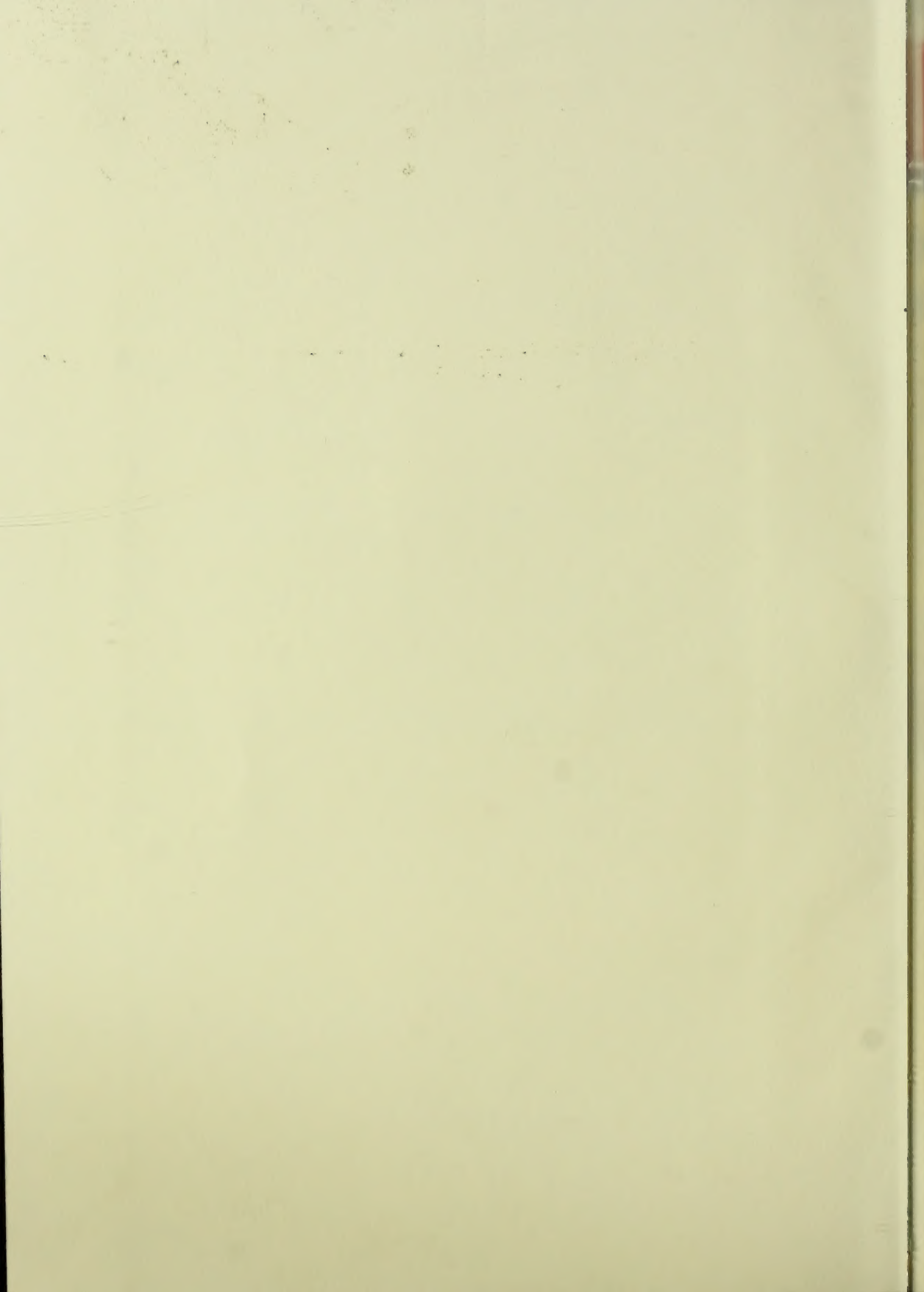


**For Reference
Do Not Take
From the Library**

Every person who maliciously cuts, defaces, breaks or injures any book, map, chart, picture, engraving, statue, coin, model, apparatus, or other work of literature, art, mechanics or object of curiosity, deposited in any public library, gallery, museum or collection is guilty of a misdemeanor.

**Penal Code of California
1915, Section 623**



BusinessWeek

EMBER 6, 2000

A PUBLICATION OF THE MCGRAW-HILL COMPANIES

SPECIAL REPORT

GLOBAL CAPITALISM

Can it be made to work better?

PAGE 72



lecom
urmoil

ent's
keup.
&T's
akup.
s: Is Cisco
ing a growth
wdown?

E
Can
anyone
else run
Jack's
company?

winners
r annual
chitecture
wards

*****5-DIGIT 94010
40602 1058111600# T03 0101 000000086
0126
006
BURLINGAME PUBLIC LIBRARY
480 PRIMROSE RD
BURLINGAME CA 94010-4010

BURLINGAME
OCT 27 2000
LIBRARY



Before our engineers design our cars, our racing programs design our engineers.

At Honda, our participation in racing not only helps improve the cars we build. But, it also helps improve the people who build and develop those cars.

You see, many of the engineers who are responsible for developing Honda automobiles have, at one time or another, participated in our racing programs. Why? Quite simply, it's one of the best training grounds in the world.

The learning curve is very quick.

Race starting times are fixed, which requires excellent preparation. And the competitive environment forces

our engineers to find new, better and quicker ways to help improve our engine performance.

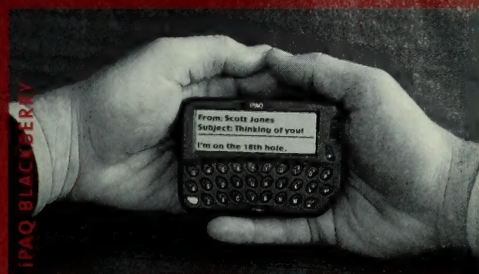
In the end, it leads to Honda's environmentally clean, fuel-efficient automobiles. And that, to us, is the biggest win of all. For more information, visit honda.com.

HONDA
Thinking.™





LOOK
THOROUGHLY
INTERESTED
AND CHECK
E-MAIL AT THE
SAME TIME.



The ingenious new Compaq iPAQ™

*BlackBerry™ is always connected to
your company network. So you can*

receive or send e-mail anytime, from

just about anywhere. And since it fits

in your hand, it's as easy to check as

your watch. Welcome to the new IT.

Inspiration Technology from Compaq.

To find the nearest reseller call

1-800-AT-COMPAQ. To learn more

visit us at compaq.com/blackberry.

COMPAQ
Inspiration Technology



Companies



The Former Enterprise Networks Group
of Lucent Technologies

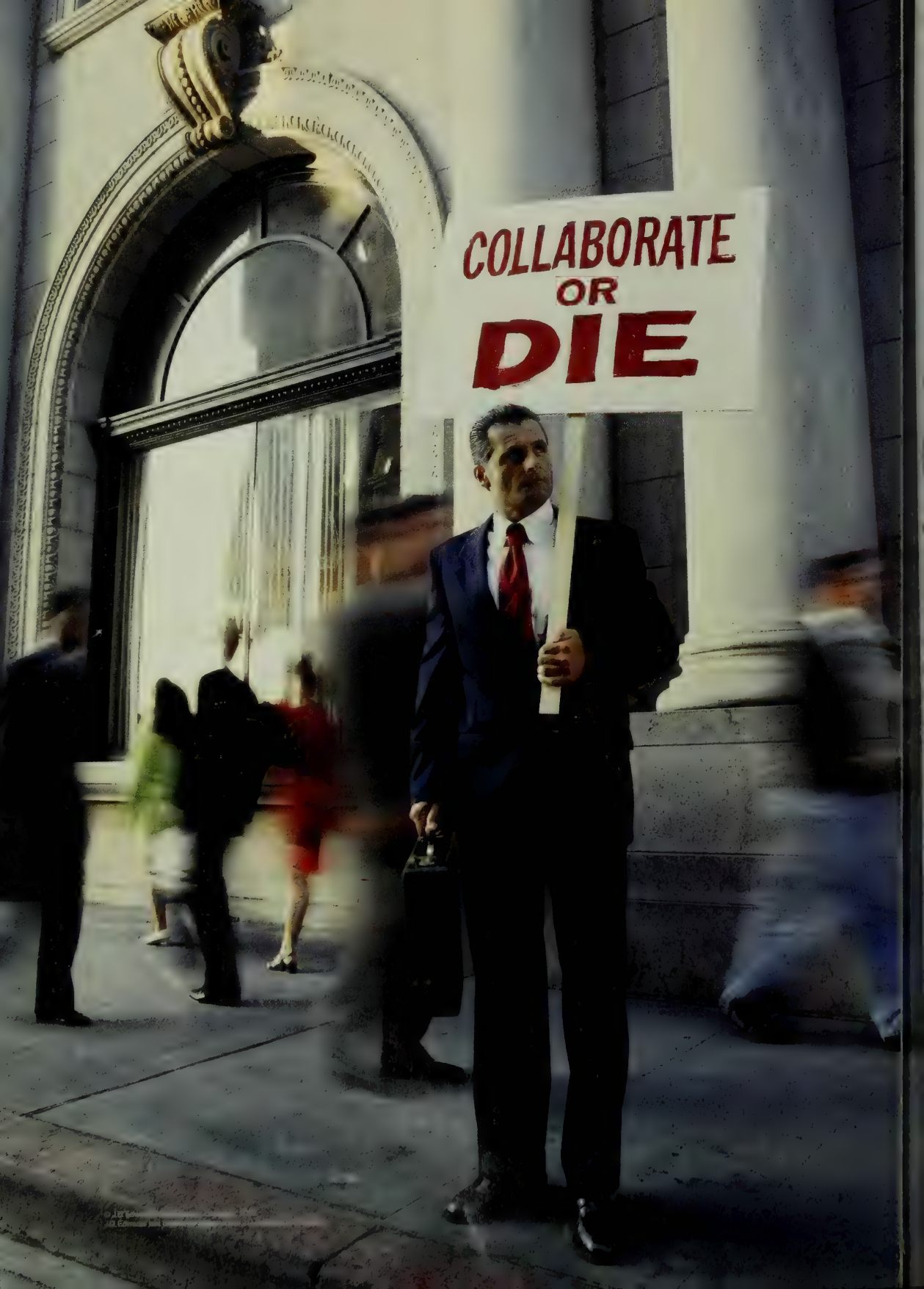
What's standing between your company and a world full of opportunities? Nothing. Avaya integrates data, voice and video. So you can stay connected with everyone you need to, any way they like. Your customers. Your vendors. With no barriers to moving information around. And moving your business ahead. Visit avaya.com or call 800-784-6104.

Customers. Systems. Networks.
Now they're talking.

Communication without boundaries



**COLLABORATE
OR
DIE**



APPOINT YOURSELF

CHIEF

FREEDOM

OFFICER.

Let's talk about freedom to collaborate. That's what we stand for at J.D. Edwards. Here's how we can help: We offer software to automate your core business processes and extend them outside your enterprise. We do this by integrating a wide range of our own proven solutions, plus hot, new e-commerce applications from our growing lineup of software partners. So now, you can build a collaborative network that brings together any customer, any supplier and any partner. Regardless of which software they're running. You get a solution that's open to the future, open to partners and open to the genius of many software suppliers. We call it The Freedom to Choose. The Power to Share. It's what makes us the leader in agile, collaborative solutions for the Internet Economy. Interested? Visit us at www.jdedwards.com/freedom.

THE FREEDOM TO CHOOSE. THE POWER TO SHARE.



**LEVIN
TALKS**
Time
Warner's
CEO
defends

the AOL deal page 157

COVER STORY

GLOBAL CAPITALISM

A more sophisticated
look at the trade-offs
is long overdue page 72

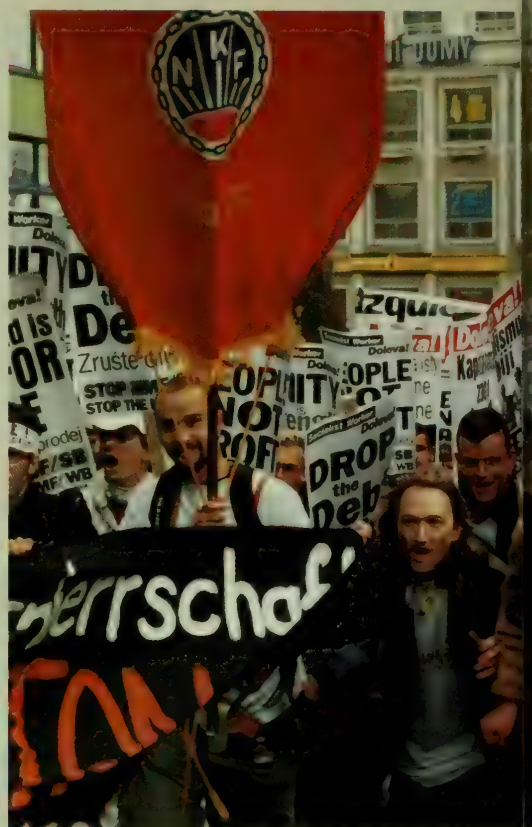


TOUGH ASSIGNMENT Can Alec Gores fix Learning Co.?

page 183

BusinessWeek

NOVEMBER 6, 2000



Special Report

72 GLOBAL CAPITALISM

Trillions transferred from rich to poor countries, phone service for millions, freer information, jobs, goods—the open market's bounties are undeniable. But equally evident are its abuses of human rights, labor, and the environment. It's time for a new cost-benefit analysis

78 UP THE ECONOMIC LADDER

Can global trade help every nation?

80 GUATEMALA ON \$3 A DAY

The export trickle-down? Mañana

84 A WORLD OF SWEATSHOPS

Only a few factories improve

88 WHOSE GLOBE?

Activists bend boardroom ears

94 CHAD: DRILLING FOR PROSPERITY

Big Oil tries to be humanitarian

96 HANDLING HOT MONEY

What can gush in, can gush out

100 COMMENTARY: GLOBAL TRADE

How to get standards accepted

News: Analysis & Commentary

40 GE AND HONEYWELL'S HURDLES

More than the Welch magic may
needed to make this megadeal work

42 UNITED TECHNOLOGIES: JILTED

Losing Honeywell to GE is a tough
blow for the avionics giant

48 FLASH PROFITS HOLD UP

Corporate America is healthy, but
don't look too far ahead

50 COMMENTARY: CORPORATE R&D

The focus now is on finding
solutions to real-world problems

51 MOBILE PHONES AREN'T SO FAST

Among the Big Three, only Nokia
is still sizzling

52 COMMENTARY: GILLETTE

After years of formulaic success,
it's time for a fresh face at the top

54 COMMENTARY: BIOTECH FOOD

Why the industry should agree to
labeling and testing

56 COMMENTARY: MASSACHUSETTS

The state has a two-party system
in name only

58 BUD'S TURN AT BAT

Commissioner Selig on baseball's
haves and have-nots

60 IN BUSINESS THIS WEEK

International Business

68 INTERNATIONAL OUTLOOK

Why North Korea's Kim Jong Il is
rushing to embrace the U.S.

Economic Analysis

32 ECONOMIC VIEWPOINT

Barro: Gore is "reckless and
offensive" on the environment

36 ECONOMIC TRENDS

Enabling the disabled, more
household savings shun safety
drug costs are rising so much

37 BUSINESS OUTLOOK

U.S.: The nonshrinking tiger
Germany: A damper on growth

Government

64 WASHINGTON OUTLOOK

Between NAFTA and a hard
How Mexico will test Fox

149 DO CEOs VOTE? NOT ALWAYS

Of 100 top execs examined
were inconsistent visitors to
ballot booth

The Corporation

104 WALMART.COM TRIES AGAIN

After four years of false start
site needs to get all the bugs
worked out

112 WAL-MART'S NEW NETMINER

Why Jeanne Jackson jumped
from Banana Republic



JACK'S GAMBLE
Buying Honeywell could throw a

wrench into GE page 40



SPECIAL REPORT

The Business Week/
Architectural Record
Awards page 117



TRY AGAIN
Is Walmart.com finally ready? page 104



DISCONNECT

Suddenly, there's trouble in telecom land page 167

OFF TO THE RACES

Compared with equities, bonds are suddenly a thoroughbred of an investment page 208



al Report

BUSINESS WEEK'S DESIGN AWARDS
is year's best architecture projects: Elegant, spirited, frugal

TALK WITH GERALD LEVIN
Editor-in-Chief Steve Shepard goes one-on-one with Time Warner's CEO

tainment

WAS THERE A HIT IN SONY'S STARS?
Is betting big on Christmas to break its losing streak
DO WE HAVE A FEEL-GOOD CHRISTMAS!
Holiday movies with schmaltz-plus

nation Technology

ED LIDSTROM: TECHNOLOGY & YOU
popular new wireless LAN
TELECOM TURMOIL
The big players are in trouble, but this is no dot-com crash
SCOTT: NAVIGATING CHOPPY SEAS
Is facing new rivals, a brain drain, and a stock drop
GOING AT IT: BREAKING UP IS HARD
Which pieces can succeed alone?

176 CLEAN SLATE AT LUCENT

Tossing its CEO, it opts for change

180 SCHACHT'S TAKE ON LUCENT

"Our strategy...is smack-on"

183 TESTED BY LEARNING CO.

A turnaround artist's hands are full

Social Issues

184 VOUCHING FOR VOUCHERS

How Silicon Valley's Tim Draper is backing California schools' Prop. 38

Finance

190 STOCKS COULD LAND SOFTLY

After a wild October, strategists see smoother sailing ahead

194 A BLIP AT CHASE MANHATTAN?

That's what the VCs say about third-quarter losses at their unit

196 KNIGHT TRADING GROUP'S ARMOR

Moving ahead despite profit concerns

Environment

200 CLEANING UP THE AIR

Trading pollution permits may help make fixes in global warming

BusinessWeek Investor

208 SUDDENLY SEXY BONDS

They're proving the best place for money to go to grow

212 DO-IT-YOURSELF BONDS

Picking bonds without a fund manager isn't so risky after all

213 BARGAIN BONDS ONLINE

Web winnowing can be worth it

218 THE BARKER PORTFOLIO

Buying munis, not heartbreak

221 MARCIAL: INSIDE WALL STREET

Features

12 UP FRONT

16 READERS REPORT

18 CORRECTIONS & CLARIFICATIONS

21 BOOKS

Bernstein: *The Power of Gold*

24 BUSINESS WEEK BEST-SELLER LIST

165 DEVELOPMENTS TO WATCH

Truck aerodynamics, a Parkinson's breakthrough, auto repairs

222 FIGURES OF THE WEEK

226 INDEX TO COMPANIES

228 EDITORIALS

BusinessWeek online

www.businessweek.com
America Online Keyword: BW

Updated every business day at **www.businessweek.com**



Winner of the 2000 National Magazine Award for General Excellence in New Media

VIDEO VIEWS

Watch the latest news and analysis from BusinessWeek's video team.

■ **MARKET WORRIES:** BW's Chief Economist Bill Wolman says the market most likely will end the year flat



■ **ON TRACK:** The Time Warner-AOL deal will close by yearend, Time Warner CEO Gerald M. Levin tells BW Editor-in-Chief Stephen Shepard



TOOLS

■ **CAPITAL GAINS CALCULATOR:** Here's how to figure if you should hold, or sell and reinvest



■ **MBA SEARCH:** Which is the right business school for you and your needs?



■ **SALARY SURVEYS:** How much money should you be paying your staff?



■ **YOUR PORTFOLIO:** Check on the health of your investments



INTERACTIVE FORUMS

■ Join other readers in ongoing discussions on investing, info tech, business schools, bad customer service, and more—or start your own

Track the daily performance of the Info Tech 100 index



Find quick links to everything on this page at the Nov. 6, 2000, issue's table of contents online, or go directly to www.businessweek.com/2000/00_45/online.htm

Herd on the Street

Earnings aren't bad, so why are investors stampeding? Partly it's the dot-com correction. Still, this wild volatility could be over soon



DAILY BRIEFING

Business and investing news, commentary, and analysis

www.businessweek.com/bw

■ **WASHINGTON WATCH:** A checklist for the final days of Campaign 2000

■ **MANAGEMENT:** An inner-city training program catches Ford's eye—and some funding

INVESTING

Investing insights powered by S&P Personal Wealth

www.businessweek.com/inv

■ **BARKER.ONLINE:** "You only need a few ideas to be fabulously wealthy," says Bruce Berkowitz of Fairholme Funds

■ **STREET WISE:** Check out our Krispy Kreme stock index

SMALL BUSINESS

A resource for entrepreneurs

frontier.businessweek.com

■ **SMART ANSWERS:** Here's how to spread the word about your company on the cheap



TECHNOLOGY

State-of-the-art coverage of info tech

www.businessweek.com/tech

■ **MANAGEMENT:** Behind the collapse of food site OneBigTable.com

■ **MOVEABLE FEAST:** Chateauonline's Gregory Salinger talks about selling wine



B-SCHOOLS

Business Week's exclusive rankings and profiles

www.businessweek.com/b-school

■ **MBA JOURNALS:** How these first-year students got into B-school

GLOBAL BUSINESS

In-depth coverage of Asia, Europe, and Latin America

www.businessweek.com/global

■ **NEWS ANALYSIS:** Top Spanish power utility Endesa's planned merger with Iberdrola has rival contender Repsol fuming

CAREERS

Advice and tools for senior-management job seekers

www.businessweek.com/careers

■ **EMPLOYMENT TRENDS:** Here's how to protect yourself if your dot-com employer goes under—right after you sign on





When was the last time
you made friends
by **bothering**
somebody?

It didn't work then, and it doesn't work today. Which is why Netcentives offers complete direct marketing solutions that help you treat customers with the respect and care they deserve.

We combine a deep understanding of customer relationships with leading-edge technology and marketing services, to deliver relevant communications programs that drive your business both online and off.

That's why industry leaders in virtually every category—from apparel to groceries to financial services and beyond—trust us with their most valuable asset: their customers.

Visit www.netcentives.com today to find out how we can help you win your customers' hearts and minds—without being a nuisance.



Netcentives™

Rewarding Relationships

Up Front

EDITED BY ROBERT McNATT

LITIGATION NATION

DID EXPLORER GET A BAD RAP ON SAFETY?

TO HEAR TORT LAWYERS, consumer advocates, and Bridgestone/Firestone tell it, Ford Motor knew or should have known its Explorer sport-utility vehicle is a death trap prone to rollovers.

An internal Ford memo written in 1989, a year before the SUV was introduced,



'99 EXPLORER: More stable

however, may make their case more difficult. Overlooked in that memo, which Ford released, is strong evidence that the carmaker took serious steps to minimize Explorer rollovers. The memo thus seems to tilt responsibility for the 119 deaths linked to Explorers with Firestone tires back toward the tire company.

In 1989, many SUVs were under fire, with the Suzuki Samurai, AMC Jeep, and Ford's own Bronco II all being sued for rollover-related incidents. The Bronco II ranked in the middle-to-poor category in federal fatality rankings. So Ford's goal for its new Explorer was to be "near B-I-C," or best-in-class, says a memo from Ford research engineer D.S. Starr.

To improve stability, Starr wrote that Ford had lengthened the Explorer's wheelbase and dampened steering responsiveness to reduce over-corrections, which he cit-

ed as the main cause of rollovers. When a prototype with those changes still showed rollover tendencies, Ford stiffened the front springs and lowered the chassis closer to the ground to improve stability. Ford even built more four-doors than two-doors, aiming for older

buyers with families and fewer younger, presumably more reckless, drivers.

As a result, the Insurance Institute for Highway Safety says that the four-door Explorer has the lowest rollover fatality rate of any large SUV, while the two-door is rated second-best in the midsize category. Notably, the institute established its rankings for Explorers with Firestones. Ford initially recommended underinflated tires, but has since reversed that recommendation.

Ford, however, did decide not to lower the front suspension angle or widen the SUV's stance. Both measures would improve stability, but would have been costly. So was it just the money? A Ford spokesman now says that because the Explorer had passed safety tests, the changes weren't needed. It will probably take many years of litigation to see if that was true. *Stan Crock*

TALK SHOW "This is an impressive crowd—the haves and have-mores. Some people call you the elite. I call you my base"

—George W. Bush, to the VIPs at New York's Alfred Smith Dinner

CAR TALK

A MOTOWN/MAD AVE DEATHWATCH

COME NOV. 7, HUNDREDS OF Detroit area ad folks could be out of work. That's the date DaimlerChrysler expects to decide which of its two ad agencies wins its \$1.5 billion business.

The high-stakes shootout for the nation's third-biggest ad account is between BBDO Worldwide, which created the "Dodge. Different" campaign, and True North Communications subsidiary FCB, which develops Jeep and Chrysler ads. The winner snarls all three brands. Each firm has about 500 employees on its DaimlerChrysler account, and each expects to win. While some employees from the losing agency will likely join the winner, big job losses are expected.

Saving money is high on Chairman Jürgen Schrempp's



FCB
WORLDWIDE

BBDO
NEW YORK

SCHREMPP: Considering ad account

agenda. The Chrysler unit would like to cut \$2 billion in expenses a year. It is already squeezing suppliers and reportedly laying or canceling products. Chrysler won't comment on that, though it admits that down the road it would like more "out-of-the-box" thinking in its ad agency. But it needs savings now. Thinking "Different" will wait. *Jeff*

THE LIST TAKERS AND TAKE-NOTS



A new study from the World Wildlife Fund in Brussels shows that if all humanity consumed as much fossil fuel and had the intensive farming practices that the U.S. has, it would take the equivalent of five planets to absorb the waste. Western Europe enjoys high living standards, but has fewer grazing animals and gas-guzzlers. Here, the WWF estimates the number of planet earths needed for the world population to enjoy the living standards of different areas:

REGION	EARTHS
U.S.	5.0
DENMARK	1.5
FRANCE	1.5
JAPAN	1.5
WESTERN EUROPE (average)	1.5
PORTUGAL	1.5
CHINA	1.5

DATA: WORLD WILDLIFE FUND



ALSTOM

Internet around the clock (energy)

Madrid-Seville (high speed train)

Relaxation (cruise ship)

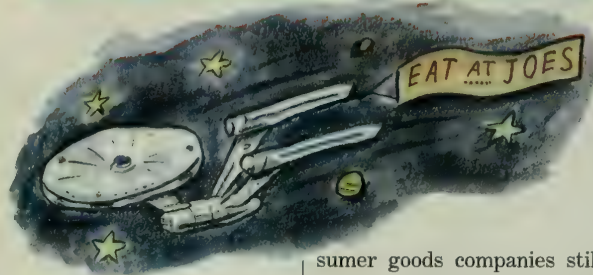
Pablo, 26, dot.com CEO

MORE AND MORE PEOPLE NEED ALSTOM

the innovative energy and transportation solutions brought to you each day by a world leader.

www.alstom.com

Up Front



MAD AVE.

THE PLOT THICKENS, LIKE HEINZ KETCHUP

NEW TELEVISION GADGETS such as TiVo and Replay can choose, store, and playback your favorite TV shows—all while leaving out the commercials. But the alternative to endless station breaks, promos, and car ads in the Age of TiVo may be even more annoying: Shows chock full of product placement.

The number of personal video recorders is predicted to grow to 50 million by 2005, says Josh Bernoff, a analyst at Forrester Research. And that could prompt an \$18 billion loss in TV ads. But con-

sumer goods companies still need to reach folks, so count on “more product placement,” said Pamela Thomas-Graham, president and CEO of CNBC.com at a New York media conference. Advertisers already pay Hollywood studios \$360 million a year to feature its products, estimates the Entertainment Resources & Marketing Assn.: Think of those Oakley sunglasses on Tom Cruise in *Mission Impossible*, for example.

The fees for these placements, however, won't make up all lost revenue. For that, broadcasters and cable stations want to develop interactive strategies to deliver information about goods and services over TV—but only to viewers who request it.

Joan Oleck

Y2K CHAOS

SAFETY FIRST, COMPUTERS LAST

THIS SUMMER, CONGRESS accused the National Highway Traffic Safety Administration of dragging its feet when investigating those now-infamous Firestone tires. But maybe the nation's auto safety watchdog didn't drag its feet. Maybe it was just 100 years early.

Say what? Well, the recall section of NHTSA's Web site duly notes that the tread could separate from Firestone's Wilderness AT tire, “possibly resulting in a vehicle crash causing injury or death.” That warning was posted this summer. But as of mid-October, the site noted that these are model year 1900 tires being recalled.

Even more embarrassing, NHTSA also lists Ford airbag recalls for 1900.

Pre-Model T cars are not the issue. But if you thought that, by now, every computer would be Y2K-compliant, you'd be wrong—because some of NHTSA's aren't. The agency says it is fixing the



FAULTY?: Wrong century

glitch. Congress is now considering a bill to enhance NHTSA's regulatory power regarding vehicle safety. Maybe Congress should be sure the agency can get the year right first. Marcia Stepanek

DRAWN & QUARTERED

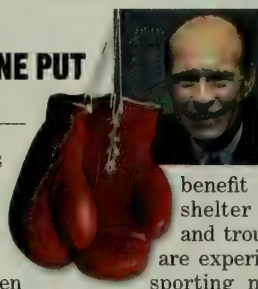


CHARITY CASES

TESTOSTERONE PUT TO GOOD USE

FIGHTIN' WORDS are usually all that the brawlers at Chicago's three major financial exchanges trade when they go toe to toe in the market—or even in court—where the Chicago Board of Trade and the Chicago Board Options Exchange have been tussling over CBOT's plan to restructure itself. But on Oct. 28, 18 denizens of the pits at the CBOE, the CBOT, and the Chicago Mercantile Exchange trade blows for real.

Traders who normally muscle each other around over soybean contracts or T-bills will face off in a nine-



ARBOR: Mercy's

bout c boxing t ment, Side 20 benefit Mercy Ho shelter for dis and troubled kids. are experienced ama sporting names like “Honduran Hurricane” Others are novices who trained for months.

One co-chair of the Patrick Arbor, an ex chairman who once liv Mercy. When he was Arbor says, kids box settle standoffs. “Now using boxing bouts be Chicago's fabled exchan build a home for mo these kids.” If only Ch exchanges could settle disputes with just a punches.

Joseph

THE BIG PICTURE

LADY GLOBETROTTERS Despite the pressing need for more global managers, women are still underrepresented among the top rank of expatriate U.S. managers. Some companies still worry that female executives won't be effective in foreign cultures.



FASTEN SEAT BELT WHILE SEATED

ATTENTION:

The seat in front of you will
no longer crush your knees
when reclined.

AMERICAN AIRLINES - AMERICAN EAGLE
AMERICAN WAVE

MORE ROOM *THROUGHOUT* COACH. ONLY ON AMERICAN.

American now has more room for more Coach passengers than any other airline. Which means, you no longer have to creatively angle your body when the person in front of you decides to lean back. Because now that we're removing rows of seats throughout the Coach cabin, there's more room than ever to stretch out and really unwind. So fly American and give your knees a rest.

American Airlines®
COACH HAS MORE CLASS™

www.aa.com



EDITOR-IN-CHIEF: Stephen B. Shepard
MANAGING EDITOR: Mark Morrison
CHIEF ECONOMIST: William Wolman
ASSISTANT MANAGING EDITORS:
 Joyce Barnathan, Frank J. Comes, Robert J. Dowling, G. David Wallace
ART DIRECTOR: Malcolm Frouman
CHIEF OF CORRESPONDENTS: James E. Ellis
SENIOR EDITORS: Bob Arnold (New Media), Rick Green (Frontier), Neil Gross, Mary Kuntz, Jeffrey M. Laderman, Christopher Power, Kathy Rebello, Jane A. Sasseen, Rod Scotti, John Templeman, Lee Walczak (Washington), Elizabeth Weiner, Seymour Zucker
EDITORIAL PAGE EDITOR: Bruce Nussbaum
SENIOR WRITERS: Catherine Ernst, Robert Barker, Aaron Bernstein, Anthony Bianco, John A. Byrne, Peter Elstrom, Gene G. Marcial, Otis Port, Paul Raeburn, Gary Weiss
ECONOMICS: James C. Cooper (Sr. Economist/Bus. Outlook ed.), Kathleen Madigan, Michael J. Mandel (Economics ed.), Peter Coy, Charles J. Whalen, Gene Koretz (Trends ed.), Christopher Farrell (Contributing ed.)
INTERNATIONAL: Patricia Kranz (European, Latin American Editions ed.); Michael S. Semil (Sr. editor); Pete Engardio, (Sr. news eds.); Rose Brady (Sr. writer); Sheridan Prasso (Asia), Cristina Lindblad (Latin America), Julia Lichtblau (Int'l. finance)
ASSOCIATE EDITORS: Dan Beckue, Amy Dunkin, Mike France, Toddi Gutner, Steve Hamm, Ira Sager, Eric Schine, Fred Strasser
PICTURE EDITOR: Lawrence Lippmann
MANAGING ART DIRECTOR: Jay Petrow
SENIOR ART DIRECTOR: Steven Taylor
INTERNATIONAL ART DIRECTOR: Christine Silver
DEPARTMENT EDITORS: Books: Hardy Green. Computers: David Rocks. The Corporation: Diane Brady, Nanette Byrnes. E-Business: Timothy J. Mullaney. Finance & Banking: Emily Thornton, Debra Sparks, Heather Timmons. Frontier: Larry Kanter, Robin D. Schatz. Industrial Management: Adam Aston. Internet: Spencer E. Ante. Management: Louis Lavelle. Markets & Investments: Marcia Vickers, Barbara Der Hovensand. Media: Tom Lowry. News: John Protos. People: Susan Berfield. Personal Finance: Susan Scherrek, Anne Terjesen. Science: Ellen Licking. Scoreboards: Frederick J. Jespersen. Technology Strategies: Marcia Stepanek. Telecommunications: Steve Rosenbusch. Up Front: Robert McNatt. Working Life: Michelle Conlin
CONTRIBUTING EDITOR: Mark Hyman (Sports business)
STAFF EDITORS: Dennis K. Berman, Lewis Braham, Jeanette Brown, Heather Green, Jennifer Merritt, Joan Oleck, Kimberly Weisul
COPY EDITORS: Prudence Crowther, Harry Maurer, Marc Miller (Deputy chiefs); Jim Talt (Asst. chief); Tim Belknap, Aleta Davies, Jack Robbins, Doug Royalty (Sr.), Giles Blunt, Jay Katz, Barry Maggs, Jane Newman, David Pengilly, Malka Perel, Monica Roman, Lourdes Velez
RESEARCHERS: Maria Chapin, Gail Fowler, Aida Rosario
PRODUCTION COPY EDITORS: Lawrence Dark (Chief), Céline Keating, Robert J. Rosenberg (Deputy chiefs), Alethea Black, Sarah B. Davis, Hallberg Hallmundsson, Robert S. Norman, David Purcell, Victoria Rubin
ART: Don Besom, Alice Cheung (Assoc.); Jamie Ellis, Edith Gutierrez, Peter Marshutz (Asst.). **Graphics & New Media:** Arthur Eves (Creative dir.); Joan Danaher (Graphics dir.); Rob Doyle (Deputy graphics dir.); Jaime Beauchamp; Laurel Dauris Allen, Alan Beseden, Joe Calviello, Matthew Kopit, Alberto Mera, David Rudes, Ray Vella (Illustrators), Eric Hoffmann.
Imaging: James Leone (Mgr.), Alan Bonzer (Asst.), Rich Michiel, Leo Nietzer, Joseph Rhames
PHOTO EDITORS: Scott Mlyn (Deputy); Ronnie Weil (Sr.); Cynthia Carris Alonso, Bettina Baudoin, Paula Gillen, Kathleen Moore, Anne Murray, Andrew Popper (Assoc.); Sarah Greenberg Morse (Asst.); M. Margarita Eiroa (Traffic mgr.); Lucy Conticello, Mindy Katzman (Researchers); Burt Hughes (Researcher/Librarian)
EDITORIAL OPERATIONS: Susan Fingerhut (Director); Ken Lockwood (Sr.); Karen Butcher, Francisco Cardozo, Thomas R. Dowd, Stephen R. Lebron, Jody A. McGinnis, Peter C. Marlon, Peter K. Neisberg, Jane M. Perkins, Laura Reissman, Karen Turok, Ilse V. Walton, Barbara Wilhelm. Mark Lang
EDITORIAL TECHNOLOGY: Thomas L. Morgan (Director), Christopher Amado, Richard Balestrino, David Bandler, Y. Steve Ben-Ari, Amanda Chan, Lawrence Crowe, Beth Higgins, James Kutz, Neil Macleod, Mike Marubio, John Navarro, Juan Rodriguez, Marta Skrelja, Mauro Vaisman, Julian Wong
PERSONAL SERVICE ONLINE: Michael Mercurio (Managing, ed.), A. Peter Olsen, John A. Wierckhoff, John A. Wierckhoff, Heather Barry, Stefani Exas, Sam Jaffe, B. Kite, Jessica Loudon, Joseph Mandel, Tay Ng, Patricia O'Connell, Margaret Popper, Alex Salveur, Mica Schneider, Arney Stone, Kathy Vuksanaj
CORRESPONDENTS: Atlanta: Dean Foust (Mgr.), Charles Haddad, Aixa Pascual. Boston: William C. Symonds (Mgr.), Norm Alster, Richard Shapiro, Geoffrey Smith. Chicago: Joseph Weber (Mgr.), Michael Arndt, Robert Berner, Roger O. Crockett, Julie Forster, Pallavi Gogi, Darnell Little. Connecticut: Pamela L. Moore. Dallas: Wendy Zellner (Mgr.), Stephanie Anderson Forest. Detroit: Kathleen Kerwin (Mgr.), Jeff Green, Joann Muller, David Welch. Los Angeles: Ronald Grover (Mgr.), Larry Armstrong, Christopher Palmeri (Sr. correspondents), Steven Y. Brull, Arlene Weintraub. Philadelphia: Amy Barrett (Mgr.). Silicon Valley: Linda Himelstein (Mgr.), Peter Burrows, Ben Elgin, Jay Greene (Seattle), Joan O'C. Hamilton, Robert D. Hof (Sr. correspondent), Jim Kretzler, Louise Lee, Andy Reinhardt, John Shinal. Washington: John Carey, Paula Dwyer (News eds.); Howard Gleckman, Mike McNamee (Sr. correspondents); Rich Miller (Sr. writer); Amy Borrus, Dan Carney, Laura Cohn, Stan Crock, Richard S. Dunham, Paul Magnusson, Nicole St. Pierre, Christopher H. Schmitt, Stephen H. Wildstrom (Tech. & You), Lorraine Woelert, Catherine Yang, Douglas Harbacht (Online Sr. News ed.). West Belton (Online News ed.). Beijing: Dexter Roberts (Mgr.). Bombay: Manjeet Kripalani (Mgr.). Brussels: William Echikson, Franklurt Jack Ewing (Mgr.), David Fairlamb, Christine Tierney. Hong Kong: Mark L. Clifford (Mgr.), Frederik Balfour, Bruce Einhorn. London: Stanley Reed (Mgr.), Kerry Capell. Mexico City: Geri Smith (Mgr.). Moscow: Paul Starobin (Mgr.). Paris: John Rossant (Mgr.), Stephen Baker, Carol Maltack. Rome: Gail Edmondson (Mgr.). Seoul: Moon Ihlwan. Singapore: Michael Shari (Mgr.). Tokyo: Brian Bremner (Mgr.). Robert Neri (Contrib. ed.), Ken Belsion, Irene M. Kunitz
EDITORIAL SERVICES: Broadcasting: Irene Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrea Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), Susan Rutledge (Research mgr.), John Cady (Technology mgr.), Lara Christiansen, Fred Katzenberg, Jennifer Reyes-Orellana, David Polek, Susan Zegel. Office Manager: Roslyn Kopit. Readers Report: Yvette Hernandez. Reprint Permission: Wendy Hernandez. Special Asst. to Editor-in-Chief: Christine Summerson

CHICAGO: STILL THE CITY THAT WORKS

As a native Chicagoan, I don't mind that Chicago has missed out becoming the New Economy center of the U.S. ("Chicago Blues," Cover Story, Oct. 16). I can live without the urban sprawl, congestion, and skyrocketing costs of living in San Francisco and San Jose, which result from the technology boom in the Silicon Valley. In the meantime, Chicago benefits from being one of the most livable cities in America—with a strong infrastructure, an improving school system, and affordable housing. While my counterparts in Silicon Valley

By contrast, Chicago's newfound diversity triggered its rise in the 1990s, and left others to beir hit wonders. Chicago has generated more than half a million jobs since January, 1990, more than triple the of New York, Los Angeles, and combined. Throw in San Francisco. Chicago still beats the whole bunch on substantial margin.

Those gains lend important on to your criticisms of the city's job housing market. For much of the expansion, including today, Chicago's unemployment rate has been substantially below that of New York and Angeles. So, Chicago's recent slow-

in job growth reflects strength in the city's existing employment base, not shortcomings.

Chicago has seen more than 40% appreciation in housing values since the start of the expansion, nearly triple that of New York, and even above that of San Francisco. Even Chicago real estate market is more affordable than

cities, which should continue to make it a draw for new business. (Have you tried to relocate workers to New York lately?)

Then, there is the issue of Chicago's prowess in the tourism and convention business. The Windy City is second only to Washington as a hub for associations and Michigan Avenue has become the most sought-after retail destination in the country.

Finally, it is the old-line industries of the Midwest and Chicago that will write the next hit in the e-commerce sweepstakes. The ultimate value of information technology rests almost entirely in the ability of these old-

MISSING THE MARK

"Focusing on corporate headquarters as a measure of civic health and 'identity' is about as out of date as eight-track tapes"

—Diane C. Swonk



fight traffic each night on the way home, I will be barbecuing dinner on my roof deck or taking a jog along the lakefront.

Craig Bender
Chicago

Focusing on corporate headquarters as a measure of civic health and "identity" is about as out of date as eight-track tapes. Corporate headquarters have pretty much been on the decline as a source of employment since the 1970s. Indeed, it is links to one industry—heavy manufacturing—that led to Chicago's lagging performance in the past.

PRESIDENT & PUBLISHER: William P. Kupper Jr.

SR. VP, OPERATIONS: Gary B. Hopkins
SR. VP, ASSOCIATE PUBLISHER: Constance E. Bennett
SR. VP, MARKETING & BUSINESS DEVELOPMENT: Keith L. Fox
SR. VP, BUSINESS WEEK ONLINE: Gregory J. Zorthian
VP, CONSUMER MARKETING/CIRCULATION: Thomas Masterson
VP, U.S. ADVERTISING SALES DIRECTOR: Joanne K. Bradford
VP, STRATEGIC PLANNING & PRODUCT DEVELOPMENT: Kimberly Greer

VP, SALES: Karen Christiansen (Southeast reg.), Robert H. Kell (Midwest reg.), Gary London (Midwest region), Michael Dace (Western reg.), **MANAGING DIRECTOR:** Alan Lamm (Asia), Paul Marston (Europe), **VP, TECHNOLOGY/NEW MEDIA:** Christopher C. Rousseau
VP, CONTROLLER: Kevin P. Pascale
VP, ADVERTISING BUSINESS & PRODUCTION: Linda F. **VP, ACCOUNT DEVELOPMENT & RESEARCH:** Charlene T. **VP, STRATEGIC PROGRAMS:** Jim Richardson

Business Week

A Division of The McGraw-Hill Companies

NOVEMBER 6, 2000 (ISSN 0007-7135) *** 3706

Published weekly, except for one week in January and one in August, by The McGraw-Hill Companies, Inc. Founder: James H. McGraw (1860-1948). Executive, Editorial, Circulation, and Advertising Offices: The McGraw-Hill Companies Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone: 212-512-2000. Fax: Domestic: 212-512-2000; Int'l: 2349127000. U.S. subscription price: \$4.95 per year; 2 years, \$9.95; 3 years, \$14.95. Single copies, \$3.95; back issues, \$5. Write for rates in other countries. Subscriber Service: 1-800-451-1200. TDD: 1-800-554-1579.

Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J. 08520. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Canada Post International Publications Mail Product Sales Agreement No. 246484.

Registered for GST as The McGraw-Hill Companies, Inc. GST #R123045678. Copyright 2000 by The McGraw-Hill Companies, Inc. All rights reserved. registered in U.S. Patent Office. European Circulation Centre: 1, rue de la Presse, Molenbeek, Belgium. Telephone: 01202-22431. Telex: 555555.

Officers of The McGraw-Hill Companies, Inc.: Harold W. McGraw III, President and Chief Executive Officer; Kenneth M. Vittor, Vice President and General Counsel; Robert J. Balush, Executive Vice President and Chief Financial Officer; Frank D. Pengelise, Senior Vice President and Treasurer.

PHOTOCOPY PERMISSION: Where necessary, permission to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by McGraw-Hill for users registered with the Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923, to photocopy any article herein for the flat fee of \$1.00 per copy of each article. Send payment to CCC. Copying for other than personal or internal reference use without the permission of The McGraw-Hill Companies, Inc. is prohibited. Address reprint requests to Business Week Reprints, 1221 Avenue of the Americas, New York, N.Y. 10020 or call 212-512-3134. ISSN 0007-7135. PRINTED IN U.S.A.

tries to turn it to their advantage
high business-to-business electronic
nerce.

ues is still music to my ears, and
ago will win the Grammy in the
phase of this expansion.

Diane C. Swonk
Chief Economist
Bank One Corp.
Chicago

hile I share your concern, particu-
about the loss of corporate head-
ers, you paint an inaccurate picture
e Chicago region's strength. Based
S. Census estimates, the Chicago
lation is growing far more robustly
other old cities. This is a great
round for Chicago, which saw popo-
n growth of only 2% per decade
1970 to 1990.

ulation growth is a more impor-
indicator of health than growth in
cial services. It reveals economic
s more fundamental than whether
t the economy is locally controlled
ether the city is the most impor-
international financial center.

ie argument about rises in housing
s is, as you recognized, two-edged.
prices and low rates of gain are a
lem in a global economy only to
extent that transferring executives
ot keep up their position in the
ing market from city to city. Over-
ur lower housing prices are a com-
pitive advantage. The fact is they
been growing at or slightly above
rate of inflation consistently, re-
ing a market able to sustain new
truction and good resale values.
g, in a market economy, should
all prices grow faster than infla-
if supply is not improperly con-
ned? This is evidence of a well-
aged, healthy market, not of
tness.

hat is going on in Chicago is far
important than can be measured
ly by the number of corporate
quarters and the health of financial
ets. Chicago is undergoing a trans-
ation to become more globally
petitive. The city and region are
capital of the Midwest. Young peo-
from the surrounding states are
n here by the dynamic economy
quality of life. Immigrants provide
d entrepreneurial energy, and
th. The city itself has undergone a
around in housing, with permits
d for 4,800 units last year alone,
overwhelming majority of it mar-
ate and reaching into a wide range
neighborhoods and distinctly urban
character, building on our competi-

tive strengths as a true city rather
than simply annexing otherwise sub-
urban territory.

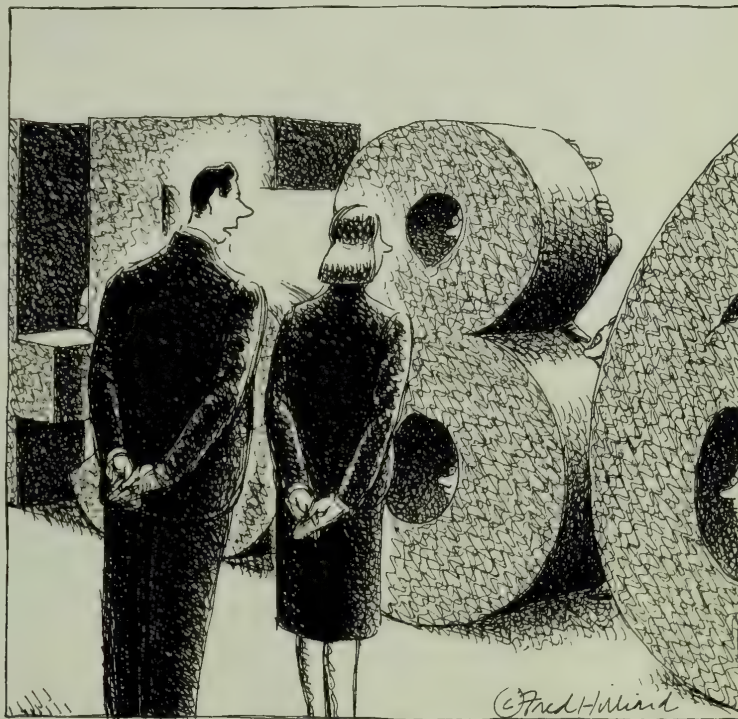
Stephen B. Friedman
Chicago

Leaders of Chicago's futures ex-
changes were forewarned as early as
the 1980s of the impending doom of the
open-outcry system and imminent loss

of market share. Yet they repeatedly
disregarded the message and banished
the messenger.

The Globex (electronic trading) sys-
tem was labeled a threat to the power
base of the autocratic exchange gov-
ernance, which quickly branded it the
means of vocational ruin for the pit
scalper. The slightest defiance of this
dominance meant expulsion from the

©2000 The Williams Companies, Inc.



"There are problems hidden in these numbers that can be overcome through insights gained on EnergyNewsLive.com, Edna."

Dissect commodities. Demystify deregulation. Uncover mergers. It's a live stream of energy news you can use, right on your desktop. From the only realtime energy network. It's not news for everyone. Just everyone in energy.



www.EnergyNewsLive.com

1-800-WILLIAMS • NYSE: WMB & WCG

CORRECTIONS & CLARIFICATIONS

In "The humbling of Jimmy Lai" (e.biz, Oct. 23), we incorrectly referred to Jardine Fleming, the investment arm of Hong Kong conglomerate Jardine Matheson. We should have used the parent company's name.

tightly controlled fiefdom of pit trading.

Chicago seems destined to repeat the experience it had with railroads and meat-packing. We never adjust the rearview mirror. Oh well. Next time around maybe things will be different.

Robert M. Pines
Chicago

As one born and raised in the Windy City but now living in Los Angeles, I can testify that the biggest obstacle facing Chicagoans is their hypersensitivity to criticism and their self-aggrandizement, which blocks any honest assessment of their city.

A few weeks back, my father flew from New York to Chicago to attend his 50th reunion at Hyde Park High School. Impressed with the renovated neighborhoods, great restaurants, and gleaming Michigan Avenue, my dad commented on "the city's renaissance" to a lifelong Chicagoan and retired head of a bank there. The banker retorted brusquely: "Chicago never needed a renaissance, because it has always been the best!"

Andrew B. Hurvitz
Van Nuys, Calif.

You quote Robert Hamada, the dean of the University of Chicago's Business School, as saying: "Having three separate exchanges in Chicago is absolutely stupid." The estimable dean is spot on. In the early 1990s, however, when Hamada was an outside director of the Chicago Board of Trade, he advised the exchange that its mission should be "member opportunity" rather than serving the market user (a.k.a. the customer) or embracing the then-apparent advance of screen-based trading. Please tell me how the introverted "member opportunity" mission pointed towards exchange consolidation. Credentials and all, he perpetuated the myopia.

Ed Donnellan
Chicago

Not everyone in Chicago has been singing the blues of late. Chicago's high-tech heritage in the telecom sector is largely responsible for the structural

displacement in the financial sector. Telecom is also powering the formation of the global corporations affecting Chicago's business landscape.

You're right that Chicago is seeding the nation with innovators who leave the area in search of venture financing. The region is fertile ground for high-tech innovation, and Carl Sandburg would still recognize Chicago as a modern day "tool maker for the world" when it comes to telecom.

Donald Mulder
President and CEO
HyperEdge Corp.
Itasca, Ill.

Your closing paragraph made me think I should buy marshmallows and be prepared for the fall of Chicago. I suppose you can't find much fault with the economies of New York and Los Angeles. Being first doesn't always mean being best. This is the city that works. Chicago has risen to the challenges of change many times during its 100-plus year history and will continue to do so well into the future. Long after tumbleweed blows through Silicon Valley and New York files Chapter 11—again.

Len Carmichael
Chicago

be accommodated. Larger aircraft the answer.

David C. O'Connell
Vice-President for Communications
Airbus Industrie
North America
Herdon, Va.

You should have mentioned that Airbus Industrie is not completely void of funds provided by the taxpayer from countries in the consortium. It may have been able to offer favorable terms to airlines that Boeing could never match. Airbus will spend more than \$14 billion of "public" funds to develop a new aircraft that will seat 78 more passengers than Boeing's 747 developed for only \$4 billion by using the current Boeing 747 platform.

Apart from spending \$25 million for each Airbus A3XX, compared with the Boeing 747X, airlines and not strapped airports will have to provide their own funds to upgrade terminals to support the A3XX. Had Airbus Industrie been a publicly traded stock company, shareholders would have been outraged at the enormous investment in the A3XX while parity to the Boeing 747X had been achieved at a much lower cost. A souped-up Airbus A340-600.

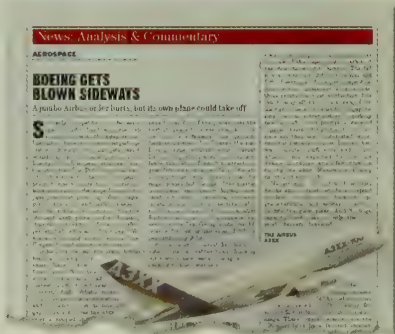
Jerome R. Miller
Coconut Creek, Fla.

SUVs NEED HIGHER PRESSURE IN THE REAR TIRES

"Making safer SUVs: It's not science" (News: Analysis & Commentary, Oct. 16) does not mention one of the most important factors in the handling of SUVs: higher tire pressure in the rear. This has been brought home to me in many years of driving station wagons and SUVs. When front and rear tire pressures are equal, such vehicles have a tendency to fishtail (or, less severely, oversteer or wander slightly).

One such experience occurred recently, when we bought new tires on a trip to Denver. When we got on the highway, we experienced a dangerous, even frightening, tail wag in the station wagon. We found that the tire installers had put equal pressure (30 pounds per square inch) in all four tires. Adding 4 psi to the rear tires cured the problem, caused by the normal rearward weight of such vehicles to a load in the rear. We have found this to be the case for all the cures—for all of our station wagons and SUVs. The pressures recommended for our 1991 Ford Explorer are, 30 psi front and 35 psi rear.

We understand that a number of



THE DOGFIGHT BETWEEN SUPERJUMBOS

The conclusion to "Boeing gets blown sideways" (News: Analysis & Commentary, Oct. 16) is wrong. For starters, the A3XX will operate at any airport a 747 serves today. Will some terminal modifications eventually be required? Yes, for those carriers planning double-deck loading. But to handle triple-rate growth over the next 20 years, airports find that a solution, not a problem.

Airbus Industrie, too, believes traffic between second-tier cities will grow. That's why we have developed new versions of the A340. Simultaneously, hub-to-hub traffic will grow, and there are limits to the numbers of aircraft that can



**We produce power systems
that keep pace with your business.**

Times are good. Business is growing. But could that success cause you problems?

Potentially yes. If, that is, you have to physically relocate because you can't upgrade your power systems.

In this day and age, you need smaller, more powerful units. Ones that will prove to be increasingly robust in an ever decreasing footprint.

Which is why you should take a good look at



our Rack and Stack systems from Powerware, Lambda, Intergy and Hawker. They can provide you with all the power, backup and power conversion your business will need.

And as they build up rather than out, you won't find yourself outgrowing your company's potential.

If you'd like to keep pace with all our products and innovations call 001 919 870 3000.



invensys
Power Systems

drivers have responded to an emergency situation such as a tread separation by overcorrecting, followed by fishtailing and rollover. It seems possible that many such disasters might be prevented by the use of higher pressure in the rear tires than in the front.

James Terrell
Los Alamos, N.M.

CEOs: STRATEGIC THINKERS WHO UNDERSTAND OPERATIONS

After reading "Long hours and long odds" (The Corporation, Oct. 2), I was astonished by the suggestion that Robert L. Nardelli may not be enough of a "strategic thinker" to run General Electric Co. Nanette Byrnes seems to imply that if people are excellent operators, by definition, they cannot also be world-class strategists. In fact, it takes the combination of those two attributes—strategic thinking and operational excellence—together with leadership skills to achieve the type of results Nardelli has achieved.

The Power Systems story is a textbook case study of restrategizing the business from the market back, attracting the talent to implement the strategy, and then flawlessly executing it through acquisitions, technology investments, and global expansion.

William R. Iuso
Executive Vice-President
Michael Allen Co.
Westport, Conn.

'OPTING OUT' OF E-MAIL ADS ISN'T SO EASY TO DO

Re "When e-mail ads aren't spam" (Marketing, Oct. 16): The author says the choice to opt out ensures that e-mail advertising is desired by the customer. But many factors considerably reduce this "permission." On many Web sites, customers are given this choice in a location that most of them never see—where the customer has to click on a link or scroll down several paragraphs of boilerplate to find. Studies have shown that this rarely happens.

And when it does, the default is usually to opt in, and the language is often so ambiguous the customer doesn't know whether to check the box or not. When someone gets the resulting e-mail advertisement or newsletter, it's still spam, because the customer didn't want it and even tried to avoid it. We are starting to see that the resulting hit to customer loyalty and brand image is huge.

Even worse is the situation in which

a customer opts in on one site and that site sells a list of "opt-in" e-mails to another company. The second company now feels empowered to send e-mail ads. But just because I want to get a newsletter about new IT technology from a highly respected vendor does not mean I want to get ads from off-shore casinos. If I could find out who sold them my e-mail address, the original company I signed up with would lose all of my business.

Marc Resnick
Professor of Usability Engineering
Florida International University
Miami

DON'T LET DEBTOR NATIONS OFF THE HOOK

"Debt relief: The U.S. is badly in arrears" (Economic Viewpoint, Oct. 16) reveals some well-meaning, yet misplaced, desires to let debtor nations off the hook. While author Robert Kuttner's premise of helping those in need is admirable, debt relief is not the answer. It sets a bad precedent and encourages further misuse and waste of future borrowings by debtor nations around the world. If the International Monetary Fund, the World Bank, and others are to provide any assistance, they should act like any other bank in similar circumstances. The assets of the bankrupt borrower become assets of the lender, which can manage them to attempt to recoup principal and interest owed.

A moral dilemma is created by bailing out mismanaged companies, and the same holds for countries. If there is to be relief, it should not be complete debt forgiveness but restructuring to be managed by the world lenders in order to push economic reform in those nations.

Michael Brace
Boston

WHEN THE HIROHITO MYTH WAS FIRST SHATTERED

Re "Shattering the myth of Hirohito" (Books, Oct. 16): Herbert Bix's *Hirohito and the Making of Modern Japan* is not the first book to expose the role of Emperor Hirohito in Japan's 20th century wars and war crimes. That credit goes to David Bergamini, the historian and author of *Japan's Imperial Conspiracy: How Emperor Hirohito Led Japan into War against the West*. That 1,612-page work was published in 1971 by William Morrow & Co. and contains numerous examples of Hirohito's direction of the wars

against Manchuria, China, and the Western powers.

Bergamini's documentation requires 150 pages of notes, and it is obvious from his reporting that he reached participants of many Imperial planning sessions with Emperor Hirohito. Among other things, Bergamini documents that Hirohito named members of his family to top military posts in order to execute his policies.

Sherwood
Sturgis,

UNCLE SAM SHOULD HAVE TO CRUNCH THE NUMBERS, TOO

The contention that "cost is too hard to measure"—before the government adopts multibillion-dollar regulations—is an invitation to all manner of misdeeds to say nothing of better outcomes in gone ("Regulators: By whose authority?" Legal Affairs, Oct. 16).

Were a chief financial officer to create a bold new initiative without carefully assessing its costs, would the company's board take comfort in hearing that messy facts should not get in the way when the project's importance is so "paramount"?

Thomas D. Hogan
Dean, College of Business
Rochester Institute of Technology
Rochester, N.Y.

BusinessWeek online

The full text of Business Week, the Business Week Daily Briefing, and five years of BW archives are available on the World Wide Web at:

www.businessweek.com

and on America Online at Keyword: BW.

HOW TO REACH BUSINESS WEEK

LETTERS FOR READERS REPORT

All letters must include an address and daytime and evening phone numbers. We reserve the right to edit letters for clarity and space and to use them in all electronic and print editions.

Mail: Business Week, 1221 Avenue of the Americas
43rd floor, New York, NY 10020

Fax: (212) 512-6458

Internet: bwreader@businessweek.com

America Online: readersbw

SUBSCRIBER SERVICES

For individual subscriptions, corporate subscription renewals, changes or problems, and single copies. Phone: (800) 635-1200 or (609) 426-7500

Fax: (609) 426-7623

Internet: bwcustsv@businessweek.com

Library fee-based services: (212) 512-6704

REPRINTS AND COPYRIGHT PERMISSIONS

For custom reprints (minimum order of 1,000) contact: (212) 512-3148

Fax: (212) 512-2337

Internet: www.businessweek.com/reprints/

For permission contact:

Phone: (212) 512-4801

Fax: (212) 512-4938

POWER OF GOLD
History of an Obsession
Peter L. Bernstein
Wiley & Sons • 432pp • \$27.95

LORY, GREED, AND ALL THAT GLITTERS

The markets are swooning. The Middle East is in turmoil. Oil prices are soaring. It's enough to investors fleeing for safety. Not so ago, that flight would have led to the huge stockpiles of gold in central banks. Only 20 years ago, with inflation running at 12%, the value of an ounce of the stuff rose to about triple its current value.

That frenzy now seems almost quaint. The gold fever of the 1970s and early '80s, in fact, marked the latest and the final chapter in a 3,000-year history of human creativity, unfathomable greed, and blind faith in the glowing metal. As financial writer Peter L. Bernstein explains in his sweeping book, *The Power of Gold: The History of an Obsession*, it's a story that began in biblical times with King Midas, then ran through the Roman era, the black plague of the Middle Ages, the Spanish quest of the Americas, the California gold rush, and the catastrophes of World War I and the Great Depression.

In contrast with our era, in which money zips around the globe as electronic blips, the pursuit of gold has caused countless miseries dazzlingly retold by Bernstein. The metal, he argues, has been a positive force, propelling civilizations with a means to attach value to goods and services. But it has also tarnished mankind's judgment, causing far more harm than good. Historical low points range from bloody wars waged in the name of gold to the massive unemployment wrought in the 20th century by economists' and politicians' unquestioning obedience to the gold standard.

With the same lively writing and sharp focus that distinguished his previous work, *Against the Gods: The Remarkable Story of Risk*, Bernstein shows how gold emerged as the manifestation of mankind's longing for power,

beauty, and immortality. This is world history on a grand scale, with gold appearing as a focal point at every major juncture. God instructed Moses to build a tabernacle of gold. It was molten gold that enemies poured down the throat of the fabulously rich Roman, Crassus, to punish him for his money madness. And gold became the foundation of modern currency and international trade right up until President Richard M. Nixon, in 1971, discarded the practice of pegging the U.S. dollar to the price of gold.

Bernstein delights in unearthing obscure nuggets. Who knew, for instance, that the Romans used Spanish slave labor in newly conquered Iberian territories to mine for gold, a pattern echoed some 1,500 years later when Spain ruled Latin America? Or that the Spanish "were able to mismanage one of the greatest windfalls of all time," squandering their cache of gold on European military adventures and conspicuous consumption? Failing to invest its gold to develop a productive economy, Spain became the pauper of European empires by the 17th century.

Indeed, gold threads its way through the history of money. Bernstein revels in the details of how gold has been weighed, calibrated, and minted into beautiful coins that became the international currencies of their time: the Byzantine empire's bezant, the Venetians' ducat, and the British guinea. Such coins paid for and kept the allegiance of mercenary armies. And when wars were lost, a stockpile of gold was the best way of ensuring a king's safety. In 1359, surrendering a third of France wasn't enough to free King Jean II, who had been taken prisoner during

battle with the English. The country also had to fork over shiploads of gold coins, or *écus*.

Not all societies, however, placed great value on gold. In the 8th century, the Arabs conquered North Africa and established a camel trade route through the scorching Sahara to Nubia to trade salt for gold. It was a good deal for the Arabs: an ounce of gold for an ounce of salt. But it was a better deal for the Nubians, who could only acquire the life-sustaining salt via this trade. Writes Bernstein: "What must those poor diggers have thought of the funny people from the north country who swapped inestimable salt for stuff whose only role on earth was to give men pride and pleasure by letting them see its luster?"

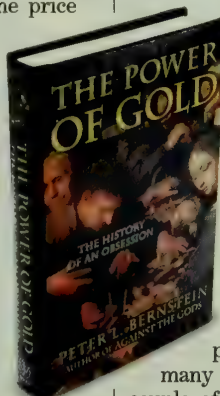
Bernstein also sheds new light on famous historical figures. Sir Isaac Newton, for instance, one of history's great scientists, spent his later life as

England's Warden of the Mint in the early 18th century. Although his fascination with monetary values resulted in a famous treatise that later helped establish Britain's gold standard, Newton's career as an economist ended in disgrace because of his faulty forecasts.

The Power of Gold's breadth is both its major strength and its chief weakness. Inevitably, it moves expeditiously through a great many periods of history. Yet the last couple of chapters are given over to a dutiful rehash of familiar topics: the establishment of the post-World War II exchange-rate system pegged to gold, the inflationary period of the 1970s and 1980s, and the gold bugs of that period.

But these are minor quibbles. Bernstein's volume is a tour de force with a satisfying conclusion: The characters in this drama prove themselves "fools for gold, chasing an illusion," he says. "Perhaps the wisest heroes... were the simple natives of Jenne and Timbuktu, who silently swapped gold for the precious salt that would keep them alive." It's a thought worth remembering in both good times and bad.

BY ERIC SCHINE
Associate Editor Schine is more interested in history than gold.



WORLD HISTORY ON A GRAND SCALE WITH GOLD AS A FOCAL POINT

A photograph of two children swimming underwater in a pool. The child in the foreground is wearing a red swimsuit and a white swim cap, looking directly at the camera with arms outstretched. The child in the background is wearing a black swimsuit with colorful patterns and a red swim cap, also with arms outstretched. The water is clear blue.

Inhibitions.

ZURICH FINANCIAL SERVICES GROUP: Centre • Farmers • Scudder Kemper Investments • Zurich Kemper Life • Zurich

Insurance services are provided by individual member companies of the Zurich Financial Services Group and may not be available in all states.



It won't work. It doesn't make sense. It can't be done. Do it this way. No. That way. Stop. Imagine a different way. Zurich Financial Services Group. With 68,000 employees. In more than 60 countries. And over a century of experience. Offering risk management solutions that go beyond the traditional. To the unexpected. Helping you achieve your financial goals with the right investment opportunities. Now's the time. Explore new waters.



ZURICH
FINANCIAL SERVICES

Your aspirations. Our passion.

www.zurich.com

THE BUSINESS WEEK BEST-SELLER LIST

HARDCOVER BUSINESS BOOKS

- 1 **WHO MOVED MY CHEESE?** by Spencer Johnson, M.D. (Putnam • \$19.95) *Learning to accept change.*
- 2 **WHEN GENIUS FAILED** by Roger Lowenstein (Random House • \$26.95) *Inside hedge fund Long-Term Capital Management.*
- 3 **THE FORTUNE TELLERS** by Howard Kurtz (Free Press • \$26) *The media's stock-market stokers.*
- 4 **PLAY LIKE A MAN, WIN LIKE A WOMAN** by Gail Evans (Broadway Books • \$23.95) *The rules of the game of business—as written by men.*
- 5 **FIRST, BREAK ALL THE RULES** by Marcus Buckingham and Curt Coffman (Simon & Schuster • \$26) *A Gallup investigation into managerial success.*
- 6 **LEADING THE REVOLUTION** by Gary Hamel (Harvard Business School • \$29.95) *A manifesto for radical innovators.*
- 7 **THE TIPPING POINT** by Malcolm Gladwell (Little, Brown • \$24.95) *Discovering what turns an idea into a hot trend.*
- 8 **FISH** by Stephen C. Lundin, PhD, Harry Paul, and John Christensen (Hyperion • \$19.95) *Motivating employees the Pike Place Fish Market way.*
- 9 **THE 9 STEPS TO FINANCIAL FREEDOM** by Suze Orman (Crown • \$23) *Practical and "spiritual" steps for managing money.*
- 10 **GUNG HO!** by Ken Blanchard and Sheldon Bowles (Morrow • \$20) *How Walton Works No. 2 fired up its employees.*
- 11 **LIVING ON THE FAULT LINE** by Geoffrey A. Moore (HarperBusiness • \$27) *Managing in the age of the dot-coms.*
- 12 **RAVING FANS** by Ken Blanchard and Sheldon Bowles (Morrow • \$20) *Turning customers into your biggest boosters.*
- 13 **ELIZABETH I, CEO** by Alan Axelrod (Prentice Hall Press • \$23) *400-year-old lessons in leadership, gleaned from the queen's successful reign.*
- 14 **THE 21 IRREFUTABLE LAWS OF LEADERSHIP** by John C. Maxwell (Thomas Nelson • \$17.99) *A minister's codification.*
- 15 **MULTIPLE STREAMS OF INCOME** by Robert G. Allen (Wiley • \$24.95) *Building wealth from several sources, complete with checklists and worksheets.*

PAPERBACK BUSINESS BOOKS

- 1 **RICH DAD, POOR DAD** by Robert T. Kiyosaki with Sharon Lechter, CPA (Warner • \$15.95) *Teach your kids the rule money that the rich play by.*
- 2 **RICH DAD'S GUIDE TO INVESTING** by Robert T. Kiyosaki with Sharon L. Lechter, CPA (Warner • \$19.95) *Choosing to be rich, not merely comfortable.*
- 3 **THE 7 HABITS OF HIGHLY EFFECTIVE PEOPLE** by Stephen R. Covey (Fireside • \$14) *Habitually popular.*
- 4 **THE CASHFLOW QUADRANT** by Robert T. Kiyosaki with Sharon L. Lechter, CPA (Warner • \$17.95) *Moving beyond job security to financial independence.*
- 5 **THE ONE MINUTE MANAGER** by Kenneth Blanchard, PH and Spencer Johnson, M.D. (Berkley • \$12.95) *Three management techniques, conveyed in brief story form.*
- 6 **THE LEXUS AND THE OLIVE TREE** by Thomas L. Friedman (Anchor Books • \$15) *Globalization and its discontents.*
- 7 **THE 48 LAWS OF POWER** by Robert Greene (Penguin • \$14) *Thoughts of Machiavelli and other power brokers distilled.*
- 8 **WHAT COLOR IS YOUR PARACHUTE? 2000** by Richard Nelson Bolles (Ten Speed Press • \$16.95) *The enduring job-search bible.*
- 9 **THE MILLIONAIRE NEXT DOOR** by Thomas J. Stanley, PH and William D. Danko, PHD (Pocket Books • \$14) *The simple ways of the wealthy among us.*
- 10 **GETTING TO YES** by Roger Fisher, William Ury, and Bruce Patton (Penguin • \$12.95) *A Harvard team's step-by-step guide to conflict resolution.*
- 11 **BUILT TO LAST** by James C. Collins and Jerry I. Porras (HarperBusiness • \$16) *How 3M, Wal-Mart, Procter & Gamble, and others became standouts.*
- 12 **THE INNOVATOR'S DILEMMA** by Clayton M. Christensen (HarperBusiness • \$16) *New technologies' disruptive effect.*
- 13 **DICTIONARY OF FINANCE AND INVESTMENT TERMS** by John Downes and Jordan Elliot Goodman (Barron's • \$13) *What is an oligopsony anyway?*
- 14 **THE GOAL** by Eliyahu M. Goldratt (North River Press • \$19.95) *Bringing company strategies in line with your purpose, making money.*
- 15 **THE WALL STREET JOURNAL GUIDE TO UNDERSTANDING MONEY AND INVESTING** by Kenneth M. Morris and Virginia B. Morris (Fireside • \$15.95) *Concise explanations enriched with graphics.*

BUSINESS WEEK's Best-Seller List is based on a survey of chain and independent booksellers that carry a broad selection of books on economic management, sales and marketing, small business, investing, personal finance, and careers. Well over 1,000 retail outlets nationwide are represented. Current rankings are based on a weighted analysis of unit sales in September.

Reviews and more are available on AOL (Keyword: BW) or www.businessweek.com

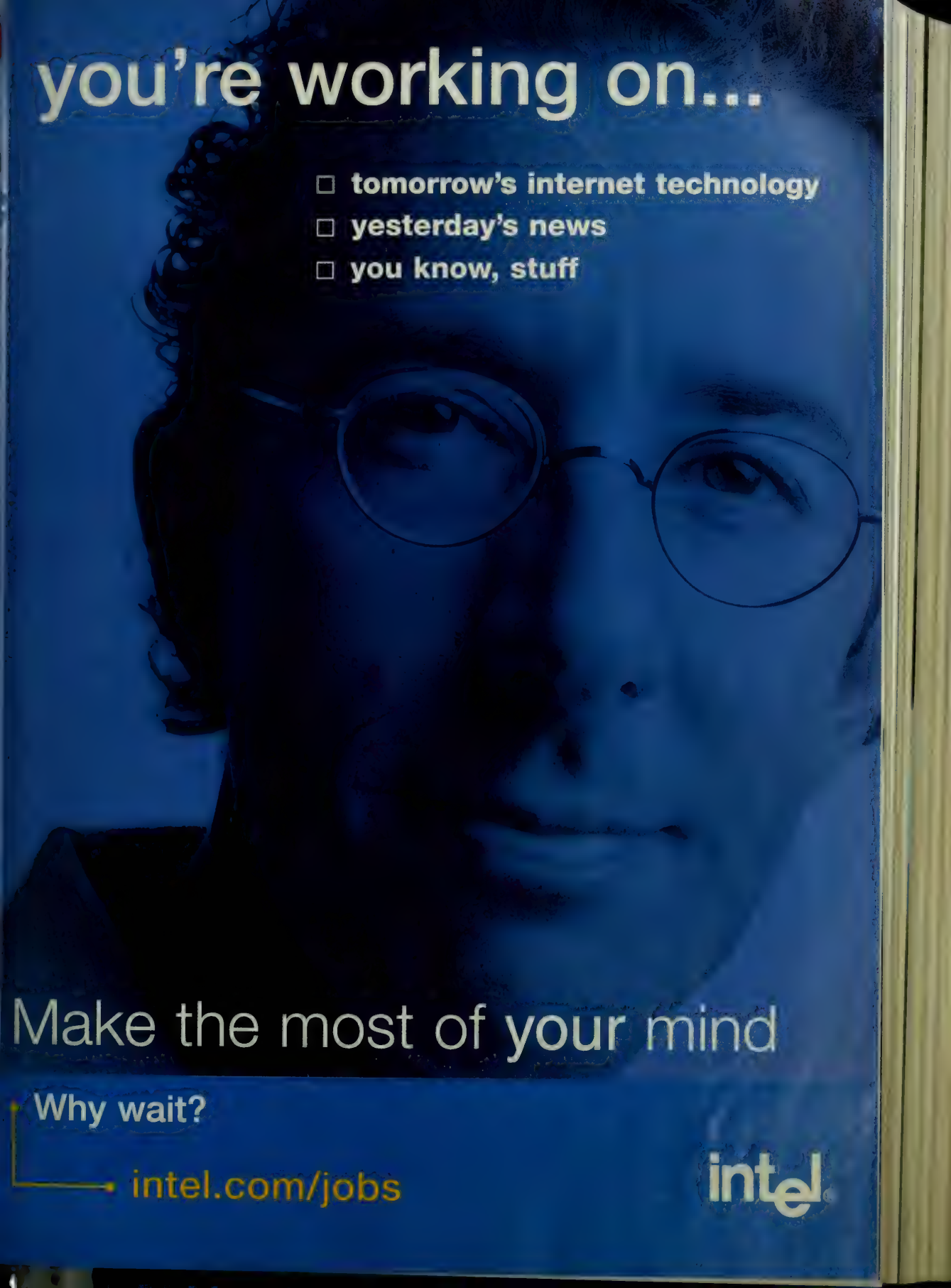
HOT TYPE

IF THE BLOW-UP-THE-CORPORATION TEACHINGS of a Geoffrey Moore or Gary Hamel strike you as too extreme, Alan Axelrod's new book, *Elizabeth I, CEO*, could be just the ticket, offering a brief history of the Elizabethan age as a bonus. The book, No. 13 on this month's hardcover list, is full of 400-year-old lessons of restraint, audacity, and survival, purportedly learned by Queen Elizabeth as she overcame a controversial ascent to rule Britain successfully.

Elizabeth's bold reign, which favored "evolution over revolution," according to the author, offers today's managers a model of a safe and moderate path to success. To that end, Axelrod demonstrates the Queen's exceptional diplomatic

skills, prudence, and innate fairness—abilities a leader in the 21st century should want to cultivate. But complex developments are often stripped of subtlety, and some maxims get colorful subtitles, such as "Make a Strong Impression: Suck It Up." Other sections' offerings are reminiscent of familiar maxims from Mom's bedtime stories: Be strong but fair. Exercise caution. Accept compromise. Don't act in anger. Axelrod acknowledges this himself in "You Can't Please Everybody," saying: "It was a version of the lesson that parents have been teaching their children for time out of mind." It's nice to have reminders of precepts that you first heard from Mom, but on the other hand, were free.

BY KARIN PEKAR



you're working on...

- ☐ tomorrow's internet technology
- ☐ yesterday's news
- ☐ you know, stuff

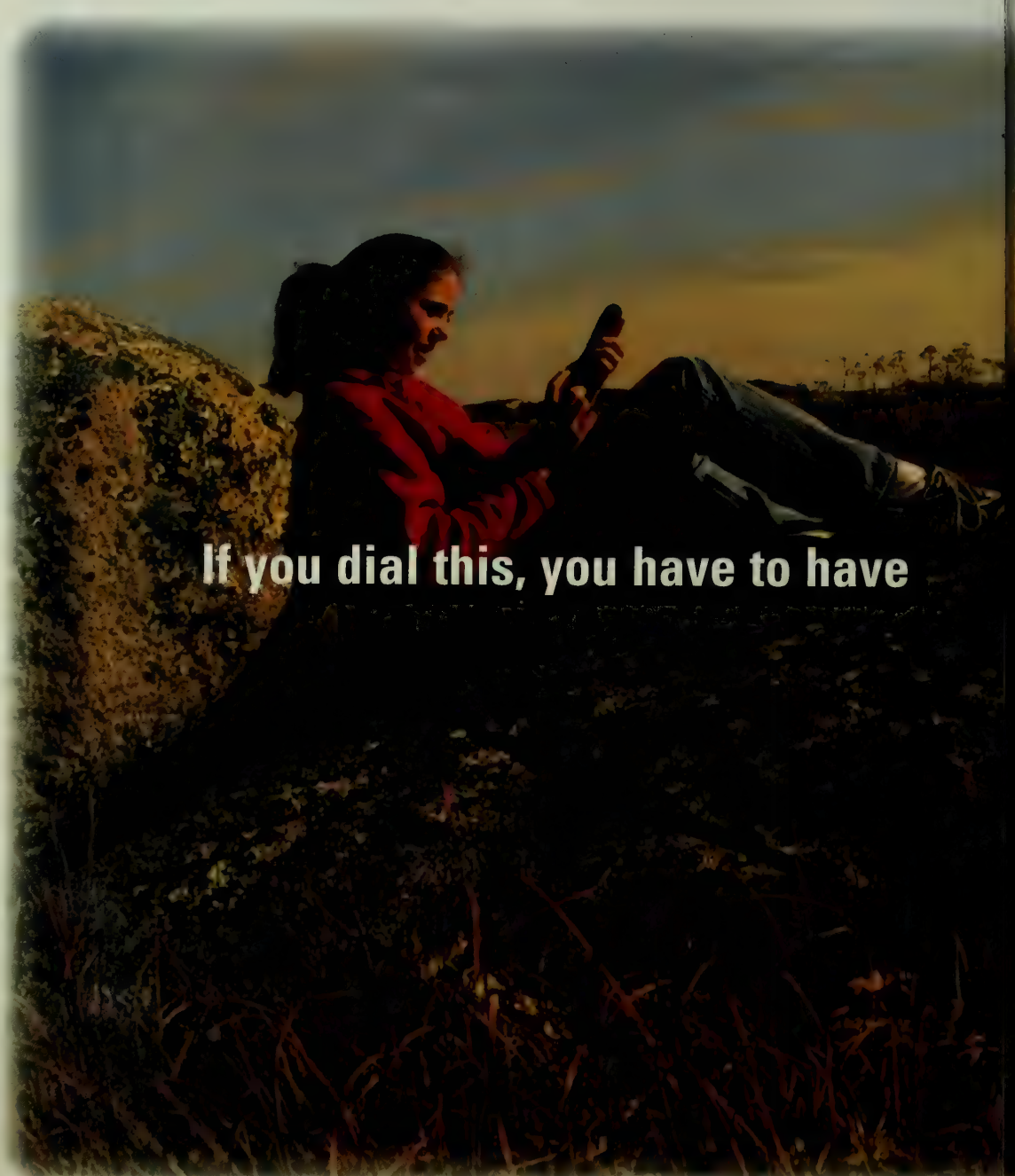
Make the most of your mind

Why wait?

intel.com/jobs

intel

SIEMENS



If you dial this, you have to have

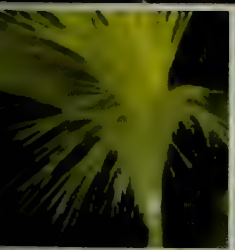
Automation • Automotive Electronics • Energy • Information and Communications • Lighting • Medical Systems • Power Generation • Transportation

may seem like a simple phone call but it's got a
ge global network behind it. And likely as not, a
emens network. We not only build local, regional
d global communications networks, we build most
the pieces of those networks. From fiber-optic cable

to central office switches to complete voice and
data systems. Whether you're looking for a cordless
phone for your home, a wireless system for your
office or a global communications infrastructure
for your company, the place to call is Siemens.

We're Siemens. We can do that.™

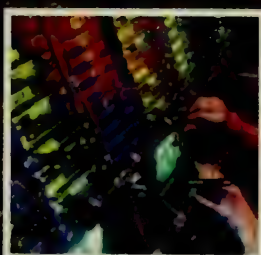
this



this



and this.



www.usa.siemens.com

BY STEPHEN H. WILDSTROM

tech&you@businessweek.com

SO LONG, COMPUTER CABLE?



An affordable, wireless LAN is a good idea catching on fast in companies and homes

Now this is portability. I store files on the corporate network at my desk, then pick up my laptop and head to the conference room, where I use it for a Web demo. At home, after dinner, I get the computer from my briefcase and deal with the remains of the day's e-mail while watching a ball game on TV. And I do it all without connecting or disconnecting a cable.

Granted, the sort of wireless communication that lets you get what you want, wherever you want it, is well off in the future. But one form of wireless is simple, reliable, affordable, and available today for home or office use. It's called an IEEE 802.11b wireless local area network, or LAN. Just about everyone who tries it wants it.

Use of this wireless network is exploding. Nearly two-thirds of companies are using, testing, or at least considering wireless LANs, according to a poll of 500-plus companies of all sizes in the Mobile Advisory Council of consulting firm International Data Corp. (www.survey.com/idcmacouncil.html). Schools, frustrated by the difficulty of pulling cables through old buildings, are going wireless, while colleges are "lighting up" entire campuses. A startup called Wayport (www.wayport.com) provides public wireless service at the Austin (Tex.) and Dallas-Fort Worth airports and hotels around the country.

Several factors led to this surge. Manufacturers such as Lucent Technologies and Cisco Systems agreed on a standard and worked to make their equipment work together. Apple Computer started making all its products ready to go on a wireless LAN with the addition of a \$100 AirPort card. And Lucent, which had worked with Apple, slashed the prices for its Orinoco line of wireless gear. Currently a PC Card for a laptop costs around \$175, and a desktop adapter is about \$70. A commercial access point, or base station, is about \$900, and a home starter kit that combines a base station and one PC Card is \$420. Under some circumstances, especially where cable must be installed in older buildings or where the presence of asbestos is an issue, wireless can be cheaper than conventional wiring.

Going wireless with an existing Ethernet network is simple. You plug an access point into the network and insert a wireless card into a PC. Installing software and setting up the access point takes minutes. The hardest part is placing the access points for maximum coverage at minimum expense. In theory, computers can be up to

300 feet from access points, but design and construction of a building affect the range.

I don't think wires will disappear from offices. Wireless LANs run at 11 megabits per second, about the same as standard wired networks. This is plenty in most cases. But graphics stations, servers, routers, and other high-end devices should be on a high-speed cabled backbone, which can run at up to 100 Mb/s.

Wireless is also attractive for home use. The Orinoco Residential Gateway, which can provide service throughout most houses, includes a modem for dial-up use. Networking makes more sense with high-speed cable or DSL, and since every computer can use the same line, the main gripe is that instructions for configuring the Orinoco Gateway for varied setups could be clearer. Look for 3Com to provide a petition around the end of the year.

Some companies, notably Intel and Proxim, are promoting a separate, incompatible wireless standard called HomeRF, but it looks like a loser. Why? People don't want to use one wireless card in the office and another at home.

The bigger news for late 2000 and early 2001 is that virtually all notebook manufacturers follow Apple's lead by making their products wireless-ready. At first, this will just mean a



antenna built into the case. Next year, they'll have internal transceivers in the case, and these will cost less and perform better than today's external cards. As costs continue to decline, wireless networking could be built into handheld devices such as Palms.

Wireless LANs haven't gotten the sort of attention given Web browsing phones or wireless handhelds. But unlike these immature and narrow technologies, wireless LANs work everywhere and cheaply. Anyone who has or could have a wireless network should give the technology a look.

BusinessWeek online

FOR A COLLECTION OF PAST COLUMNS and online-only reviews of technology products, go to Technology & You at www.businessweek.com/technology/

**urprisingly, to become one of the largest e-business
companies in the world, you don't
have to deal in books or collectibles.**



For over 30 years, you've known Fannie Mae as the private company with a public mission to expand the dream of homeownership. Despite our traditional look, we've also been a leader in developing innovative technology solutions that help our lender partners serve more borrowers and qualify more families. So it's only natural that we're putting this expertise to work by making our technology more widely available on the Internet to help our mortgage industry partners offer consumers the best possible low-cost mortgage experience.



Last year alone, we conducted about \$170 billion in business through our proprietary e-business network. Now we are moving all of our business services to the Internet, enabling us to do \$300 – \$400 billion of business online each year.

Which explains why we're more than just the world's largest source of mortgage funds. We're rapidly becoming one of the world's largest e-businesses.

Fanniemae.com. It's how we do business. Period.



Risk.

Covered by Allianz Group

Wherever you are, whenever you
need us, the Allianz Group is
always there for you.

To us, risk management means thinking the unthinkable
to prevent risk turning into loss. As one of the world's
leading insurers our financial strength and technical
expertise combine to make Allianz Group the partner
you can trust whenever and wherever you need us.

Allianz. The Power Beside You.



Allianz Group. Europe's leading global insurer
and provider of financial services.

BY ROBERT J. BARRO

GORE'S 'RECKLESS AND OFFENSIVE' PASSION FOR THE ENVIRONMENT



ZEALOT:
The energy policies advocated by Gore would be disastrous. So why are voters seriously considering him for the Presidency?

The recent rises in oil prices highlight energy policy as an area of contrast between the two Presidential candidates. George W. Bush favors expansion of U.S. supply, including oil exploration in Alaska. Al Gore emphasizes reductions in energy demand, and he opposes Alaskan exploration on environmental grounds. He also argues that any expanded capacity would be delayed for five years and would therefore not help the current situation.

The last point is odd, because policymakers ought to value energy solutions even if they take five years to work. Moreover, investments that expand future oil supply would motivate producers, such as Saudi Arabia, to sell more oil earlier, while prices were still high. This reaction causes supply to rise and prices to fall well before the new capacity arrives.

Gore's opposition to oil exploration in Alaska is important because it demonstrates his unwillingness to adopt a cost-benefit approach to the environment. Although such calculations can be difficult, we have to make these assessments to make policy choices, and we will not make reasonable decisions if we always pretend that any environmental damage costs an infinite amount.

The benefits of the exploration include a gross valuation of roughly \$9 billion per year (assuming 1 million barrels per day at a per-barrel price of \$25), starting perhaps in five years. Although much of the revenue would accrue initially to oil companies, the benefits extend ultimately to all users of energy. The cost involves hypothetical damage to a vast wilderness that is not especially attractive and that most of us will never see. I am waiting for the plausible calculation that makes this cost comparable to the billions on the revenue side.

POLITICAL PLOY. Since Gore is reputed to be an environmental expert, it's curious this area has received little attention in the campaign. However, we can predict his policies by consulting his 1992 book, *Earth in the Balance: Ecology and the Human Spirit*. The book is striking for the extreme positions taken on all of the favorite environmental causes, including global warming, ozone-layer depletion, and preservation of endangered species and rain forests. The thesis is that we humans are unrestrained guzzlers of energy and dangerous enemies of the environment. Hence, enlightened policymakers ought to spare no effort in combating these tendencies.

This attitude led Gore to advocate abolition of the internal combustion engine by 2017. His view of automobile transportation was summarized as

"it makes little sense for each of us to burn all the energy necessary to travel with several thousand pounds of metal wherever we go. Thus, he believes that Americans' love affair with their cars stem not from the efficiency or convenience of the mode of transport but rather from some sort of mass craziness.

Gore regards the threat to the environment so serious and imminent that he likens it to the Nazi Holocaust: "In the 1930s, when Kristallnacht revealed the nature of Hitler's intentions toward the Jews...the U.S. and the rest of the world [were] slow to act.... Now, warnings of a different sort signal an environmental holocaust without precedent.... Once again, world leaders waffle.... Yet today the evidence of an ecological Kristallnacht is as clear as the sound of glass shattering in Berlin."

Gore goes on to compare the environmental danger to the injustice of American slavery: "Most...of the generation that wrote the Constitution were partially blind when it came to the inalienable rights of the African-American slaves.... Today, most...are partially blind when it comes to our connection with the natural world." Some people regard this passion as admirable, but I regard it as reckless and offensive.

In any event, the hyperbole is hard to reconcile with Gore's recent support of the release of oil from the Strategic Petroleum Reserve. Apparently, during a Presidential campaign, moderating the rise in oil prices is more important than saving the world from holocaust and slavery.

From my perspective, the use of the reserve is a political ploy that will have little impact on oil prices. I always disliked the idea of the government's amassing large supplies of oil. The main rationale is for use during wartime, when the government will keep prices from rising above market levels. The danger, as recently verified, is that the reserve will be used for political purposes and to interfere with market forces.

It seems undeniable that Gore's views on energy and the environment are extreme relative to the opinions of average Americans. One therefore has to wonder why voters are seriously considering him for the Presidency. I think people either doubt Gore's belief in his own extreme statements or expect the U.S. Congress to impose restraint. Unfortunately, the President has a lot of power to enact energy and environmental policies on his own. Therefore, it is prudent to take Gore at his word and regard him as a serious threat to carry out the mission described in his book *Earth in the Balance*.

Robert J. Barro is a professor of economics at Harvard University and a senior fellow of the Hoover Institution (rjbweek@harvard.edu).



Are you seeing the whole picture?

In e-business, what looks good one minute can be deadly the next.

That's where Informatica comes in. We give you instant access to all of your information no matter where it is. Delivered to you no matter where you are. So you can make informed decisions. See the whole picture now, at www.informatica.com/elunch-bw. Or call 1-800-970-1179.

INFORMATICA
NOW YOU KNOW™

it's the bad mamma-jamma of wireless computing



SPANworks® software with the Toshiba Bluetooth PC Card allows network and file sharing, presentation sharing, chat and business card data exchange.

Bluetooth PC Card delivers up to 20 times the speed of a traditional V.90 modem with a range three times farther than other PC cards: up to 100 feet.

Bluetooth is standards-based, so it works virtually worldwide and with all Bluetooth devices.



pentium® III

Toshiba recommends Microsoft® Windows® 2000 Professional for business.

¹The Toshiba Bluetooth PC Card is compatible on Microsoft Windows 98 Second Edition and Microsoft Windows Me. ²When products become available. ©2000 Toshiba America Information Systems, Inc. Tebra and SPANworks is a registered trademark of SPANworks, Inc. Intel, the Intel Inside logo and Pentium are registered trademarks and Intel SpeedStep is a trademark of Intel Corporation. All other trademarks are the property of their respective owners.

roducing the totally new Tecra 8100. The first ever Bluetooth PC solution.

 The Toshiba Tecra® 8100 with the Bluetooth™ PC Card¹ is so fine, it's poetry in motion. With the Bluetooth PC Card, you can connect effortlessly with other Bluetooth PCs, handheld devices, LAN and Internet connections — all without

wires or cables.² Bluetooth is the latest mobile computing innovation pioneered by Toshiba through a joint venture with industry leaders. Now you can truly work without being tethered to old technology. So free yourself from the cables and wires that bind. You don't need them anymore.



Bluetooth has 128-bit encryption, which ensures that every connection is secure.

Superfast Mobile Intel® Pentium® III processors up to 850MHz featuring Intel SpeedStep™ technology and configurable from 5.6 lbs. light and 1.5" thin.

Up to 20 billion byte hard drive and a 14.1" diagonal TFT active-matrix color display.

choose freedom™
TOSHIBA

To buy direct, visit bluetooth.toshiba.com or call 1-800-TOSHIBA

ed trademarks, and choose freedom is a trademark of Toshiba America Information Systems, Inc. and/or Toshiba Corporation. Bluetooth is a trademark owned by its proprietor and used by Toshiba under license. All other trademarks are the property of their respective owners. All rights reserved.

BY GENE KORETZ

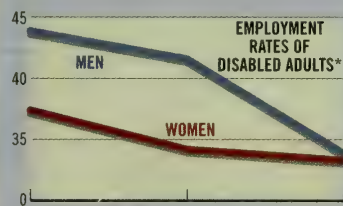
HOW TO ENABLE THE DISABLED

They still lag in jobs and income

It's a puzzle that is perplexing the economics fraternity. While the expansion of the 1990s boosted jobs and incomes for most Americans, it seems to have bypassed a key group: the nearly 10% of the working-age population with disabilities.

A study by Richard V. Burkhauser and Andrew J. Houtenville of Cornell University and Mary C. Daly of the Federal Reserve Bank of San Francisco tells

SCANT PROGRESS FOR PEOPLE WITH DISABILITIES



DATA: RICHARD V. BURKHAUSER, MARY C. DALY AND ANDREW J. HOUTENVILLE

the story. Despite rising demand for workers, the employment rates of disabled men and women fell steadily from 1989 to 1999 (chart). Further, their household incomes lagged behind the income gains of other households, as earnings declines were only partly offset by higher payments from such programs as Social Security Disability Insurance (DI) and Supplemental Security Income (SSI).

Why hasn't employment of the disabled grown during this expansion, as it did in other cyclical upturns such as that of the 1980s? The question is touching off a hot debate among economists.

Some, such as Massachusetts Institute of Technology economists Daron Acemoglu and Joshua Angrist, believe the Americans With Disabilities Act, (ADA) which took effect in 1992 and was supposed to enhance hiring of the disabled, actually backfired. Their analysis of survey data suggests the costs of accommodating disabled employees—and lawsuits if they are fired—have dissuaded employers from adding disabled workers to their payrolls.

The law's defenders argue that the survey data are flawed. People who are successfully integrated into the work-

force, for example, may no longer describe themselves as "disabled" in government surveys—thus lowering the employment estimate for the disabled population. Researchers Douglas Kruse and Lisa Schur of Rutgers University find that employment of people with functional disabilities who did not describe themselves as "work-disabled" rose after the ADA was passed.

Still others stress a sharp rise in people receiving disability payments via Social Security or SSI. In this view, the decline in employer-sponsored health insurance along with relaxed government eligibility standards in the 1990s induced many of the disabled to opt for transfer programs rather than work. Indeed, a study by John Bound and Timothy Waidmann of the University of Michigan attributes much of the drop in disabled employment rates to the growth in government disability insurance rolls.

Of course, it's likely that all of these theories have some validity—that the ADA hurt hiring prospects for some people and helped others, for example, and that many were attracted by the greater availability of government transfer programs. What everyone agrees is that more has to be done to bring the disabled into the world of work and off the government dole.

Thus, hopes are now focused on the new "Ticket to Work" federal law about to go into effect. Under this program, private agencies that successfully train and place the disabled in continuing employment will receive as payment some of the funds they save the government.

IT USED TO BE RISK WAS SCARY

Now, household savings shun safety

Once upon a time, U.S. households kept most of their financial assets in vehicles that protected their principal. No more. The huge rewards reaped by risk-takers over the past decade appear to have substantially lessened the average household's fears of risk, says economist Paul Kasriel of Northern Trust Corp.

Take corporate equities, which are regarded as riskier than fixed-income securities and bank deposits from a return-of-principal standpoint. Between 1984 and 1999, notes Kasriel, the share of household financial assets invested in the often-volatile stock market has surged from 27.4% to 67.6%.

That's not all. Not only did the non-equity share of household financial as-

sets hit a postwar low of 32.4% last year, but its holdings of federally insured bank deposits and Treasury securities are also the lowest in the postwar period. Indeed, these risk-free assets now make up just 20% of all household financial assets, down from 50% in 1960.

The riskier assets replacing Treasury and deposits in household nonequity baskets are mainly money-market mutual funds and various forms of "securitized" loans, including government agency debt such as Fannie Mae and Freddie Mac issues, which are not backed by the full faith and credit of the Treasury. Further, money-market funds have been piling their holdings of Treasury securities

In sum, household financial assets are getting riskier because of their increased weighting of stocks, and of shifts in their nonequity portfolios. "Risk aversion," says Kasriel, "seems to have dropped out of Americans' vocabulary."

WHY THOSE DRUG COSTS ARE UP

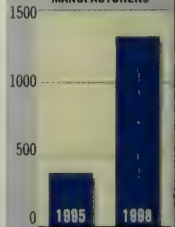
New, pricier drugs are in demand

Although overall spending for prescription drugs in the U.S. has more than doubled since 1990, it's not because makers have been raising prices. On a per-capita basis, annual usage jumped 32% between 1992 and 1998 alone, to 9.6 prescriptions per person.

Meanwhile, the industry has boosted the number of new, high-priced brand-name drugs coming to market—the fruit of heightened research and development spending. Notwithstanding the effectiveness of such drugs, Kaiser notes that a major factor behind the surge in demand for both old and new drugs is a huge jump in consumer advertising by drug-makers, which tripled between 1995 and 1998.

TARGETING PILL POPPERS

CONSUMER ADVERTISING OUTLAYS BY DRUG MANUFACTURERS*



* MILLIONS OF DOLLARS
* FOR PRESCRIPTION DRUGS
DATA: KAISER FAMILY FOUNDATION

There's No Upside to Downtime

How netsourcing helps combat the crippling effects of downtime on revenue, reputation and customer satisfaction

THE E-BUSINESS REVOLUTION is changing all the rules. It's making already hyper-competitive business environments fiercer than ever. In this Web-driven world, your application represents the core of your e-business model. Chances are you've spent millions creating the optimal combination of people, products and services to support it. But what if customers can't access your application because a component of your IT or network infrastructure is down? The fact is customers expect e-business applications to be up-and-running 24x7. If they experience downtime, all it takes is a single mouse click to propel them to a competitor.

The Demons of Downtime

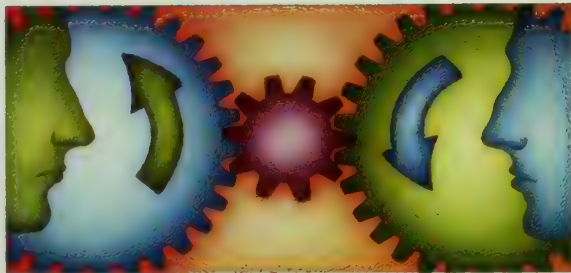
Complex e-business applications are playing a crucial role in many companies' business strategies by directly impacting their bottom line. And these applications require a similarly complex infrastructure to support them. Combine that need with the surging, exponential growth of the Internet and unprecedented traffic levels, and a key mantra emerges: prepare to scale or fail.

Indeed, many service outages and interruptions are attributable to inadequate technology infrastructure growth planning and the inability to quickly provision technology resources. Procuring the expertise and technology required to scale complex environments in a timely, cost-effective manner is more difficult than ever.

Security is the other burning issue e-businesses face. Hackers, viruses, industrial espionage and disgruntled former employees are some of the biggest threats to an e-business infrastructure. The great thing about the Internet is that it's brought businesses, partners and customers closer than ever. But it's also created unprecedented opportunities for malicious attacks. Just look at the recent spate of Denial of Service incidents that hit some of the world's most renowned e-services and e-commerce sites.

The Awful Truth

Downtime can fundamentally impact the future of your business and dull its competitive edge by instigating:



- **Decreased financial performance** — Say goodbye to your market cap and hello to shareholder angst. The valuation of many high-profile e-businesses continues to be pummeled as a result of downtime.
- **Damaged reputation** — Congratulations, your e-business application is making news worldwide! Too bad the headlines are about the fact that you were down for 10 solid hours. Downtime can mean a public relations disaster. Major news organizations are known for reporting on downtime within hours of an occurrence — something that adversely affects external perceptions of the company and saps internal morale.
- **Productivity loss** — Are your employees focused on your core business? Or are they busy fighting fires, trying to alleviate IT issues that tax their skill sets, energy and enthusiasm? The inevitable delays in strategic projects and deliverables can set you back weeks or months — an eternity in Internet time.

These downtime scenarios represent the pitfalls every e-business faces right now, regardless of industry. They can trigger at any second of every day. And while it's useful to figure out if you're prepared to deal with them, it's far more beneficial to ensure you've got a system that helps prevent them from happening in the first place.

To ensure maximum application availability, many companies are turning to e-business infrastructure outsourcing. But the problem is most outsourcing options are limited to strategies that react to downtime instead of preventing it. Netsourcing is the exception. It's a new breed of high-end e-business infrastructure outsourcing that offers a realistic guarantee of application availability.

According to The Yankee Group analyst firm, netsourcing is the outsourcing of critical infrastructure for Web-based e-commerce and other next-generation e-business applications. A true netsourcing solution delivers a complete, turnkey infrastructure that accelerates e-business application deployment, minimizes downtime and lowers total cost of ownership. Working with a netsourcing provider is fast becoming an essential element for e-business. It's easy to see why.

ture integration, implementation, equipment provisioning and operations management resides solely with the customer.

Recently, some first-generation hosting providers have engaged in acquisitions and partnerships to bolster their limited offerings with piecemeal IT/network infrastructure management capabilities. But it remains a fragmented approach rife with limitations and decentralized accountability.

Outsourcing brokers attempt to

the customer's perspective. Only one option — netsourcing — truly minimizes risk factors by offering a rock-solid, 24x7, all-encompassing solution that guarantees maximum application availability.

Netsourcing involves outsourcing the entire IT/network infrastructure with the sole exception of your application — in other words, *your business*. It incorporates hardware provisioning, infrastructure integration, network services, security, performance and operations management and support services into one seamless solution. And unlike other business infrastructure outsourcing options, some netsourcing providers have direct and immediate control over the IT/network infrastructure. In these cases, there are no subcontracted or brokered services. This means no runaround when it comes to the upkeep of the infrastructure underlying your mission-critical application. Netsourcing providers also have teams of in-house skill resources on staff, allowing them to be fully accountable for the entire infrastructure.

All told, netsourcing providers deliver services that are truly "application ready" via complete, turnkey infrastructure solutions tailored to the requirements of your application and desired level of application availability.

E-Business Infrastructure Outsourcing in Context

	First-Generation Hosting Providers	Outsourcing Brokers	Netsourcing Providers
Domain Expertise	Co-location and managed services delivered in-house or subcontracted	Subcontracting of all infrastructure services and facilities	Single-source, application-ready e-business infrastructure
Provides	Primary: Data center floor space, physical security, Internet access Secondary: Value-added services	Software layer simulating integration of disparate third-party components	Turnkey IT/network infrastructure and operations

Outsourcing Options Aren't Created Equal

All e-business infrastructure outsourcing providers claim to effectively address application availability, complexity, scalability and time-to-market

pull more pieces together than their first-generation counterparts via a team-driven approach. They assemble a variety of infrastructure providers and manage them with a layer of software to establish the perception of a

"Only the strong will survive the blistering demands of today's e-business environment. If your application goes down, it may very well take your whole business with it."

issues. And while each asserts they offer a consistent, comprehensive approach, the reality is most have varying — even erratic — degrees of expertise in these arenas.

Take first-generation hosting providers for example. They argue their solutions are comprehensive enough to meet the exacting needs of e-business. But truth be told, they're optimized to host companies' Web sites, not today's complex e-business applications. Most only offer data center floor space and an Internet hook-up, along with some value-added services at extra cost. In most cases, the entirety of responsibility for infrastruc-

single, integrated solution. But the reality is outsourcing brokers are merely providing second-hand services. Your applications are at the mercy of these subcontracted providers for response time. That's why the verdict is still out on the outsourcing broker's ability to guarantee application availability, not to mention quickly reacting to your changing needs.

Netsourcing Minimizes Risk

It goes without saying that risk is at the core of the outsourcing debate. Solutions from first-generation hosting providers and outsourcing brokers involve a great deal of risk from

tion ready" via complete, turnkey infrastructure solutions tailored to the requirements of your application and desired level of application availability.

A Netsourcing Case Study

An example of netsourcing in action is Intira Corporation. Many point to the San Francisco Bay Area-based company as one possessing the unique understanding and resources needed to meet and exceed the requirements of today's e-businesses.

"E-business is a time-to-market game," says Steve Duplessie, senior analyst at the Enterprise Storage Group research firm. "Intira has bu-

comprehensive, highly-integrated infrastructure and hired a diverse set of technical talent that together can rapidly architect and deploy a customer's mission-critical infrastructure. The customer then merely has to focus on their specific application and content, and not worry about the underlying technology. Intira guarantees per-

formance levels and has the ability to create a highly scalable model that is very flexible — the single biggest challenge facing e-business customers.”

As a netsourcing provider, Intira was built from the ground up to focus on business availability, not mere business recovery — the method adopted by first-generation providers and outsourcing brokers that don't have direct control over their infrastructures. This is a significant distinction.

Companies must weigh the risk factors when deciding whether prevention strategies are better than failover measures as a means of protecting their business. The business recovery approach takes action to restore e-business services only after

an outage has occurred. There are risks attached to this approach, as the provider scrambles to correct the outage. In contrast, Intira has direct and immediate control of the IT/network infrastructure which allows it to proactively monitor your application availability 24x7. The investment Intira has made in both infrastructure and monitoring enables it to detect and remedy problems before service levels and application availability are affected.

The Service Level Playing Field

When outsourcing your IT/network infrastructure, you're putting your e-business on the line. You need to create a strategic relationship with a partner that takes the time to understand the critical nature of your business. The most important part of that relationship is the Service Level Agreement (SLA).

The SLA is an essential tool for building accountability into the provider-client relationship and measuring the provider's performance. In stark contrast to first-generation

providers and outsourcing brokers, Intira's business model places extraordinary emphasis on an integrated, comprehensive SLA, rather than umbrella SLAs that merely reflect numerous sub-SLAs covering individual infrastructure components. In Intira's case, the company backs up its commitment with a comprehensive

SLA offering up to 99.95 percent application availability.

Other outsourcing providers package their business recovery services with SLAs that allegedly offer 99.99 and 99.9999 percent uptime. Prospective customers need to avoid the “battle of the nines” and put such SLAs under intense scrutiny. Key questions to ask include:

- Is the SLA focused on 24x7 application availability?
- Is it really a single SLA or just a shell housing multiple SLAs reflecting a jumble of subcontracted services, software and hardware?
- Does the SLA include substantial penalties that highly incent the provider to deliver on its promises?

“The widespread adoption of netsourcing demonstrates an evolving shift towards e-business infrastructure outsourcing. For organizations with enterprise-class e-business applications that must be highly available, premier netsourcing providers such as Intira should be strongly considered.”

Netsourcing@Work: myspace

Myspace provides a Web-based service located at www.myspace.com offering businesses and consumers a way to safely store, organize, share and distribute information on a private, secure virtual hard drive. The company's mission-critical online file storage, collaboration and management service is central to its business.

Myspace allocates 300 MB to each user and is experiencing an exponential customer growth rate of more than 500,000 new users per month.

“Our business is riding on our infrastructure and storage systems,” says Bud James, chief technology officer of myspace. “Our applications have to be up and running all the time. We also need the capacity to handle surges, performance spikes, sudden bandwidth capacity demands

and disk utilization issues without bogging down our site.”

“We chose Intira for its proven ability to support fast-growing, high-functionality sites and commitment to providing a solid, reliable and scalable service to myspace,” adds Ricky Aaron, CEO of myspace. “Intira allows us to meet our current demands while rapidly expanding our capabilities beyond our already aggressive growth model.”

Since the implementation of its Intira Netsourcing Solution, myspace and its customers have enjoyed significant benefits.

“Uploads and downloads are demonstrably faster than before,” says James. “We're relying on Intira to help us maintain these service levels as we grow to upwards of 20 million users.”

- Has the provider demonstrated the capacity to meet its SLA commitment?

If the answer to any of these questions is "no" then you're putting your e-business at risk. By delivering one integrated SLA, Intira is able to focus on what matters most to customers: application availability.

It's important to note that Intira also backs its SLA with a service level management strategy that incorporates the people, processes and tools to ensure service levels are continuously met. It's the reason TeVeO, Inc., a leading online digital video and Web camera technologies provider, selected Intira.

"Our comprehensive, fully managed Intira Netsourcing Solution, covered by a single, aggressive and comprehensive SLA, gives us the confidence to focus on developing and promoting our proprietary application, not on the technology to support it," says Joyce Cooper, Web technology architect of TeVeO, Inc. "The Intira Netsourcing Solution helps us establish and maintain a competitive edge in our market."

When looking for a strategic partner to enhance its offering, Deloitte Consulting, a world leader in professional services, chose Intira. The renowned organization understands the substantial value netsourcing is providing companies across the globe.

"Deloitte Consulting sees more and more world-class organizations looking to netsourcing in order to fulfill their e-business infrastructure needs," says Craig Hodgetts at Deloitte Consulting. "Intira is a standout example of the type of customer-focused company that Deloitte Consulting has partnered with while building our business. Together, the companies will ensure seamless integration between customer applications and Intira's Netsourcing technology infrastructure based on industry-leading processes and standards."

TeVeO and Deloitte Consulting aren't alone in their commitment to netsourcing.

"The widespread customer adoption of netsourcing demonstrates an evolving shift towards e-business infra-

Intira Corporation

Enabling e-business with a foundation you can count on

Intira recognizes that your application is your business, not the complex IT/network infrastructure and operations that support it. That's why its Netsourcing Solutions are built and engineered from the ground up to exclusively support mission-critical e-business applications with the highest levels of application availability.

Intira Netsourcing Solutions combine all the IT/network elements your e-business applications require to deliver successfully time after time — an integrated, world-class IT/network infrastructure; highly automated, secure operations and management systems; a broad set of highly-skilled technical resources; and a full range of robust, value-added services.

And because Intira has direct and immediate control over the entire infrastructure your applications reside on, it can offer a comprehensive SLA guaranteeing application availability up to 99.95 percent, as well as a single point of accountability for the entire Netsourcing solution.

Intira is driven to be more than just the industry's leading Netsourcing provider. It wants to be a full-fledged partner in your success. That's why Intira's Netsourcing Solutions are designed to accelerate your time-to-market, reduce costly staffing and technology investments, and enable you to focus on building your core business.

With Intira, you get more — far more — than what traditional, first-generation hosting providers or outsourcing brokers offer. You get a solid e-business foundation you can count on today and far into the future.

For more information about Intira's
Netsourcing Solutions, please visit
www.intira.com or call 1-888-350-6290.



© 2000 Intira Corporation. All rights reserved.

structure outsourcing," says Chris Selland, vice president of e-business strategies at the Yankee Group. "For organizations with enterprise-class e-business and internal applications that must be highly available, premier netsourcing providers such as Intira should be strongly considered."

Ensuring E-Business Survival

Only the strong will survive the blistering demands of today's e-business environment. If your application goes down, it may very well take your whole business with it. That's the cold, hard reality of the situation.

You need to think carefully — and strategically — about how much downtime risk your organization is willing to absorb. Ask yourself how downtime will affect your business and customers. What are its potential short- and long-

term impacts? Unless you're wearing rose-colored glasses, there's absolutely no upside to downtime.

Netsourcing is clearly leading the e-business infrastructure outsourcing revolution with its zero-tolerance for downtime. It's the only game in town that completely offloads the weight and worry of making sure your mission-critical application's availability is maximized, even under the most challenging conditions. And when it comes to netsourcing, no other vendor has Intira's experience or success in providing solutions offering maximum performance, availability and functionality.

The potential rewards of the global e-business environment are enormous. But the dangers are too. Shifting your infrastructure focus to a netsourcing model will help you reap the benefits with a minimum of peril. •

BY JAMES C. COOPER & KATHLEEN MADIGAN

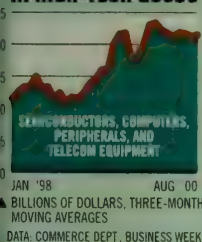
THE INCREDIBLE SHRINKING TRADE DEFICIT? NOT YET

Exports have a long way to grow just to keep the deficit steady

U.S. ECONOMY Is the trade deficit turning around? That hopeful question popped up after the August data showed that the U.S. foreign trade gap shrank by more than \$2 billion from July, the largest monthly improvement in four years. Equally important, the yearly growth in real merchandise exports finally caught up with the advance in imports, something that hasn't happened in three years.

The August data notwithstanding, talk of a shrinking trade deficit is premature. The best that can be said is that the rate of widening in the gap is starting to slow. The reason for a more cautious view is a case of some not-so-fuzzy math. Because imports are 35% bigger than exports, exports must grow about a third faster than imports just to hold the deficit steady.

A WIDER TRADE GAP IN HIGH-TECH GOODS



ok. Trade has acted like a safety valve during crucial parts of this expansion. For instance, the surge in domestic demand has been met largely by a flood of imports. Without them, the U.S. economy might have faced production bottlenecks and shortages. In addition, without competition from cheap imports, U.S. producers would have enjoyed more pricing power in the 1990s, leading to a faster inflation rate for goods.

That's not to say that the trade deficit can widen indefinitely. At some point, investment opportunities in the rest of the world will become relatively more attractive than those in the U.S. The U.S. will then have a harder time drawing the funds needed to finance its massive and still-growing external obligations without at least some depreciation in the dollar.

HAT DAY OF RECKONING is not yet on the horizon, though. That's a good thing, because the August shrinking of the trade gap is unlikely to be repeated, especially in September, when higher oil prices are sure to

swell imports. The August deficit for all goods and services fell to \$29.4 billion from July's \$31.7 billion, thanks to a 3.6% jump in exports. However, much of that gain was in high-tech gear, the demand for which appears to have weakened in September, especially in Europe after the euro's latest slump.

Even so, export growth has picked up considerably. Real goods exports for the first two months of the third quarter rose 13.7% from a year ago. That's almost double their pace of this time in 1999, and it equals the rapid growth in imports (chart). The recent pickup is why trade did not subtract significantly from third-quarter growth in real gross domestic product.

The export acceleration is the result of a pickup in global growth. In particular, foreign shipments of high-tech goods, including computers, peripherals, semiconductors, and telecom equipment are surging as companies around the world get more involved in information-based businesses.

Looking forward, however, the global economy is not maintaining its first-half momentum. In particular, higher energy prices are squeezing domestic demand in many of the industrial and emerging-market economies. Currency fluctuations are also causing problems, especially in the euro zone. The increasingly weak euro is lifting inflation to uncomfortable levels, especially as it magnifies the impact of costlier imported oil. The European Central Bank has responded by raising interest rates. As a result, growth in the euro zone may slow to less than 3% in 2001, from a bit above 3% this year.

BUT IF ANOTHER SLOWDOWN in global growth will result in cooler export growth, will a U.S. soft landing curb imports as well? Yes, but to a much lesser degree than is needed to narrow the trade deficit. Remember the trade math: Import growth has to be far below that of exports just in order to keep the deficit from widening.

Imports edged up just 0.8% in August, but that looked a bit fluky. A drop in oil prices cut the value of petroleum imports even though the number of barrels shipped hit a record 310 million. And crude prices started to rise again in September and October, which

EXPORT GROWTH HAS CAUGHT UP TO IMPORTS



should boost the total value of imports for those months. That suggests the trade deficit worsened again at least in September.

Looking further out, though, spending in the U.S. may be slowing as the combined impact of past Federal Reserve tightening, higher oil prices, and a fickle stock market temper demand. That cooldown will become more apparent in 2001. Instead of the current 5½% pace for domestic spending, demand is likely to grow between 3½% and 4%.

All other things being equal, that slowdown would imply that import growth will drop to between 9% and 10% in 2001, down from the current 14% clip. However, the trade math says that exports will have to grow at a rate of 12% or 13% just to hold the gap steady. Exports of goods and services are currently growing about 12% per year, and that pace is likely to slow as world growth edges back a notch.

IN ADDITION, the shift to an information-based, productivity-driven economy is creating a structural trade deficit—structural because it is not all caused by the broad ups and downs in demand but by longer-term shifts in the relative importance of technology in business investment.

Just as overseas investment in high-tech equipment is lifting U.S. exports, the current domestic investment boom is lifting high-tech imports. The U.S.

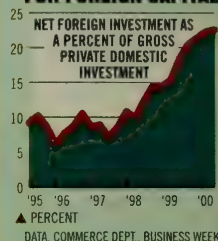
trade deficit on high-tech goods has doubled just two years. Back in the early 1990s, the U.S. enjoyed a surplus in the same category.

Investing in tech equipment—whether imported or homemade—is not a bad thing for the economy, since such spending lifts productivity and keeps inflation low. But it is important to keep in mind that this structural trade gap needs to be financed. The current level of private savings in the U.S. is nowhere near large enough to cover the huge amount of investment now going on in the country.

As a result, the U.S. must borrow heavily from abroad. Net foreign investment has ballooned to record 23% of total investment (chart). Little wonder, then, that the U.S. current-account deficit will continue to grow just like the trade gap.

But for how long? That's the trade question that may well be bandied about in 2001. So far this year, foreign-capital flows have not been keeping pace with the widening in the current account as well as they did last year. If that trend were to continue into 2001, the some dollar depreciation—and some upward pressure on U.S. inflation—would likely result.

A GROWING APPETITE FOR FOREIGN CAPITAL



GERMANY

THE EURO IS SLOWING GROWTH—WHICH HURTS THE EURO

The wise men have spoken, and they're not very optimistic.

On Oct. 24, the German government's six economic advisers, the so-called wise men, released their forecast for the economy in 2001. They expect German real gross domestic product to grow 2.7%, down from 3% this year. And since real GDP has grown at a 3.9% annual rate in the first half, the forecast implies a sharp slowdown in the third and fourth quarters. The magi also forecast that inflation in 2001 will fall below 2%, from about 2.5% in 2000.

In 2001, the report said, "the retarding effects of higher oil prices will gradually diminish, but at the same time, the dampening

effects from slower external demand and tighter monetary policy will be more and more felt." Already, the European Central Bank's seven hikes in interest rates are slowing domestic demand and dimming business prospects. German business confidence in September fell for the fourth straight month (chart). That followed a sharp drop in the purchasing managers' index.

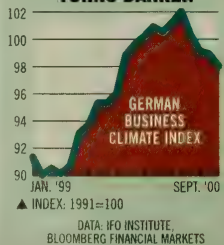
Although the German job market is picking up—the unemployment rate hit a five-year low of 9.45% in September—household spending is being held back as rising import prices, thanks to the weak euro and higher energy costs, cut

into buying power. Consumer prices nationally increased 2.5% in the year ended in August, a 5½-year high. Given the latest round of weakness in the euro, German inflation is likely to rise higher in coming months.

The ECB has tried to turn the euro around by intervening in the currency markets. So far, though, the action hasn't worked: The euro remained at near-record lows in mid-October. Analysts have said that unless the ECB follows up intervention with higher rates, the euro will remain weak. Higher rates, though, would curb German growth even further.

Of course, the euro would rise if growth prospects in the euro zone were stronger than those in the U.S. But with the zone's largest economy slowing down, that simply isn't the case.

BUSINESS SENTIMENT TURNS DARKER





To build a network of excellence, speak with someone who's already logged on.

Relationships—they give you access to information and people critical to success in the new economy. Opportunities unfold when technology clients call on Goldman Sachs. By tapping into our global network, clients leverage insight, professional experience and executional expertise. So wherever your company may be in the business life cycle, log on with Goldman Sachs.



UNRELENTING THINKING

www.gs.com

JACK'S RISKY LAST ACT

Will Honeywell throw a wrench into his well-oiled GE?

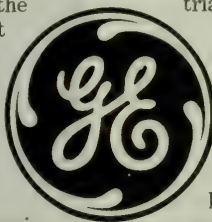


It was vintage Jack Welch. At the Oct. 23 press conference announcing General Electric Co.'s \$45 billion acquisition of aerospace and industrial conglomerate Honeywell International Inc., the GE chairman and CEO strutted around the stage, boasting of the promise of the deal and challenging analysts who hinted that he'd face tough antitrust scrutiny. Welch spoke bullishly of the acquisition—"It's exciting as hell"—and dismissed the notion he was having a hard time relinquishing power. "It ain't anything to do with 65 or hanging on," he insisted.

As a performance, it was long on charismatic promises and short on details. More important, it raised questions fundamental to the continued success of America's most widely held corporation: Why would the chief executive officer of one of America's best-managed corporations take on such a challenge only weeks before announcing his successor? Welch's move risked undermining a decision that has been eagerly anticipated, prepared for, and massaged for years. And aside from that, how would the company manage the integration of the troubled conglomerate it had just snatched from the hands of rival United Technologies Corp.? For all the looming questions, though, the Welch magic seemed to work. Most investors embraced the deal. And after dropping some \$6 a share on news of the purchase, GE's stock rebounded to \$54—just below its pre-merger price—in the wake of Welch's performance.

Whether investors care to admit it or not, the acquisition will by no means be an easy one, especially for Welch's eventual successor: Honeywell—itsself the product of a less-than-successful merger of the old Honeywell and AlliedSignal Inc. just 11 months ago—has been a far weaker performer than GE and is saddled with some low-margin, slow-growth businesses. And even though the potential for improvement is clear, bringing Honeywell's unit up to GE's performance standards will neither be a simple nor short-term task. Meanwhile, Welch's announcement that he'll stay on for eight months beyond his planned April, 2001, retirement—with hints he could remain even longer—has upended what had been hailed as a model succession plan for one of the country's most respected CEOs.

It all made for one heck of a surprising last act for a man who had already started to leave the stage. Adding to the drama is the fact that this deal is unlike any GE has tackled.



It's the largest acquisition GE has ever done, comparable only to the \$6.4 billion buy of RCA back in 1986 in terms of what it adds to the company's size and scale. The new GE will be a megabeheemoth, with expected 2001 revenues of \$176 billion. Honeywell's avionics and engines unit will add significant muscle to GE's jet-engine business, an operation that will account for an estimated 13% of the new company's sales. The deal also bulks up GE's offerings in businesses such as industrial controls and power generation.

Sure, GE has proven its expertise in doing smaller acquisitions—it has gobbled up some 134 companies worth \$17 billion last year alone. But the much larger Honeywell acquisition will require different skills altogether. "It is easy to merge a small company," says Patrick A. Gaughan, a graduate professor of Mergers & Acquisitions at Fairleigh Dickinson University. "But the integration problems are magnified exponentially here."

The bigger question, however, is whether or not Welch's as-yet-unnamed heir will be able to manage what will be an even more Roman-like empire. The company Jack built is in many ways an old-fashioned conglomerate that, unlike many, works because of Welch's phenomenal management skills and the knowledge he has built up over two decades of constructing the GE edifice.

But there will be important differences for the next CEO. The new GE will initially have more than 450,000 employees, up from a current 340,000, operate in more than 100 countries, and sell everything from circuit breakers to refrigerators to jet engines to mutual funds. Even before this deal, some questioned whether, without Welch, GE was becoming a company too big and complex to manage effectively. "Adding Honeywell really raises the stakes," says Edward E. Lawler,

WHAT COULD GO RIGHT —OR WRONG

GE's \$45 billion acquisition of Honeywell offers great potential rewards as well as daunting challenges

THE BENEFITS

- It will add 7%, or about 10 cents, to GE's 2001 earnings per share and could yield \$1.5 billion in joint cost savings.
- GE will become far and away the largest supplier in the aerospace industry, able to offer aircraft makers one-stop shopping for everything from engines to complex cockpit-software systems.
- GE has turbocharged its performance by shifting away from manufacturing: Higher-margin services now make up 70% of revenues. Expect the same for Honeywell.
- Welch's prowess with the Six Sigma manufacturing efficiency program should allow GE to drive major productivity improvements at Honeywell.

THE CHALLENGES

- Honeywell is much bigger than any prior GE acquisition, and many of its businesses are underperforming. Righting Honeywell's problems won't be quick or easy.
- Honeywell and AlliedSignal have struggled to build a unified culture since their December, 1999, merger. Now, GE will inherit that struggle while attempting to integrate both into GE's related units.
- GE's well-oiled succession plan could be pushed off course by CEO Welch's decision to stay on. You thought filling his shoes was already going to be difficult? Well, the job just got a whole lot tougher, since Welch's successor will have to manage a much larger and more complex conglomerate.

Welch maintains that the deal will close by February

director of the Center for Effective Organizations at the University of Southern California's Marshall School of Business. "It's a huge order for somebody to step in and manage the complexity that has been created by this acquisition."

It is precisely Welch's record in managing such complexity that has made him an icon. Through a flurry of handwritten notes to employees, endless plant visits, and a hard-driving, hands-on style, Welch has insinuated himself into every nook of the business. His personal charisma and one-of-the-boys style inspire an intense loyalty and teamwork; his ruthless obsession with the bottom line inspires fear. Together, the combination has kept the \$130 billion conglomerate riding high in both stock and earnings performance for the past decade. And there's little doubt that GE's rich price-earnings valuation—it trades at 42 times expected 2000 earnings, far above that of other conglomerates—stems directly from the "Welch premium." It's a reflection of investors' faith in Welch's record and mystique. In fact, Honeywell Chairman and CEO Michael R. Bonsignore says the Honeywell board felt comfortable accepting GE's overture in large part because Welch made it clear he would stay on to oversee the merger.

Comforting as that may be in the short term, the move creates great uncertainty surrounding one of the most closely watched successions in corporate history. Welch had been expected to name his successor within weeks; now, he says the announcement may not come till yearend. The betting remains that the top job will go to 44-year-old Jeffrey R. Immelt, president and CEO of GE Medical Systems. He has

TEAMWORK

Bonsignore says Honeywell's board is relying on Welch to help oversee the merger



boosted sales 23%, to \$6 billion, at the once-sluggish unit and has the team-building expertise and whiz-kid style Welch so greatly values.

Still, many GE observers say the Honeywell deal could give a big boost to the chances of W. James McNerney Jr., head of GE Aircraft Engines. McNerney would play a critical role in integrating Honeywell's aerospace operations, the business at the heart of the Honeywell deal. At his Oct. 23 pres-

LEFT AT THE ALTAR, WILL UNITED TECHNOLOGIES STILL WED?

It could have been the biggest home run of CEO George David's career: a merger that catapulted United Technologies Corp. into what one analyst calls the "super league of industrial businesses." But after months of negotiations and careful wooing of top management at Honeywell International Inc., David suddenly found himself jilted, thanks to a last-minute bid from General Electric Co.'s richer and fiercer Jack Welch. "We came within 10 minutes of doing a deal for \$8 billion less than General Electric," says David.

He has good reason to pout. A merger with Honeywell would have doubled revenues, creating a \$48 billion power-

house. Honeywell's expertise in aerospace and industrial controls would also have greatly expanded the market reach and heft of United Technologies, which makes Pratt & Whitney engines, Otis elevators, Carrier air conditioners, Hamilton Sundstrand aerospace systems, and Sikorsky helicopters.

Most important, a Honeywell union would have given UT a big boost in the high-margin, core aviation-parts business. Honeywell's cockpit-avionics suite and other aerospace offerings are considered tops in the industry, commanding profit margins of well over 20%. So a merger would have enabled UT to offer a nose-to-tail product line in a

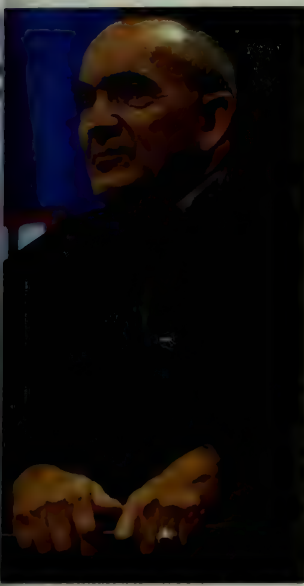
fiercely competitive—and consolidating—sector.

Instead, the Hartford manufacturer now faces a much tougher GE-Honeywell combo. And its goal of doubling revenues within its core Pratt & Whitney unit, which accounts for 28% of operating earnings, just got a lot harder. It's a wound—and probably near a fatal organ," says industry headhunter Martin H. Bauman. He thinks the new competition and consolidation could set off an acquisition spree to compete for GE or risk losing market share.

That said, losing Honeywell is a death blow to UT, which has seen earnings grow at a steady double-digit pace for the past several years. After getting investors jazzed about the prospect of a Honeywell merger, suddenly in the spotlight: Wall Street wants UT to find another route to blockbuster growth. Says Goldman

CEO David says Honeywell was an opportunity, not a need—but GE-Honeywell will be a tough rival

antitrust experts say it will take many months more



conference, Welch called McNerney, 51, the driving force behind the deal. But if Immelt gets the nod, executive recruiters say McNerney would likely bolt for a CEO job elsewhere. That would be a major loss, making the task of integrating Honeywell far more difficult.

Even more disturbing is that Welch's vow to stay raises questions about whether GE's vaunted executive bench is as deep and rich as people think. Roger M. Kenny, a managing partner at New York-based Boardroom Consultants, notes that the potential successors have run single businesses—not the mix of disparate operations

that make up GE. "They've never run multiple businesses at the same time," says Kenny. "Now, there's a tremendous amount of complexity." Adds Charles M. Elson, director of the Center for Corporate Governance at the University of Delaware: "The fact that Welch is staying an extra year suggests that combining the two companies would be too much for the heir."

Regulatory delays could give Welch the opportunity—or

the need—to extend his stay even further. While the CEO has maintained the deal will close in February, antitrust experts think that's a long shot. They warn that approval may be delayed many months as the merger gets tough scrutiny in the U.S. and in Europe. Even though there isn't a lot of direct overlap between GE and Honeywell products, regulators will take a particularly hard look at the two aerospace businesses. They will be studying whether GE could grab market share by bundling certain products they want to promote with other more popular products or services.

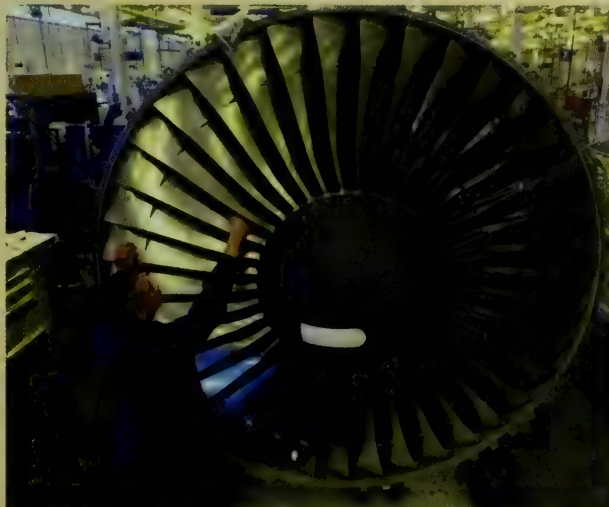
Regardless of when it gets approval, there's no doubt the Honeywell deal creates real opportunities for GE. From the get-go, GE expects the buy to add at least 7% earnings per share, or 10¢, in 2001. And Welch figures combining the companies should ultimately yield \$1.5 billion in cost savings. While he gave few specifics on where those savings would be found, analysts expect brutal workforce cuts.

Of course, the real payoff comes by adding muscle to GE's already powerful business franchises. The best fit is clearly in the combination of the aerospace units. That will yield a \$22-billion-in-sales operation that marries Honeywell's strength in business-jet engines and cockpit avionics with GE's massive business in larger jet engines. Combining them should strengthen GE's hand in cross-selling other products and services to big customers. In fact, analysts figure it was the threat of United Technologies garnering that sort of edge with Honeywell that prompted Welch to swoop in and snatch it in the first place. "The company will be able to give full nose-to-tail coverage for customers such as Boeing," says Steven Roorda, an analyst at American Express Financial Advisors, an investor in both GE and Honeywell.

Some other GE and Honeywell businesses enjoy a similar

& Co. analyst Howard A. Rubel: "It's a missed opportunity, but it's the final inning in the game." In the wake of the failed deal, in fact, investors pushed up shares of manufacturers such as Rockwell International, Boeing, and Parker Hannifin in the belief that UT might come courting. All three boast a solid array of industrial offerings. And Rockwell and BFGoodrich are well positioned in the aviation market. Only by making the company more diversified and bigger through acquisitions does UT stand a chance of reaching close to a GE-like stock valuation. At its weaker valuation—it trades at less than its estimated 2000 earnings, while GE is a princely 42—is a big reason that David had no choice but to back down in the face of GE's offer.

David, though, is unbowed. He says the Honeywell deal was more an opportunity than a pressing need. And he insists that UT doesn't need to do a deal in aerospace; instead it will simply go on "business as usual." That means sticking to the more modest annual



FLYING SOLO:
Can UT's Pratt & Whitney go it alone?

spending of up to \$2 billion for small acquisitions that boost his core areas of business. He's looking to beef up divisions such as Otis and Carrier, for instance, because both are in industries that David considers ripe for consolidation. Nor does he foresee any souring of UT's current corporate relations with Honeywell. He expects, for instance, to continue UT's existing joint ventures with Honeywell in areas such as MyAircraft, an e-commerce Web site.

Nevertheless, after losing such a plum opportunity to transform his company into a corporate behemoth, it must be cold comfort indeed to have to content himself with snatching up such morsels. And meanwhile, General Electric just keeps getting bigger and bigger.

By Diane Brady in New York

OUR PROCESS TO REDUCE SULFUR IN GASOLINE
HELPS THOSE WHO DON'T EVEN DRIVE.



Sulfur is a naturally occurring element in gasoline and contributes to air pollution. But until recently, the methods used to remove sulfur from gasoline weren't very efficient. So Phillips is developing a new process that removes more than 90% of the sulfur in standard gasoline without significant loss of

octane or volume. It's an innovation that will help us reduce harmful emissions from cars, improve air quality and meet proposed sulfur regulations for years to come. And it's just one of the many ways we live up to the name The Performance Company.

PHILLIPS PETROLEUM COMPANY



For a copy of our annual report, call 918-661-3700, write to: Phillips Annual Report, B-41, Adams Bldg., Bartlesville, OK 74004, or visit us at www.phillips66.com.



complementary fit. Honeywell's microturbine business—small gas turbines used by some large companies for backup power—should bolster GE's offerings in the power sector. And in industrial systems, while GE focuses on making plant controls for industries such as aerospace and autos, Honeywell sells gear and software to manage oil, gas, and chemicals plants.

Despite such tantalizing synergies, Welch's Honeywell bet also carries substantial operational risks. For one thing, customers may not want one-stop shopping. "We don't buy engines, auxiliary power units, and avionics on one purchase order, and we don't expect to in the future," says Boeing Chairman and CEO Philip M. Condit. Instead, he will continue to look for the best supplier in each product line.

Moreover, Honeywell is no star performer. It has been battered by external forces and internal mistakes. Higher raw-material costs because of rising oil and gas prices have hurt divisions such as the \$4.1 billion performance-materials unit. And the company has suffered from poor execution, such as when its decision to outsource key aerospace components was followed by supplier shortages.

Honeywell's bottom line has been hit hard by these headaches. Management originally promised 20% earnings-per-share growth this year, but in July, CEO Bonsignore said growth will come in at only around 2% to 14% and that sales would grow at an even more modest 8% to 10%. GE's earnings per share this year should be up 19% on sales growth of 16%. "The issues at Honeywell run a bit deeper than we thought" in terms of it being a quick-fix candidate, says Art Barry, portfolio manager at Federated Investors, a Honeywell investor.

COCKPIT KING

Honeywell's avionics unit will complement GE's jet business

Indeed, academic research would have shareholders nix many such deals at their announcements. Timothy Loughran, associate professor of finance at University of Notre Dame's business school, studied 947 acquisitions from 1970 to 1989. Over the long term, he found that shareholders generally do not benefit from mergers—and that the worst performance came from friendly stock deals such as the GE-Honeywell deal.

GE's troops are betting that they can defy that history. Most observers say Honeywell operations will be divvied up and quickly folded into existing operations. Then, GE's management will aggressively try to expand into higher-margin service businesses that can be developed from Honeywell's manufacturing base. While Honeywell has been

aiming to build up those sorts of annuity-like revenue streams via services such as the management of process-control systems at oil refineries, only 40% of sales now come from services. Compare that to 70% of GE's total sales. And while there are certain Honeywell units that analysts say GE could jettison, including some low-margin performance-materials businesses, GE's use of pooling accounting may preclude major divestitures for up to two years.

Welch & Co. will also be looking to wring inefficiencies out of Honeywell. Its average employee generates about \$209,000 in revenue per employee, vs. \$382,000 at GE. To improve Honeywell's productivity, GE will push its expertise with Six Sigma, the manufacturing-efficiency program that attempts to cut defects to a minimum, throughout Honeywell.

Certainly, execs who grew up in the former AlliedSignal, run for years by GE vet Lawrence A. Bossidy, who had embraced Six Sigma, may be comfortable in GE's culture. But managers from the old Honeywell, where the focus on efficiency was less intense, may suffer. "GE has to manage a cultural change," says Prudential Securities Inc.'s Nicholas P. Heymann. "GE moves at the speed of light, while these other guys move at the speed of sound." The question now is whether GE's speed—and Welch's expertise—will be enough to make his swan song a thing of beauty or an ugly duckling.

By Amy Barrett in Philadelphia and Pamela L. Moore, Diane Brady, Nanette Byrnes, and Louis Lavelle in New York, with Andy Reinhardt in San Mateo and Dan Carney in Washington

AN EVEN BIGGER BEHEMOTH

GE'S SALES ARE DIVERSIFIED AND LARGE...

	2000 ESTIMATES*	
	REVENUES	OPERATING PROFITS
AIRCRAFT ENGINES	10,930	2,385
APPLIANCES	6,000	675
BROADCASTING	6,830	1,815
GE CAPITOL	64,135	5,200
INDUSTRIAL SYSTEMS	12,035	2,255
MATERIALS	7,965	1,960
POWER SYSTEMS	14,800	2,690
TECHNICAL PRODUCTS	8,215	1,640
ALL OTHER	290	300
TOTAL	131,200	18,920

...BUT HONEYWELL COULD OFFER SYNERGIES

Honeywell	2000 ESTIMATES*	
	REVENUES	OPERATING PROFITS
AEROSPACE	9,905	2,192
AUTOMATION AND CONTROL	7,416	1,082
PERFORMANCE MATERIALS	4,110	386
POWER AND TRANSPORTATION	3,585	313
ALL OTHER	80	N/A
TOTAL	25,096	3,973

*In millions

DATA: PRUDENTIAL SECURITIES, CREDIT SUISSE FIRST BOSTON

**Does not include corporate eliminations

2001 SATURN I300
PERFORMANCE SEDAN

182-horsepower, 3.0-liter V-6

Four-wheel disc brakes

Anti-lock brakes with
Traction Control

Four-speed automatic

Leather Appointments

Power windows, locks and
heated exterior mirrors

Six-way power driver's seat

AM/FM/CD/Cassette with
amplifier, sub-woofer
and premium speakers

Remote keyless entry

Security System

Cruise control

Alloy wheels

Sport-tuned suspension

Foglamps

Dent-resistant polymer
doors and fenders

✓ M.S.R.P. \$22,140

www.saturn.com



A Different Kind of Company.
A Different Kind of Car.



We are who we are.

Our personality, philosophy and way of doing business is the same today as it was ten years ago. That hasn't changed, and we suspect it never will. What's changed are the cars. The L-Series are made unlike our other Saturn models. They're roomier, more responsive, more luxurious, and to be honest, they're more expensive. But when you compare them to cars with the same features, they're still thousands less.

Because, like every Saturn, the L-Series gives you a lot for your money. Guess that's another thing about us that's not going to change.



CORPORATE PROFITS

THINGS LOOK GREAT. JUST DON'T LOOK TOO FAR

Flash profits are strong, but analysts see a 2001 slowdown

A glance at corporate profits in the third quarter suggests that the good times just keep on rolling: After two consecutive quarters of 20%-plus growth, BUSINESS WEEK's flash profits survey of 114 bellwether companies showed another 25% surge. In many instances, results handily beat Wall Street's expectations. "For many companies, we're not talking about a penny [a share] better than expectations," notes I/B/E/S International Inc. equity strategist Joseph Kalinowski, who predicts a 17% profit gain for the Standard & Poor's 500-stock index in the third quarter.

Despite that stellar showing by Corporate America, however, there's a growing feeling that the third quarter may stand as the high-water mark for profits. Reason: the "four Es"—energy, the euro, the election, and the economy. Indeed, many execs are growing more cautious: "I won't use the 'R' word, but my mind is set around a continued slowing of the economy," notes Eastman Kodak Co. Chief Executive Daniel A. Carp.

Even as Wall Street analysts are celebrating the current quarter, they have slashed their outlook for the fourth quarter for the S&P 500, from 15.6% in early October to 12.9%, notes Charles L. Hill, director of research at First Call/Thomson Financial. And with the economy expected to trail off from the heady 6.1% rise in gross domestic product over the past four quarters to 4% or less in the coming year, Hill believes 2001 profit growth could easily slide

from Wall Street's current 13.9% forecast, perhaps to around 10%. And some analysts believe the drop could be lower. Economists at Standard & Poor's DRI division, which builds earnings forecasts from broader economic trends than do most Wall Street firms, believe earnings at both public and private companies overall could rise just 2% next year. "We should see a fairly precipitous slowdown in 2001," warns Sara L. Johnson, director of North America research for DRI.

EURO SLIDE. Despite the projected 40% gain in high-tech profits this quarter, analysts have been cutting their fourth-quarter estimates from 29% to 19%. While demand remains robust in some sectors—including semiconductors, where Texas Instruments Inc. reported a 69% surge in third-quarter profits and Altera Corp. turned in a 112% earnings gain—the question is how much longer tech can deliver eye-popping gains.

Indeed, analysts note that the continuing slide in the euro is likely to take a bite out of the profits of tech companies like JDS Uniphase, Novell, and Autodesk, each of which generate 30% or more of their sales from the Continent. "If the dollar remains at current levels for the fourth quarter, the situation can only get worse," says John Joyce, chief financial officer for IBM. The bottom line: The road ahead is going to get bumpier for Corporate America.

By Dean Foust in
Atlanta, with David
Rocks in New York,
Geoffrey Smith in
Boston, and bureau
reports

CURRENT QTR. SALES
(MILLIONS)

INDUSTRIALS

ABBOTT LABORATORIES	3,317.9
ALCOA	6,298.0
AMERICAN STANDARD	1,961.0
ARCHER DANIELS MIDLAND †	4,634.8
BLACK & DECKER	1,133.2

BOEING	11,877.0
BRISTOL-MYERS SQUIBB	5,299.0
CATERPILLAR	4,779.0
CHEVRON	13,586.0
COCA-COLA	5,543.0

COLGATE-PALMOLIVE	2,366.5
CONAGRA †	6,801.6
CORNING	1,944.0
CROWN CORK & SEAL	1,954.0
DANA	2,855.0

DUPONT	6,445.0
EASTMAN CHEMICAL	1,387.0
EASTMAN KODAK	3,590.0
EXXON MOBIL	58,852.0
FORD MOTOR	40,064.0

GENERAL ELECTRIC	32,014.0
GENERAL MOTORS	42,606.0
GEORGIA-PACIFIC GROUP	5,310.0
GILLETTE	2,321.0
GOODYEAR TIRE & RUBBER	3,482.4

HASBRO	1,072.6
HONEYWELL INTERNATIONAL	6,216.0
IBP	4,154.3
INTERNATIONAL PAPER	7,800.0
JOHNSON & JOHNSON	7,204.0

LEAR	3,144.1
LILLY (ELI)	2,811.9
MATTEL	1,583.8
MAYTAG	1,056.4
MERCK	10,567.5

MINNESOTA MINING & MFG.	4,252.0
NIKE †	2,636.7
NUCOR	1,163.1
PEPSICO	4,909.0
PFIZER	7,205.0

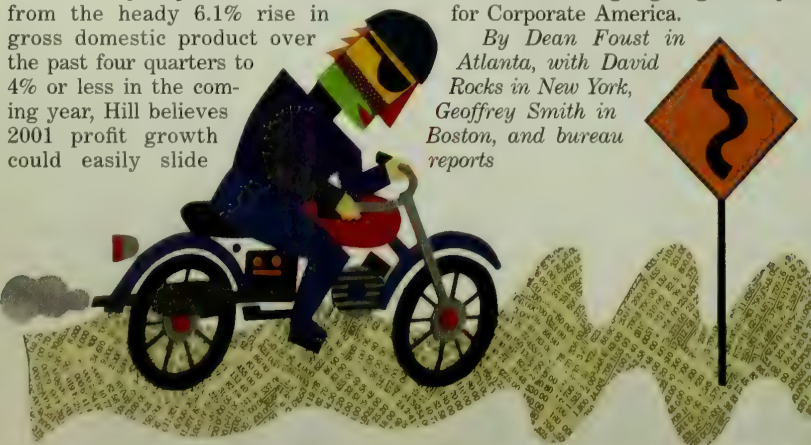
PHILIPS DODGE	1,193.4
PHILIP MORRIS	15,757.0
RAYTHEON	4,160.0
SCHLUMBERGER	2,447.3
SHERWIN-WILLIAMS	1,411.9

TEMPLE-INLAND	1,049.0
TEXACO	13,359.0
TYCO INTERNATIONAL	7,805.4
UNITED TECHNOLOGIES	6,465.0
USG	895.0

USX-MARATHON GROUP	9,287.0
USX-U.S. STEEL GROUP	1,430.0
WEYERHAEUSER	3,690.0
WHIRLPOOL	2,570.0

SERVICES

ALLSTATE	7,445.0
AMERICAN EXPRESS	5,981.0
AMR	5,256.0
AVIS GROUP HOLDINGS	1,130.3
BANK OF AMERICA	NA



ITS \$	% CHG.	EST. EPS (8/17/2000)	REPORTED EPS	DIFF.
+33	0.58	0.59	+0.01	
+40	0.42	0.42	—	
+42	0.52	0.42	-0.10	
+14	1.25	1.23	-0.02	
+201	0.14	0.17	+0.03	
+15	1.03	1.03	—	
+28	0.66	0.70	+0.04	
+13	0.61	0.62	+0.01	
-1	0.68	0.62	-0.06	
+163	1.65	2.35	+0.70	
+36	0.41	0.43	+0.02	
+15	0.43	0.44	+0.01	
+44	0.31	0.30	-0.01	
+79	0.29	0.28	-0.01	
-63	0.71	0.35	-0.36	
-82	0.90	0.41*	-0.49	
+210	0.59	0.53	-0.06	
+194	1.07	1.27	+0.20	
+78	1.60	1.36	-0.24	
+105	1.05	1.28	+0.23	
-7	0.95	0.53	-0.42	
+20	0.32	0.32	—	
-5	1.64	1.55	-0.09	
-43	1.15	0.85*	-0.30	
-1	0.34	0.33	-0.01	
NM	0.41	-0.04	-0.45	
-84	0.37	0.08	-0.29	
-49	0.77	0.76*	-0.01	
-24	0.67	0.79	+0.12	
+21	0.77	0.53*	-0.24	
+14	0.88	0.89	+0.01	
-2	0.67	0.59	-0.08	
+6	0.70	0.71	+0.01	
-53	0.43	0.24	-0.19	
-27	0.98	0.74	-0.24	
+19	0.73	0.78	+0.05	
+9	1.24	1.25	+0.01	
+5	0.75	0.77	+0.02	
-1	0.93	0.85	-0.08	
+21	0.39	0.40	+0.01	
+23	0.26	0.27*	+0.01	
+155	0.23	0.50	+0.27	
+16	0.98	1.03	+0.05	
NM	0.40	0.39	-0.01	
+85	0.34	0.35	+0.01	
-4	0.73	0.66	-0.07	
-28	1.30	1.05*	-0.25	
+106	1.14	1.46	+0.32	
+145	0.63	0.64*	+0.01	
+451	0.96	0.98	+0.02	
-44	1.88	1.48	-0.40	
-47	0.88	1.14*	+0.26	
NM	0.54	0.26*	-0.28	
-16	1.20	0.90	-0.30	
-37	1.60	0.98	-0.62	
+3	0.66	0.67	+0.01	
+31	0.70	0.87	+0.17	
+14	0.52	0.54	+0.02	
+51	1.66	1.96	+0.30	
+23	1.31	1.36	+0.05	
-15	1.30	1.10	-0.20	

	CURRENT QTR. SALES (MILLIONS)	% CHG.	QTR. PROFITS (MILLIONS)	% CHG.	EST. EPS (8/17/2000)	REPORTED EPS	DIFF.
BANK ONE	NA	NA	581.0	-37	0.50	0.50	—
CHASE MANHATTAN	NA	NA	884.0	-26	1.01	0.66	-0.35
CITIGROUP	25,074.0	+25	3,088.0	+27	0.65	0.67	+0.02
CNF	1,534.9	+9	27.7	-37	0.83	0.66*	-0.17
COSTCO WHOLESALE ††	10,589.2	+20	200.2	+31	0.43	0.43	—
CSX	2,039.0	-27	59.0	NM	0.42	0.28	-0.14
DOW JONES	500.3	+6	-33.9	NM	0.54	0.55*	+0.01
ENRON	30,007.0	+154	292.0	+1	0.33	0.34	+0.01
FEDEX †	4,778.7	+11	168.7	+6	0.54	0.58	+0.04
FIRST UNION	NA	NA	852.0	+6	0.70	0.86	+0.16
FLEETBOSTON FINANCIAL	NA	NA	841.0	+18	0.83	0.90	+0.07
GANNETT	1,599.3	+24	208.3	+5	0.80	0.79	-0.01
HCA-THE HEALTHCARE CO.	4,093.0	+5	174.0	+26	0.31	0.31	—
HERTZ	1,437.8	+7	142.8	+3	1.43	1.33	-0.10
KAUFMAN & BROAD HOME	981.0	-7	44.6	+17	1.11	1.14	+0.03
MCDONALD'S	3,749.0	+9	548.5	+1	0.42	0.41	-0.01
MCGRAW-HILL	1,391.7	+6	217.7	+14	1.10	1.11	+0.01
MERRILL LYNCH	10,853.0	+28	885.0	+53	0.85	0.94	+0.09
MORGAN (J.P.)	NA	NA	514.0	+16	2.55	2.77	+0.22
MORGAN STANLEY DEAN WITTER	11,711.0	+36	1,246.0	+28	1.13	1.09	-0.04
PAINWEBBER GROUP	2,445.2	+31	135.8	-2	0.94	0.85	-0.09
SAFEWAY	7,457.2	+15	270.0	+21	0.52	0.53	+0.01
SCHWAB (CHARLES)	1,322.5	+30	142.3	-1	0.14	0.10	-0.04
SEARS ROEBUCK	9,627.0	+5	278.0	+18	0.80	0.81	+0.01
SUPERVALU ††	5,333.8	+29	57.3	+26	0.45	0.43	-0.02
SYSCO †	5,360.2	+15	144.0	+36	0.37	0.43	+0.06
TENET HEALTHCARE †	2,893.0	+1	154.0	+20	0.45	0.48	+0.03
TIME WARNER	6,873.0	+2	88.0	-77	0.08	0.06	-0.02
TRICON GLOBAL RESTAURANTS	1,658.0	-8	59.0	-70	0.72	0.77*	+0.05
UAL	4,905.0	+1	-110.0	NM	2.76	-1.29*	-4.05
UNION PACIFIC	3,070.0	+6	256.0	+17	1.05	1.00	-0.05
UNITED PARCEL SERVICE	7,367.0	+10	702.0	+22	0.59	0.60	+0.01
WELLS FARGO	NA	NA	1,070.0	+11	0.64	0.64	—
WINN-DIXIE STORES †	2,940.9	-7	9.4	-57	0.13	0.07	-0.06
TECHNOLOGY	82,280.5	+14	10,678.2	+41	0.30	0.32	+0.02
AMERICA ONLINE †	1,975.0	+34	345.0	+91	0.13	0.13	—
APPLE COMPUTER †††	1,870.0	+40	170.0	+53	0.45	0.47	+0.02
COMPAQ COMPUTER	11,200.0	+22	550.0	+293	0.29	0.31	+0.02
EMC	2,283.0	+34	458.2	+55	0.19	0.20	+0.01
GATEWAY	2,530.1	+16	152.6	+35	0.45	0.46	+0.01
HUGHES ELECTRONICS	1,688.5	+4	-104.3	NM	-0.09	-0.09	—
IBM	21,781.0	+3	1,963.0	+11	1.08	1.08	—
INTEL	8,731.0	+19	2,509.0	+72	0.41	0.36	-0.05
MICROSOFT †	5,800.0	+8	2,581.0	+18	0.41	0.46	+0.05
MOTOROLA	9,493.0	+15	531.0	+366	0.26	0.23	-0.03
ORACLE †	2,261.9	+14	500.7	+111	0.07	0.09	+0.02
SUN MICROSYSTEMS †	5,045.0	+60	510.0	+88	0.25	0.30	+0.05
TEXAS INSTRUMENTS	3,160.0	+26	679.0	+69	0.33	0.38	+0.05
XEROX	4,462.0	-4	-167.0	NM	0.16	-0.26	-0.42
UTILITIES & TELECOM	54,807.0	+15	6,365.0	+39	0.45	0.53	+0.08
AMERICAN ELECTRIC POWER	3,921.0	+11	403.0	0	1.11	1.25	+0.14
AT&T	16,975.0	+4	1,319.0	-19	0.38	0.35	-0.03
BELLSOUTH	6,903.0	+7	1,036.0	+4	0.56	0.55	-0.01
SBC COMMUNICATIONS	13,453.0	+8	2,999.0	+164	0.57	0.88	+0.31
SOUTHERN	7,479.0	+100	614.0	0	0.93	0.95	+0.02
SPRINT FON GROUP	4,403.0	+2	384.0	-8	0.50	0.43	-0.07
SPRINT PCS GROUP	1,673.0	+98	-390.0	NM	-0.48	-0.41	+0.07

† First-quarter results
NM = not meaningful

†† Second-quarter results
NA = not available

††† Fourth-quarter results
*EPS adjusted for special items

DATA: COMPUSTAT, PROVIDED BY STANDARD & POOR'S INSTITUTIONAL MARKET SERVICES, EARNINGS ESTIMATE DATA
PROVIDED BY I/B/E/S INTERNATIONAL INC., NEW YORK, NY. I/B/E/S IS A REGISTERED TRADEMARK OF I/B/E/S INTERNATIONAL INC.



TELECOMMUNICATIONS

SUDDENLY, MOBILE PHONES AREN'T MOVING SO FAST

Among the Big Three, only Nokia is still sizzling

This ought to be prime time for wireless phonemakers. The fourth quarter, anchored by the holiday shopping season, is generally a cellular bonanza; sales and profits pour in. It's curious, then, that two of the world's three cellular giants are forecasting Scrooge-like results this time of year.

Indeed, coal in the stocking might be better for Swedish telecom gear maker Ericsson. On Oct. 20, it announced that its handset business would likely suffer full-year losses of \$1.59 billion, twice what analysts expected. A week earlier, Motorola Inc. in Schaumburg, Ill., warned that profit margins in its phone business would reach just 6.5% in the fourth quarter, less than the 10% it had predicted. Only Nokia Corp. has a jolly outlook. It posted 19% margins and extended its lead in global market share. "They're simply executing better than the other guys," says Paul S. Dittner, an analyst with researcher Dataquest Inc.

What gives? Partly, it's the market. Phenomenal worldwide annual growth in handsets of more than 45% has eased to about 30%. And U.S. growth will slow from a fat 50% this year to mid-30% next year. At the same time, price-conscious buyers are demanding cheaper phones.

Those problems are sorting the winners from the losers. Just two years ago, the Big Three—Nokia, Motorola, and Ericsson—held a firm grip on the global wireless market. Through June, Nokia was on top with a 27.5% share, Motorola held 15.6%, and Ericsson had 10.3%. Nokia continues to sizzle. But analysts expect Motorola and Ericsson to slip as rivals like Samsung, Alcatel, and Siemens have come from nowhere to each grab nearly 6% of the market. "The troika is no more," remarks Seamus McAteer, a senior analyst at Jupiter Research.

Lesser-known wireless players are now targeting international markets. Already, Mitsubishi Corp. is the dominant maker of Internet phones for AT&T Wireless. Samsung is the No. 1 provider of phones to Sprint PCS and is opening a new plant in Spain to increase its Eu-

ropean share. It has achieved 10% profit margins while selling more than 5 million phones a quarter this year. Alcatel and France's little-known SAGEM lead the mid- and low-priced market in such European countries as Spain and France. Indeed, Europe is one of the key markets where Motorola and Ericsson have lost momentum. Growth there has come from the prepaid wireless phone card business, where users buy a phone for \$100 or less and a card loaded with a certain number of minutes. Nokia, by contrast, has excelled in prepaid products along with Siemens and Matsushita Communication Industrial Co., which markets the Panasonic brand.

NEW RIVALS. Motorola says lower prices put pressure on profit margins. The same issue has hurt Ericsson. While company execs say Ericsson will remain in the handset business, which accounts for just 20% of its sales, many industry observers expect the Swedish equipment maker to exit the market because it hasn't been able to accurately predict demand and make phones quickly and profitably. "The wheels are coming off of the handset business," says Dataquest's Bryan Prohm.

As others stray, Nokia has stayed ahead by setting a new standard for handset production. It has built the industry's strongest brand and streamlined manufacturing to keep costs down.

Remaining grounded in this ever-changing market is crucial. The much anticipated third generation—due in a couple of years—could allow new rivals to leap ahead. Matsushita and Mitsubishi have proven that they can deliver nifty products in Japan that zap short messages and color images. Asian vendors will have "a leg up on competitors when 3G networks start in other markets," Prohm says.

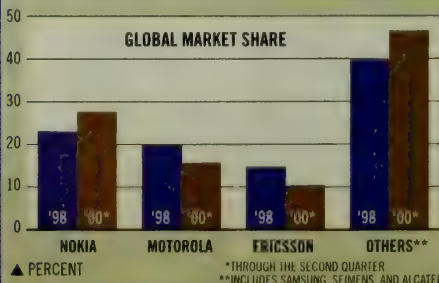
Even Nokia, which has been slow to market with next-generation data phones isn't immune. Still, CEO Jorma Ollila isn't worried about the newcomers. "This is not a market where you jump in after making an announcement at a trade show," Ollila says. But clearly, the wireless phone business is no longer just a matter of offering the best holiday products.

By Roger O. Crockett in Chicago, with Stephen Baker in Paris

HANDSET WARS

Nokia and a feisty crop of new rivals are winning as onetime powers Motorola and Ericsson lose ground

DATA: DATAQUEST INC.



By Peter Coy

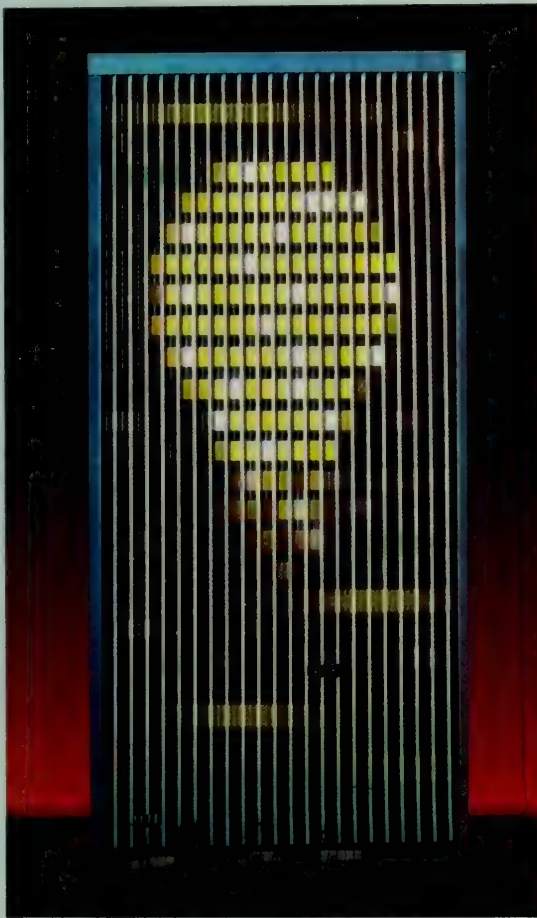
RESEARCH LABS GET REAL. IT'S ABOUT TIME

While you stand there jabbing at buttons, opening side panels, and wondering why you can't get a simple 8½-by-11 copy out of your Xerox copier, the deep thinkers at Xerox Corp.'s fabled Palo Alto Research Center are trying to improve your life. Not right away, though. Later this century, thanks to research on exotic stuff such as a robot named PolyBot or "smart matter" embedded with microscopic machines. They're even working on natural language processing—presumably, so that when you curse the copier, it will understand you.

They'd better work quickly, though, because PARC is up for grabs. As part of a company-wide effort to raise money and cut costs, Xerox said on Oct. 24 that it would seek partners for the lab. PARC is famous for landmark inventions such as Ethernet computer networking and the point-and-click interface that did little or nothing for Xerox shareholders. Though PARC consumes less than 10% of Xerox' R&D budget, its enormous ambitions send the wrong message for a company that needs to refocus on making money. Now, co-owners will likely demand PARC researchers work on more practical, short-term business problems. And that's a good thing.

FERTILE. Xerox' woes might seem to provide evidence that there's something wrong with the U.S. system of corporate R&D. That's not the case. Innovation is rife in the U.S., from industrial labs to contract research outfits and Silicon Valley startups. Says Martin N. Baily, chairman of the President's Council of Economic Advisers: "We've been able to generate a fertile breeding ground because we have a range of funding mechanisms."

Start with the corporate labs, which once resembled ivory towers. Today, their PhDs are getting their hands dirty on real-world customer problems. But "Xerox has been rela-



PRAGMATIC Corporate R&D today is results-oriented. Even Xerox' PARC may get the idea

tively slow" to latch on to that trend, says Massachusetts Institute of Technology economist Rebecca M. Henderson, an expert on corporate R&D.

Companies that get more pragmatic about research aren't dropping the "R" to do more "D." Many tough business problems can't be solved without resorting to basic science—but these days it's a lot more focused. The National Science Foundation says growth of industry investment in research outpaced investment in development from 1994 to 1998, 64% vs. 46%. One product born of basic research is IBM's Micro-

drive, which is the size of a matchbook. It harnesses a phenomenon, giant magnetoresistance, that was confined to academic labs until IBM physicists caught wind of it. Says Paul Horn, IBM's senior vice-president for research: "We want to capture new ideas wherever they bubble up."

And they often bubble up outside of corporate labs. The fastest growing source of industrial R&D is startups funded by venture capitalists. The amount of VC funding soared from \$5 billion in 1988 to an annual rate of \$100 billion so far this year. Josh Lerner of Harvard Business School has found that VC-backed companies produce lots of patents that are frequently cited, showing that startups aren't freeloading off research done by others.

Smart corporations also are getting ideas from the outside. Cisco Systems Inc. has perfected R&D by acquisition, snapping up 20 companies this year alone. But even Cisco realizes that buying tech companies isn't sufficient. It spends 14% of revenue on its own R&D. Venture capitalists agree that acquisitions aren't the full answer: "If I were a CEO, I would want to own my corporate competency," says Mark W. Perry, general partner with New Enterprise Associates, a Menlo Park (Calif.) VC firm.

With corporate labs narrowing their vision, who will fund research that produces the Ethernets of the future? Government, for one, should boost support for basic research. For-profit companies may also pick up some of the slack. For instance, Judy Estrin, Cisco's former chief technology officer, has co-founded Packet Design Inc. in Menlo Park, Calif., to solve Internet problems.

There are many good models for industrial R&D. The one model that doesn't seem to work is PARC's: corporate lab as dream factory.

Coy is associate economics editor.

COMMENTARY

By William Symonds

A FRESH FACE COULD DO WONDERS FOR GILLETTE

Warren E. Buffett is one of the most patient investors. But even he has had enough of the alarming decline of Gillette Co. On Oct. 19, Buffett and other board members asked CEO Michael C. Hawley to resign and installed 32-year company veteran Edward F. DeGraan as acting CEO. Now the question is where the board will find a permanent chief. Buffett is signaling a strong desire for an outsider.

This would be a radical step for Gillette, which has one of Corporate America's most insular cultures. But that very culture—though it provided the basis of Gillette's success for years—now bears as much blame for the company's troubles as any one individual. After two years of stagnant sales, repeatedly missed earnings forecasts, and a stock that has been cut in half, investors have lost confidence that the executives long steeped in Gillette's way of doing business will be able to bring needed change. "What Gillette needs now is some shaking up," argues Harvard Business School professor Rosabeth Moss Kanter.

For years, Boston-based Gillette has been led by executives like Hawley, who have spent decades working their way up the ladder. Gillette has not looked outside for a top operating executive since 1973, when Vincent Ziegler, then chairman, brought in a marketing maven from Hunt-Wesson Foods as his heir apparent. But that experiment failed in just over a year.

Those who've risen to the top have invariably succeeded because they are masters at the

growth formula that served Gillette so well for decades. Honed in the shaving market, which the company has dominated for nearly a century, the formula relies on the enormous engineering expertise to develop superior products for which Gillette charges a premium.



Problem is, while this formula still works in the blade business, "it clearly isn't working on some of their other categories," says Don Stuart, partner at marketing consultants Cannondale Associates. Exhibit A is Duracell, where Gillette rolled out a premium-priced battery, but still lost market share and saw margins fall.

The even deeper problem is that it's virtually the only way Gillette executives know how to do business. This cultural mind-set has made it

difficult for insiders to find new solutions. "They need a large infusion of fresh blood," says Stuart.

The key challenge for the next CEO is to invent "a next-generation business design that will build a foundation for another 10 years of growth," says Adrian Slywotzky, a business strategy expert at

Mercer Management Consulting. And that will likely require "an outsider who can bring in fresh insights, especially in marketing," argues Gary Stibel, founder and principal of the New England Consulting Group.

SAME AGAIN? That creates a huge hurdle for DeGraan, who was previously president. Buffett calls him a "terrific candidate" to win the CEO job permanently.

But DeGraan is cut from the same cloth as his predecessors.

In Gillette's core shaving business, he oversaw much of the development of two blockbuster blades: Sensor and Mach3. But he bears much of the responsibility for the Duracell disappointments. Moreover, he says his job now is simply to "complete and accelerate the strategies [that were] agreed to" under Hawley.

No wonder investors are clamoring for a fresh face. Removing Hawley "was a great step forward," says Henry Asher, president of Northstar Group, a New York investment firm. But now, he adds, "they need someone from outside the company."

To be sure, parachuting in a high-profile outsider doesn't always work. Just look at C. Michael Armstrong's troubles at AT&T and George M.C. Fisher's rocky reign at Eastman Kodak Co. Still, Stibel predicts there will be outstanding candidates eager to become a hero at Gillette.

Even DeGraan admits that an outsider "would probably be accepted" at Gillette during these troubled times. The reason: "A lot of our employees own a lot of Gillette shares," he says. "I get a lot of e-mails from employees," he adds. The main message: "Do something about the stock price." For now, the best way to do that may be to go outside the company for the next CEO.

Bureau Chief Symonds covers Gillette from Boston.





COMMENTARY

By Paul Raeburn

AFTER TACO BELL: CAN BIOTECH LEARN ITS LESSON?

It's been a chaotic month for the biotech industry. The trouble began in late September when genetically engineered animal corn—potentially harmful to humans—was found in Taco Bell taco shells. Then it showed up in Safeway Inc.'s house-brand taco shells. In mid-October, Kellogg Co. shut down a production line in Memphis, because testing had delayed grain deliveries.

What is perhaps most embarrassing for the industry is that all of this was triggered by its critics. The animal-feed contamination was discovered by the Genetically Engineered Food Alert, a coalition of environmental groups that favor tougher biotech regulations. They are now busy testing all the corn products they can get their hands on. Some millers and food processors say they will buy only white corn until all of the animal corn—which is yellow—has been accounted for.

Once again, it seems, the industry has hurt itself with its unyielding opposition to labeling or special regulations for biotech foods. Many consumers, already wary of biotech foods, will likely become even more skeptical. It could cost the industry millions to find the animal corn and get it out of the food supply. And distributors and food companies will find themselves stuck with corn they can't use or sell.

ALLERGENS? More than just the industry's well-being is at stake, however. Properly used, these new biotech crops have enormous potential to reduce pesticide use, improve human nutrition, and ease hunger in developing countries. But none of that will happen unless consumers believe that the foods are safe.

The genetically engineered corn,



called Starlink, is made by Aventis CropScience, a U.S. subsidiary of Aventis of France. Starlink was altered to make it resistant to pests. It carries a foreign protein that is probably safe for human consumption but which does have some of the chemical characteristics of a human allergen—a general term for substances that can theoretically trigger anything from a mild allergy to a fatal case of shock.

Animal feed is not supposed to get into the food supply, whether or not it is genetically engineered. This is a clear case where special tracking of biotech crops might have allowed the industry to find the contaminated corn

and remove it from the human food supply much more quickly than it is able to do now.

Instead, the industry is scrambling. Gary Strube, manager of the Superior Cooperative Elevator Co. in northern Iowa, tested 31 cars of grain in a 75-car train bound for Archer Daniels Midland Co. processing plants in Iowa. He found Starlink in 18 of the 31 cars tested and stopped testing—he assumed the entire lot was bad. He sold it for chicken feed in Arkansas—he won't say to whom—at a price 7¢ less than what he would have received from ADM.

Aventis is trying to find and buy back all the Starlink corn, which was planted on 350,000 acres across the country. But it is harvest time, and 9 million bushels have left the farm. They could already be in the human food supply.

That helps explain the other move Aventis has up its sleeve. On Oct. 25, Aventis asked the Environmental Protection Agency to temporarily approve Starlink for human use. That would neatly solve Aventis' problem—and infuriate its critics. "I think consumers would be outraged," says Charles Margulis, the genetic-engineering specialist at Greenpeace. "You're telling them this is a potential allergen, but because it's inconvenient for the industry, we're going to go ahead and let people be experimented on."

None of this has led the biotech-food industry to soften its opposition to labeling or to any special regulations for biotech products. But it's time for a change. Biotech foods are new, they are different, and they deserve special regulations. The industry should drop its opposition to tougher regulations. That could boost consumer confidence and disarm the critics. Then we might all begin to enjoy, much sooner, the benefits that biotech foods can provide.

With Julie Forster in Chicago and Paul Magnusson in Washington, D.C.

YIELD Because the safety of biotech foods is still disputed, the industry should agree to labeling and better oversight

ORDERING CHINESE?

FedEx provides direct service from the U.S. to the most Asian cities, including Hong Kong, Beijing, Shanghai and Shenzhen. From Taipei to Tokyo, from Seoul to Singapore, FedEx is your gateway to the Far East. And now FedEx introduces the International Resource Center, the one stop for all your international trade needs. Let our International Document Assistance program guide you through the customary red tape of international shipping. Find out more about the International Resource Center and our full menu of FedEx services at **fedex.com** or call 1-800-Go-FedEx. **Be absolutely sure.®**



FedEx
Express

COMMENTARY

By William Symonds

A TWO-PARTY SYSTEM IN NAME ONLY

The mere mention of Ted Kennedy's name gets conservative Republican blood boiling and eyes blazing. So you might think the GOP would be eager to take on the liberal patriarch as he runs for reelection this November. But not in Massachusetts, where Republican leaders have adopted the astonishing position of implying that Kennedy is the best man for the job he has held since 1962.

True, there will be a Republican on the ballot for Kennedy's seat: Jack E. Robinson III, a Harvard University-educated lawyer and entrepreneur. But Robinson has become such an embarrassment that state party officials have refused to endorse him. Robinson's campaign nearly aborted on take-off last March when the self-styled reformer released a detailed "complete report to the citizens of the Commonwealth" on his checkered past. In it, Robinson discussed a drunken-driving arrest near Fenway Park, why he failed the bar exam three times, and a restraining order that a former girlfriend took out against him in 1998, alleging he had forced her to engage in sexual relations. "I am not a groper," Robinson declared, noting the woman later agreed to drop the charges.

FORFEITED FIGHT. Undaunted, Robinson insists his "grass-roots guerrilla campaign will pull off an upset," just as John F. Kennedy shocked the pros by beating Senator Henry Cabot Lodge Jr. in 1952. But with a campaign war chest of some \$25,000—vs. \$6 million for Kennedy—"he can't possibly win," says Gerry Chervinsky, president of Massachusetts pollsters KRC Communications Research. In fact, Robinson may end up finishing third behind Libertarian Carla Howell, who advocates abolishing federal income tax and gun laws and



In Massachusetts, Ted Kennedy has been practically endorsed by the GOP

full privatization of Social Security.

Robinson is the most obvious—but far from the only—sign of the disturbing descent of Massachusetts into a one-party state. Republicans are not fielding candidates for half the 10 congressional seats on the ballot—all of which are held by Democrats. And the state party has forfeited the battle for control of the legislature: Republicans are contesting just 62 of 160 seats in the Massachusetts House and a mere 14 of 40 seats in the state Senate. With only 13% of voters registered as Republi-

cans—vs. 36% for the Democrats and 51% for independents—it's "our most one-party state," says Michael Franc of the Heritage Foundation, a conservative think tank.

Not everyone, however, agrees that there is a problem. "The system is not broken down," says Marty Linksy, a lecturer in public policy at Harvard's John F. Kennedy School of Government. He argues that there are not more GOP candidates for the State Legislature because "many [Democratic] state legislators work their tails off" for constituents. "If people really wanted a choice, there would be another candidate," he says.

FREE REIN. But to work well, democracy requires healthy competition among two or more political parties. In the current climate, Kennedy

and other Democratic potentates "are free to adopt an uncompromising liberalism," argues William G. Mayer, an associate political science professor at Northeastern University.

Moreover, "the kind of debate over public policy that takes place in virtually every other state capital is largely absent here," complains Michael Widmer, president of the Massachusetts Taxpayers Foundation. Take taxes. In 1989, the legislature passed an emergency measure raising income tax rates to 5.95% from 5%. At the time, the Democrats promised that the hike was temporary. In a two-party system, they would have been held to that promise. But 11 years later, the emergency is long over, and the legislature still refuses to consider any cut below 5.75%. Now the issue is being put to the voters: A ballot initiative would roll back rates to 5%.

Republicans showed a glimmer of life a decade ago, after then-Governor

*A moment of inspiration
can happen anywhere. Anytime.
That's the whole reason for
products like the Compaq
Wireless LAN. Send an e-mail
while you're away from your desk.
Retrieve information
while you're in another office.
Wireless technology cuts you loose.
And once you're free,
it's hard telling where your
imagination might take you.*



INSPIRATION COMES WITH NO STRINGS ATTACHED.

*Something cool is happening.
We're moving beyond
the limitations of
Information Technology
to something more inspiring.
Welcome to the new IT.
Inspiration Technology
from Compaq.*

COMPAQ
Inspiration Technology

Michael S. Dukakis lost his 1988 bid for the White House and his "Massachusetts miracle" collapsed into the "Massachusetts mess." With state finances in a shambles, voters elected Republican William F. Weld governor in 1990, and the GOP picked up enough seats in the state Senate to sustain his veto. In 1994, venture capitalist Mitt Romney mounted a credible challenge to Kennedy.

UP FOR GRABS. It has been straight downhill for the GOP since then. Although Republicans hold just 7 of 40 seats in the state Senate and 27 of 160 in the House, the GOP is so demoralized that John Brockelman, executive director of the Massachusetts Republican Party, says somewhat pathetically: "If we could pick up [just] one seat in both chambers, that would be a dramatic change." Weld, now chairman of the advisory board of Leeds Equity Partners, has moved to New York and is contemplating running for governor there. Romney has moved to Utah to clean up the Salt Lake City Winter Olympics.

Worst of all, the one remaining bastion of Republican power in Massachusetts—the governor's office—is poised to crumble. "The redoubt has been breached," says Weld. An ethical scandal involving Lieutenant Governor Jane Swift and huge spending overruns on the "Big Dig," the \$12 billion-plus highway project that runs through the center of Boston, has sent Cellucci's popularity rating to an all-time low. "He is lucky he is not up for reelection until 2002," says Chervinsky. But with prominent Democrats already preparing to run in that race, most observers believe it is now only a question of which one will prevail.

The American Revolution began here, and Massachusetts is littered with the symbols of democracy. But the free and vigorous exchanges that characterize democratic political institutions are fast disappearing, and increasingly, the people of Massachusetts hear but a single voice. If they listen closely, though, they can probably make out another one—Paul Revere howling in his grave.

Symonds is Boston bureau chief.

Q&A

BUD'S TURN AT BAT

Selig on team disparities, and his role as baseball commish



Major League Baseball Commissioner Bud Selig took time out from the Subway Series to sit down with Sports Business Contributing Editor Mark Hyman and other editors for a freewheeling discussion of the great issues facing the game, such as the gulf between have and have-not clubs and who will buy the Red Sox. Since Selig could wind up as the ultimate arbiter of the bat-throwing incident in Game 2 of the Series that cost Yankees pitcher Roger Clemens a \$50,000 fine, he declined to comment on the episode. But he wasn't reticent about the need to fix the disparities between teams.

Q: You've talked often about concerns that the big-revenue clubs are crowding out the small-market teams. Isn't this [the Subway Series] another example of that and therefore not good for baseball?

A: Well, the fact is [this Series] is the manifestation of the system that we have today. You have the highest-payroll team [the Yankees] playing the third-highest-payroll team [the Mets]. But in terms of the continued renaissance of the game, this is a good World Series.

Q: There seem to be a lot of people who are very bullish about baseball. I noticed recently that the financial markets extended [the league] a billion-dollar line of credit, plus TV feels very positive about baseball, with Fox having just paid \$2.5 billion for postseason

rights. Yet often within baseball, you hear more of a pessimistic view about the future of the game. Why is that?

A: I think the concerns you are talking about internally are the result of the disparity issue and the economic issues that surround it. I don't think anybody inside the game doubts that we are in the midst of a renaissance...but there is no doubt wherever I go, all people want to talk about are players' salaries disparity, what are you going to do about it? It's really an amazing paradox, because you have this incredible popularity, with attendance rising this year to almost 73 million.... On the other hand, you have the Minnesota Twins with a payroll of \$15 million and the New York Yankees with a payroll of \$115 million. So that's my job—get all this in line.



SELIG: "WE DIDN'T SOLVE OUR PROBLEMS"

Q: To fix the disparity issue, when do you move from persuasion to coercion?

A: Shortly. I've spent enough time establishing all the facts.

Q: The Red Sox are for sale. What sort of ownership group do you envision there?

A: It is a very crucial franchise. This is not a happy set of events but that's life. Hopefully, it will be a local group because I believe in local ownership.

Q: When you were acting commissioner you were criticized a lot for not being tough enough. Since you've become commissioner you have consolidated a lot of power in the Office of the Commissioner and assembled a strong management team. Were you just playing possum when you were acting commissioner?

A: I wasn't playing possum but.... I was reluctant to do anything without building a consensus. One thing about being commissioner, whatever you do, somebody is going to be mad at you.

BusinessWeek online

For a video of Selig, go to www.businessweek.com/mediacenter/

"In terms of the continued renaissance of the game, this is a good World Series"



TECHNOLOGY SHOULD NEVER GET IN THE WAY OF A BIG IDEA.

*Sometimes, before you can think big
you have to think small.*

*Small, like the Compaq
ProLiant DL360 Server. With a
1.75-inch profile that fits everywhere,
you can have your*

big start-up idea anywhere.

Even in the back of a van.

Welcome to the new IT.

*Inspiration Technology
from Compaq.*

COMPAQ
Inspiration Technology

EDITED BY MONICA ROMAN

AMAZON'S EBBING TIDE OF RED INK

IS THE WORST OVER FOR Amazon.com? Surprising skeptics, the e-tail giant on Oct. 24 reported higher-than-expected third-quarter sales of \$638 million and a smaller operating loss of \$68 million. The reasons: growing sales of new products such as consumer electronics, coupled with reduced inventories and better deals from suppliers. CEO Jeffrey Bezos also promised operating losses would dip below 5% of an expected \$4 billion in sales next year. Investors bid Amazon shares up 8%, to 31%, the next day. But with consumer spending on the wane and Amazon.com still refusing to predict when it will turn

profitable, investors are waiting for the critical fourth quarter.

MICROSOFT PUTS OUT ONE FIRE

THE JUSTICE DEPT. ISN'T THE only federal regulator breathing down Microsoft's neck. The Federal Trade Commission is getting its licks in, too. On Oct. 25, the FTC settled deceptive advertising claims with WebTV Networks, a Microsoft service.

The agency accused WebTV of misleading consumers with ads that promised full Internet access and failing to adequately disclose possible long-distance phone charges users might run up. To settle the case, WebTV agreed to run accurate ads, set up a consumer education program, and reimburse customers who canceled the service because of unexpected long-distance charges. "We're willing to be reasonable and get the matter behind us," says Microsoft spokesman Vivek Varma. Now if Microsoft could only shake that other dispute with trustbusters.

WILL THIS REVAMP HELP FOCUS KODAK?

EASTMAN KODAK ANNOUNCED management changes aimed at boosting flagging growth. On Oct. 16, CEO Dan Carp combined seven business units into two and gave responsibility for the company's shrinking professional and commercial imaging business to Martin Coyne, who had run Kodak's health-imaging business. Analysts say the changes are welcome, but won't quickly address Kodak's problems. Its stock tumbled nearly 40% last month after the company reported a sharp slowdown in third-quarter film sales, along with widening losses from sales of digital products.

HEADLINER: DONALD KEOUGH

NOW THINGS MAY GO BETTER

Call it the second coming of Donald Keough. After retiring from a legendary 43-year career at Coca-Cola in 1993, Keough was treated as persona non grata by M. Douglas Ivester, who succeeded him as president and later became CEO. When Keough sent Ivester a memo last October offering advice on how to handle the contamination scare in Europe and a discrimination suit back home, Ivester sent a curt thank-you note.

Ivester is gone, but his successor, Douglas Daft, has no problem tapping Keough's wisdom. Daft has

long sought Keough's advice, but on Oct. 23, he made the relationship official by naming Keough as a special adviser to the board of the Atlanta behemoth.

Daft's gesture should also play well with Coke's star-studded board, which had grown weary of Ivester's go-it-alone style of management. Keough, 74, was a childhood friend of fellow Omaha native Warren Buffett and serves as chairman of Herbert Allen's New York investment bank. Both Buffett and Allen sit on the Coke board.

By Dean Foust in Atlanta



CLOSING BELL

OPTICAL ILLUSION

It was a lovely ride while it lasted. But on Oct. 25, JDS Uniphase fell to earth. After nearly tripling over the last year, shares in the No. 1 maker of fiber-optic components plunged 25%, to 71, on worries of slowing fiber-optic equipment sales. The rout began when Nortel Networks, the leading seller of optical gear, reported lower-than-expected growth on Oct. 24—up a mere 90%, vs. hopes as high as 125%. The contagion spread quickly to all optical companies.



BIG BANKS. POOR GRADES

THE BANKING INDUSTRY scored a C— overall in the NAACP's first-ever survey of the industry's relations with African Americans. The group rated banks on employment, vendor relationships, marketing, community reinvestment, and charitable involvement.

Bank of America topped the list, with a B. Citigroup, KeyCorp, FleetBoston, Wells Fargo, Mellon, and US Bancorp all received failing grades of D. SunTrust, which did not respond to the survey, got an F.

ONE TOUGH SELL FOR FEDERATED

FEDERATED DEPARTMENT Stores has put up for sale \$2.4 billion in bad consumer debt from its Fingerhut catalog unit. The unpaid debt was

financed between 1985 and 1995 and has already been written off. McDonald Investments analyst Jeffrey Stein says the debt has little value to an acquirer because its age will make it hard to collect. Federated was aiming to boost its catalogue and Internet businesses when it acquired Fingerhut in early 1999 for \$1.7 billion. But rising credit delinquencies and losses at Fingerhut have raised questions about the wisdom of the acquisition.

ET CETERA...

- Cendant will spin off to shareholders much of the business it inherited in its merger with CUC International.
- Direct seller Amway has a new corporate holding company called Alticor.
- Halliburton's third-quarter revenue at its engineering and construction businesses dropped 21%.

Be everywhere.



Have eyes and ears in 26 countries—including 800 Merrill Lynch analysts in all four corners of the globe. With one of earth's most honored research teams, we can help you pounce on opportunity. Whatever part of the world you happen to inhabit.

Be bullish.

It took him
five years to build
a local business.

He's taking it global
at light-speed.

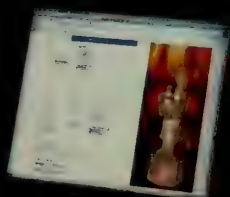


With the **Optical Internet** Lucent is creating, a business knows no boundaries. We're building all-optical networks that are four times faster than today's—with the speed and capacity to connect local markets to global markets. So businesses large and small can serve new customers anywhere in the world. Change the way people communicate, and you change the way they do business. Lucent Technologies. We make the Internet move at light-speed.

Expect great things.SM

Lucent Technologies
Bell Labs Innovations

www.lucent.com
1-888-4-LUCENT



EDITED BY PAULA DWYER

BETWEEN NAFTA AND A HARD PLACE: HOW MEXICO WILL TEST THE NEXT PRESIDENT

Texas Governor George W. Bush and Vice-President Al Gore are both self-proclaimed free-traders who strongly support the 1994 North American Free Trade Agreement. But when a NAFTA dispute panel issues a report shortly after the Nov. 7 election, it is likely to complicate relations between incoming Mexican President Vicente Fox and the fledgling Administration of either President Bush or President Gore just as the new U.S. chief executive is trying to showcase his leadership skills on the world stage.

The NAFTA panel is expected to rule that the U.S. has violated a central promise of the trade treaty: that trucks from each nation would be able to deliver goods across the border as long as they meet one another's safety regulations. President Clinton refused in December, 1995, to open up border states to Mexican trucks. And last January, he denied Mexican trucks access to all 50 states, despite a NAFTA deadline requiring him to do so. Citing safety concerns, Clinton has limited Mexican 18-wheelers to a narrow commercial zone along the border.

"SNOWBALL'S CHANCE." The real reason for the backtracking was political, many observers say. Just days before then-Transportation Secretary Federico Peña was to announce the border opening, the White House reversed the decision as a favor to the Teamsters union, which opposes letting low-paid Mexican truck drivers enter the U.S. "The U.S. has been wrong from day one on this issue, and there's not a snowball's chance in hell that it will win this case," says Sidney Weintraub, an expert in Latin American trade issues at the Center for Strategic & International Studies, a centrist Washington think tank. "This has nothing to do with safety and everything to do with the Teamsters and the election," says James R. Giermanski, who studied the is-

sue as a professor at Texas A&M University in Laredo.

If Gore becomes President, he'll be in a ticklish situation. Should he mend fences by cutting a deal with Mexico—and sending a pro-trade signal to business—he would alienate Hill Democratic leaders and the AFL-CIO allies who helped him get elected. Especially miffed would be Teamsters President James P. Hoffa, whose union endorsed the Veep in September. That could set the stage for labor opposition to other Gore trade initiatives, including legislation that would allow him a free hand in negotiating future trade treaties.

A President Bush, on the other hand, would likely reverse Clinton and open the border to Mexican trucks. But he could find his options limited by other trade disputes. Bush, who says he knows Fox well, would also need to address U.S. protectionist measures on tuna, avocados, and sugar. "Fox has made it very clear that he wants a more open relationship with the U.S., but you also hear that the U.S. has too many barriers to trade," says Rordan Roett, director of the Western Hemisphere Program at the School of Advanced International Studies in Washington.

Bush would also feel heat from telecom players like AT&T and MCI WorldCom Inc. At their urging, the U.S. has been trying to get Mexico to crack down on the alleged monopolistic practices of Teléfonos de México. Washington has already taken the case to the World Trade Organization but hopes to negotiate a resolution after Fox, who favors liberalizing Mexico's \$14 billion telecom market, takes office.

Whoever wins the White House will have to confront such thorny trade issues with Mexico. And that will provide an early test of the new President's ability to manage relations with America's second-biggest trading partner.

By Paul Magnusson, with Geri Smith in Mexico City



FOX AND BUSH: Border buddies?

CAPITAL WRAPUP

BIG STEEL'S REVENGE

► Senator Robert C. Byrd (D-W.Va.) has slipped a rider onto an unrelated farm spending bill to help U.S. steelmakers and, in the process, has angered exporters and their trading partners. The measure, which Congress passed on Oct. 20 and which President Clinton says he will sign, allows U.S. companies that win anti-dumping cases to share in the penalties, which normally go directly into the treasury. While steelmakers are overjoyed—they bring most dumping

cases—many of America's biggest exporters worry that the law will encourage a blizzard of anti-dumping cases. Worse, they say, it violates international trade agreements and will open up the U.S. to retaliation by Europe, Japan, and South Korea. House Ways & Means Chairman Bill Archer (R-Tex.) hopes to repeal the amendment.

THE GOP'S MISSOURI PROBLEM

► In what could be the strangest turn of events in the November elections,

Republican insiders are increasingly worried that Missouri GOP Senator John Ashcroft could lose his bid for reelection—to a dead man. Ashcroft was in a tight battle with Missouri Governor Mel Carnahan, who died in an Oct. 16 plane crash. Carnahan's name remains on the ballot, and the state's new Democratic governor, Roger Wilson, says he will name Carnahan's widow, Jean, to the Senate seat if her late husband outpolls Ashcroft. Republicans privately fear that an outpouring of sympathy could turn the seat Democratic.

OTHER CRM VENDORS PROMISE FRONT AND BACK END INTEGRATION.

THEIR RESULTS NEVER PROVIDE FULFILLMENT.



Not just any CRM supplier can serve up real-time fulfillment, seamlessly integrated. Only PeopleSoft 8 CRM gives you robust, feature-rich, real-time solutions from a single vendor. So your people can track orders from the point of customer contact—whether by phone, fax, e-mail or web—through order management, procurement and fulfillment, to service execution and delivery. The result is more informed decisions, lead-time reduction and cost savings. Which will help put a generous serving of success on your company's plate.

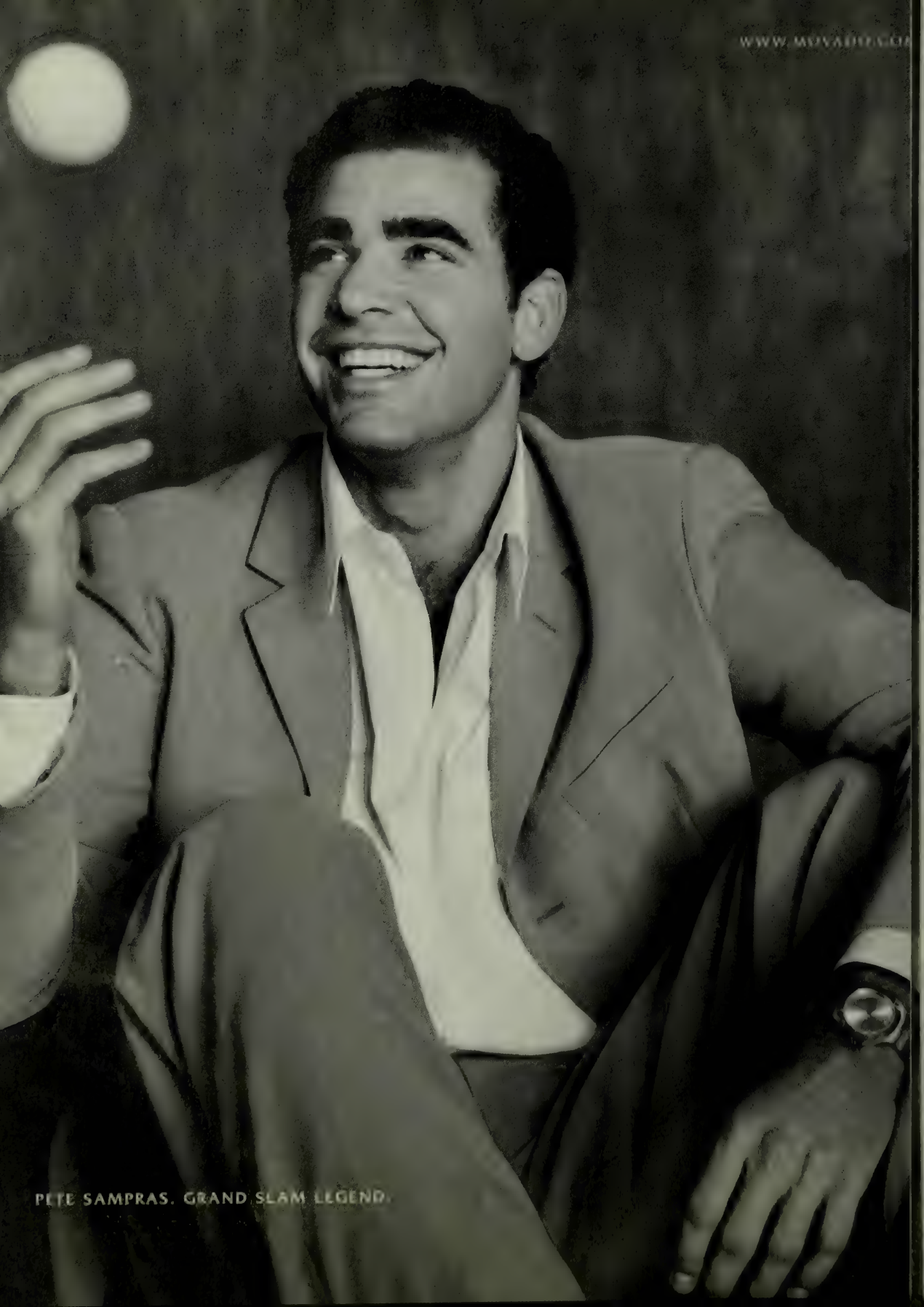
PeopleSoft CRM powered by

vantive

CUSTOMERS • EMPLOYEES • SUPPLIERS

People power the internet.

PEOPLE
Soft



PETE SAMPRAS. GRAND SLAM LEGEND.



THE NEW MOVADO SE™

MOVADO

THE MUSEUM® WATCH. PUSHING THE ARTFORM.™

STAINLESS STEEL. SWISS QUARTZ. WATER RESISTANT. MEN'S AND WOMEN'S

ROBINSONS • MAY

EDITED BY SHERIDAN PRASSO

WHY NORTH KOREA IS RUSHING TO COZY UP TO CLINTON

Six months ago, much of the world saw North Korean leader Kim Jong Il as a playboy terrorist. But after two days of cordial talks Oct. 23-25 with U.S. Secretary of State Madeleine K. Albright—the first American official Kim has ever met—the reclusive North Korean is suddenly projecting the image of a man the U.S. can do business with. During Albright's visit to Pyongyang, Kim and Albright spent many hours together—in discussions, at two dinners, and at a bombastic spectacle of 100,000 performers extolling the ideals of the Korean Workers' Party. As her visit ended, Albright suggested that Kim "pick up the phone anytime" he wanted to reach her. Kim responded: "Please give me your e-mail address."

The Secretary of State and the Dear Leader as e-mail pen pals? It's hard to imagine. But the speed with which the two nations are moving to end what Kim termed "50 years of silence" is breathtaking. The Albright visit capped a year of feverish diplomacy by the North Koreans. For both sides, realpolitik is driving the process. With only three months left before President Clinton leaves office, the North Koreans fear the next Administration—whoever is in charge—may not be as accommodating. Making nice to Albright was the best way for Kim to get Clinton to visit before the end of the year, and solidify some of the promises the U.S. President has made to get North Korea to back down on missile proliferation and its nuclear threat. These include steps toward diplomatic normalization and ending the trade embargo, plus more economic aid. As a lame duck, Clinton has nothing to lose politically by locking in agreements that can't be undone by his successor.

Neither Al Gore nor George W. Bush have said what their policies toward North Korea would be. A victorious Gore would be unlikely to squander political capital by pushing

good relations with North Korea right away, especially if Republicans dominate Congress. The GOP has accused Clinton of giving in to nuclear blackmail by promising in 1994 to build nuclear power plants in exchange for Pyongyang halting its nuclear weapons program. Bush would almost certainly take a hawkish stance. He has, for instance, vowed to push ahead with the Theatre Missile Defense shield, developed in part as a deterrent to North Korean aggression.

DIPLOMATIC BLITZ. It's been a dramatic year for North Korea. Kim has hosted his counterparts from South Korea and Russia, and has gone to China himself—a visit in which Chinese leader Jiang Zemin assured Kim that he can have economic reform without losing political control. Kim is working to normalize relations with Britain and Germany, following success with Italy and Canada. Until Albright's visit, the U.S. seemed the laggard in the campaign to bridge the Demilitarized Zone.

This outreach has to do with balancing superpowers. Since the collapse of the Soviet Union in 1991, Moscow isn't in a position to help economically. That's left Pyongyang heavily dependent on handouts from China, but reluctant to become a client state of Beijing. Analysts noted that while Chinese Defense Minister Chi Haotian visited at the same time as Albright, he didn't get a quick meeting with Kim, but rather was dispatched on a lengthy sightseeing tour that included the birthplace shrine of deceased Great Leader Kim Il Sung. In addition to the promised steps, such as liaison offices in their respective capitals, Kim wants the U.S. to remove North Korea from the list of terrorist states and help Pyongyang launch a satellite. A Clinton visit could cement such agreements, and enhance the security of the Korean Peninsula. North Korea knows it has little time left to do it.

By Mark L. Clifford in Pyongyang



KIM AND ALBRIGHT: *E-mail pals?*

GLOBAL WRAPUP

FEAR OF DEFAULT IN ARGENTINA

► Try as it might, Argentina's government cannot shore up crumbling investor confidence. Fears that the country may be headed for a debt default caused Argentine bond prices to plunge to a 14-month low on Oct. 25. The spread on Argentine debt widened to more than 850 basis points over comparable U.S. Treasuries. Worries about Argentina's ability to finance its \$123 billion public debt have been mounting since the government announced it might have to tap a \$7.2 bil-

lion emergency credit line with the International Monetary Fund next year. The country needs to raise \$19 billion to pay off maturing debt and fulfill other obligations over the next 14 months.

Under normal conditions, the 10-month-old government of President Fernando de la Rúa would have tapped international capital markets to raise those funds. But with the economy mired in a two-year recession and the government engulfed by a political scandal, investor appetite for the country's bonds has all but evaporated.

Economy Minister José Luis Ma-

china tried to boost confidence on Oct. 23 by announcing a new package of tax cuts designed to stimulate economic activity. The measures include a reduction in the tax charged on interest payments on corporate debt and the elimination of some capital-gains taxes. Investors, however, were not impressed and kept dumping Argentine securities. Meanwhile, rumors continue to circulate that the government may invite former Economy Minister Domingo Cavallo, the architect of the country's currency board regime and a familiar face for Wall Street, to join the Cabinet.

— CERTIFIED PRE-OWNED LEXUS —

Other Cars Are Pre-Owned. But That's Where The Similarities End.



Truth be told, Certified Pre-Owned Lexus Vehicles have more in common with new cars. Like the "Lexus of warranties" that backs them for three years from your purchase date or 100,000 total vehicle miles.* A complimentary loaner car.[†] Extremely competitive financing rates and lease terms. And one more important thing that separates a Certified Pre-Owned Lexus from others: They're available only at your Lexus dealer. Stop by for a test drive today.



lexuscpo.com

web hosting the intel way

is checking something
2000 times an hour
a sign of mental instability?

or website



stability?

at intel® online services, we live by a simple motto: "only the paranoid survive." because in our business, total obsessiveness is what separates the never-miss-a-blip from the merely attentive. we take over 2,000 measurements of website performance every hour. we monitor the entire end-to-end path from you to your customers in over 40 countries around the world. and we have a team of web and application hosting specialists, certified in over 35 web and networking standards, at your disposal around the clock. because in the surge economy, a lot can happen between tick and tock. to take the first step, visit us online or call

1-877-320-2662. web hosting for the surge economy → intelonlineservices.com/info

GLOBALIZATION CAPITALISM

Can it be made to work better?

It's hard to figure how a term that once connoted so much good for the world has fallen into such disrepute. In the past decade, globalization—meaning the rise of market capitalism around the world—has undeniably contributed to America's New Economy boom. It has created millions of jobs from Malaysia to Mexico and a cornucopia of affordable goods for Western consumers. It has brought phone service to some 300 million households in developing nations and a transfer of nearly \$2 trillion from rich countries to poor through equity, bond investments, and commercial loans. It has helped topple dictators by making information freely available in once sheltered societies. And now the Internet is poised to narrow the commercial and cultural gulfs separating rich nations from poor even further in the decade to come.

So it's little wonder that, for many,

CONTENTS

GLOBALIZATION	72
LABOR	78
Guatemala	80
Sweatshops	84
INVESTMENT	88
Chad	94
CAPITAL	96
THE CODA	100

ALISM



GLOBAL CAPITALISM

the rage now being vented against globalization is perplexing. Even in this jittery autumn, as investors punish bourses and recession fears rise, many workers and government officials in nations such as China, Mexico, and Hungary still feel that the movement toward open markets has paid off. The tumultuous street theater of angry young middle-class Westerners vilifying multinationals seems bizarrely detached from the real-life concerns voiced in countries that are supposed to be victims of global capitalism. Even in the toughest situations, there is little interest in returning to the past. "The more open the Russian economy is to the rest of the world, the better," says Yevgeny Gavrilenkov, an architect of President Vladimir Putin's economic plan.

RETHINKING. Yet it would be a grave mistake to dismiss the uproar witnessed in the past few years in Seattle, Washington, D.C., and Prague. Many of the radicals leading the protests may be on the political fringe. But they have helped to kick-start a profound rethinking about globalization among governments, mainstream economists, and corporations that, until recently, was carried on mostly in obscure think tanks.

This reassessment is badly overdue. In the late 20th century, global capitalism was pushed by leaps in technology, the failure of socialism, and East Asia's seemingly miraculous success. Now, it's time to get realistic. The plain truth is that market liberalization by itself does not lift all boats, and in some cases, it has caused severe damage. What's more, there's no point denying that multinationals have contributed to labor, environmental, and human-rights abuses.

For global capitalism to move into the next stage will require a much more sophisticated look at the costs and benefits of open markets. To assess these increasingly important trade-offs, BUSINESS WEEK sent more than a dozen reporters around the world, from the deserts of Chad to the factories of Guatemala, to witness firsthand the effects of global capitalism. They met workers who toil 16 hours a day for miserly pay making garments sold in the U.S. as well as villagers who want oil companies off their land. But they



NIGERIA: Some areas have only pollution to show for global capitalism.

also talked to factory laborers who have seen big gains in their standards of living as well as creative bureaucrats who have used markets to coax growth out of once moribund economies.

The overwhelming conclusion of this reporting is that there are many examples of where reckless investment has done harm—but there is no case where the hazards can't be addressed with better government and corporate policy. The real question isn't whether free markets are good or bad. It is why they are producing such wildly different results in different countries. Figuring out that answer is essential before all the benefits of global markets are realized.

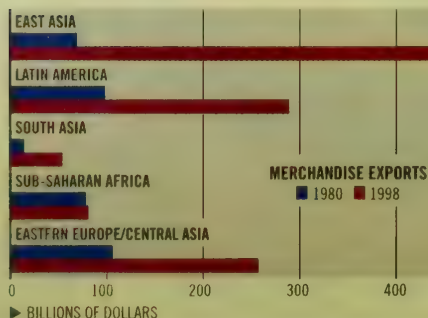
The extremes of global capitalism are astonishing. While the economies of East Asia have achieved rapid growth, there has been little overall progress in much of the rest of the developing world. Income in Latin America grew by only 6% in the past two decades, when the continent was opening up. Average incomes in sub-Saharan Africa and the old Eastern bloc have actually contracted. The World Bank figures the number of people living on \$1 a day increased, to 1.3 billion, over the past decade.

The downside of global capitalism is the disruption of whole societies. While the industrialized countries have enacted all sorts of worker and environmental safeguards since the turn of the century, the global economy is pretty much still in the robber-baron age. Yet if global capitalism's

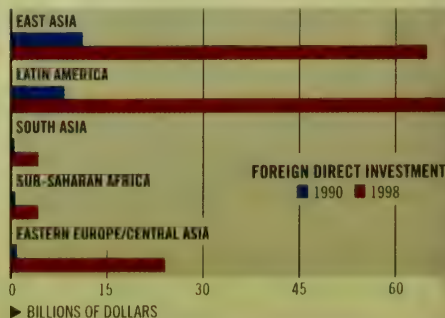
DETAIL

From 1990 to 1996, only 33 countries managed to sustain 3% annual growth, and 59 countries saw their economies contract

EXPORTS HAVE SURGED FOR TWO DECADES...



...WHILE FOREIGN INVESTMENT HAS EXPANDED...



One Size Does Not Fit All



flaws aren't addressed, the backlash could grow more severe. Already, the momentum for new international free-trade deals has been stopped cold. An ambitious Multilateral Agreement on Investment, which would have removed restrictions on cross-border investment by corporations, fizzled last year. So have hopes for a new global trade round through the World Trade Organization. In the U.S., Congress has refused to give the President fast-track authority to strike new trade deals.

The longer-term danger is that if the world's poor see no benefits from free trade and IMF austerity programs, political support for reform could erode. The current system is "unsustainable," says United Nations Assistant Secretary General John G. Ruggie, who, as a political economist at Columbia University, examined how previous golden ages of global capitalism, such as the one at the turn of the 19th century, unraveled.

It all adds up to a breakdown of what was known as the Washington Consensus, the world view pushed aggressively by the U.S. Treasury, the IMF, and the World Bank in the early 1990s. This dictum held that all countries should open their markets to trade, direct investment, and short-term capital as quickly as possible. The transition would be painful, but inevitably, prosperity would result.

In hindsight, it was a naïve and self-interested view. Although developing nations badly needed

to import capital and foreign financial knowhow, many simply could not handle the inflows. The results were huge white-elephant industrial and property projects—and foreign-currency debt bombs that started exploding in 1994.

A more realistic view is now gaining hold. It begins with a similar premise: that trade and inflows of private capital are still essential to achieving strong, sustainable growth and to reducing poverty. But it acknowledges that multinationals—which account for the bulk of direct cross-border investment and one-

third of trade—have social responsibilities in nations where the rule of law is weak. And this view dispenses with the erroneous notion that open markets will magically produce prosperity in all conditions. Even the IMF now warns that a high degree of openness to global capital can be dangerous for some developing nations. "The IMF push for capital-market liberalization for all nations was driven by financial-market ideology," says former World Bank chief economist Joseph E. Stiglitz, now a vocal IMF critic. "They have conceded defeat, but only after the damage was done."

NOT SO FAST. According to the new pragmatism, governments first must deliver political stability, sound economic management, and educated workers if they are to gain from wide-open markets. East Asia's Tigers had many of these features when they began their export drives; most of Latin America and Africa did not. "To get the benefits of trade and capital flows, you need a broader base of development," says Dani Rodrik, a Harvard University economist whose research has raised hackles by suggesting that there is no automatic link between openness and growth in developing countries.

The search for a more intelligent approach to

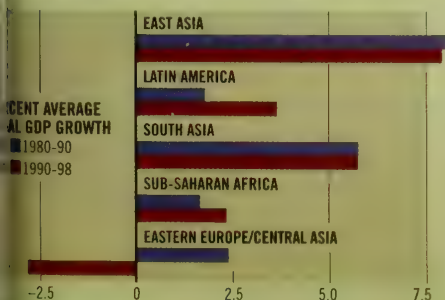


BLINDED BY WALL STREET?

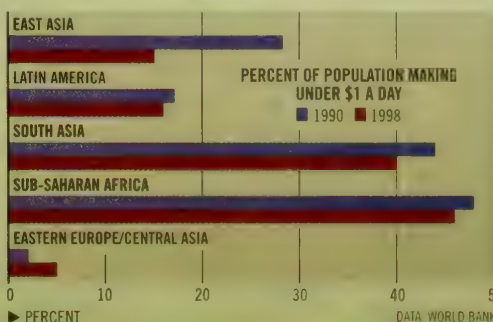
“The IMF push for capital-market liberalization for all nations was driven by financial-market ideology. They have conceded defeat, but only after the damage was done”

JOSEPH STIGLITZ, former chief economist of the World Bank

BUT GROWTH HAS BEEN UNEVEN...



AND POVERTY IS STILL WIDESPREAD



GLOBAL CAPITALISM

globalization is most evident within developing nations. Russia is only now starting to recover from the massive corruption, capital flight, and economic collapse of the 1990s. President Putin's government plans to continue market reforms and wants to join the WTO. But its blueprint also calls for strengthening the legal system and control of the financial sector. "There's an emphasis on long-term plans instead of the haphazard, piecemeal policies of the pre-crisis years," says Mikhail Zadornov, who was finance minister under Boris N. Yeltsin.

Web. To allay critics, companies such as Nike, Mattel, Levi Strauss, and Royal Dutch Shell Group have drawn up their own guidelines and invited monitors to ensure that they live up to them.

But altering business practices to appease pressure groups can also hurt more than help. Soon after a bill was proposed in the U.S. Congress in 1993 to ban imports from countries where children work in factories, garment makers in Bangladesh fired 36,000 workers under age 18, most of them girls. Studies by the International Labor Organization and Unicef found that few of the fired workers ended up in school. Instead, many took more dangerous jobs or became prostitutes.

Partly to avoid having extremists set the agenda, efforts are now under way to clarify the rules. In May, the U.N. kicked off a program called Global Compact. The idea is to get multinationals to endorse a set of basic human rights, environmental, and labor principles, and allow private groups to monitor their compliance. So far, some 44 companies, including Shell and Nike, have signed up.

SANCTIONS. Because industry self-regulation schemes lack real teeth, critics dismiss them as mere public relations. But such pacts are beginning to form the basis of a kind of global capitalism with rules. There already

are international agreements on intellectual-property rights and prison labor that allow countries to bar imports from violators.

And as the costs of consumer boycotts and monitoring rise, companies and their investors are likely to look toward more uniform standards of behavior. Yet it's highly unlikely anyone would agree to a global government to police corporations and capital markets. The new rules of global capitalism will evolve slowly and in pieces.

A serious discussion on globalization has begun. Until now, it has been dominated by extremists on both sides. "At each end of the spectrum are ideologues who are pushing agendas unrelated to reality," says World Bank development research director Paul Collier. "It has been a dreadfully silly debate."

A decade ago, when much of the world was still clinging to various brands of wealth-destroying socialism, it may have made sense to push rigid doctrines. But the battle for market-driven economics has been largely won. And the flaws of trying to force every country into the same template have become clear. To take globalization to the next level, it is time to forge a more enlightened consensus.

By Pete Engardio in Washington, with Catherine Belton in Moscow, and bureau reports



CZECH REPUBLIC: Environmental and labor concerns will have to be addressed

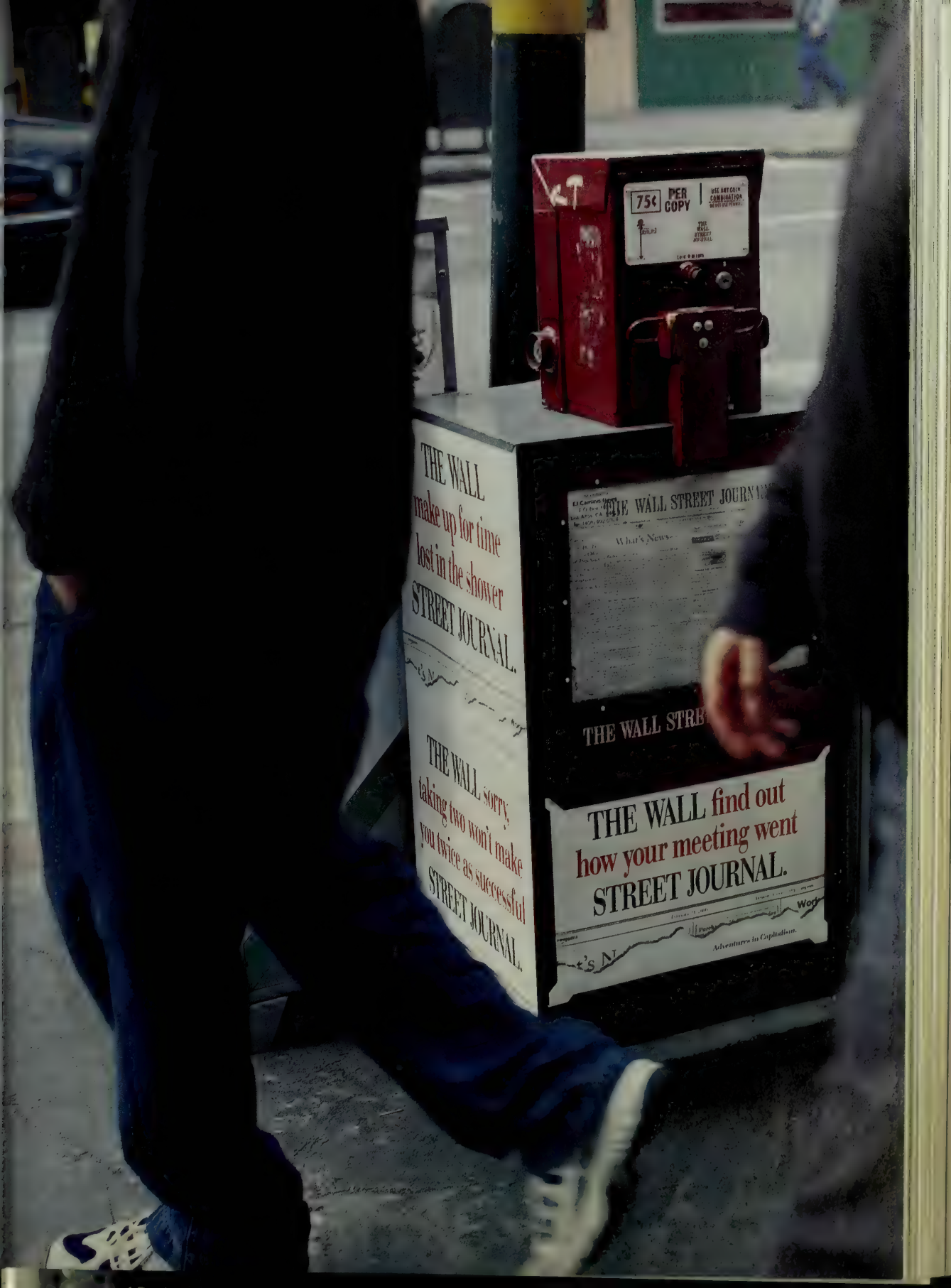
Some countries face such immense challenges that it could take a decade before they benefit from the lifting of trade and financial barriers. Despite liberalization in sub-Saharan Africa, for example, growth has fallen from 3.5% in the 1970s to 2.2% in the 1990s. "Companies have nothing against Africa," says U.N. Development Program economist Salim Jahar. "It's that stability, infrastructure, and skills are not there."

Just as there are no one-size-fits-all policies for development, there also are no clear roadmaps for corporate behavior. Balancing growth with environmental and labor regulations is wrenchingly complex in countries where people live on the margin. Many developing nations fiercely resist discussion of labor or environmental issues in the WTO because they fear that Western protectionists will shield jobs at home by imposing standards that drive up labor costs in emerging markets. "It's hypocrisy of the first sort for the West to talk about opening borders and then hide behind barriers," says Indian economist Surjit Bhalla.

The result, however, is confusion. At a time when image is paramount, corporations are besieged with activists who harangue executives at shareholder meetings, organize consumer boycotts, and smear their brand names on the

DETAILS

Foreign direct investment has soared sevenfold, to about \$400 billion yearly. But 80% of it goes to only 10 countries, while 100 countries average just \$100 million in FDI each year



THE WALL
make up for time
lost in the shower
STREET JOURNAL.

THE WALL sorry,
taking two won't make
you twice as successful
STREET JOURNAL.

El Camarillo, Calif.
THE WALL STREET JOURNAL
What's News

THE WALL STREET

THE WALL find out
how your meeting went
STREET JOURNAL.

Adventures in Capitalism.

UP THE LADDER

Global trade: Can all nations benefit?

Inside his cramped, two-bedroom house, in a subdivision of identical tan- and cream-colored dwellings, José Brigido Aguirre boasts of the changes in his life. Since moving from his small hometown to booming Ciudad Juárez on the U.S.-Mexican border, he's found employment as a factory technician. And thanks to a mortgage he lined up through a program funded by the government and his employer, Delphi Automotive Systems Corp. in Troy, Mich., Aguirre, 25, now supports three generations—eight people in all—under one roof on \$135 a week before taxes. And he wants to put his three younger siblings through school. “I have plans for them to study so we can all make something of ourselves in life,” Aguirre says.

Aguirre's story is one piece of evidence that globalization can lift up the poor. Yet in spite of thousands of stories like Aguirre's, not everyone will come away from Juárez impressed. The overcrowded city of 1.5 million is a ramshackle sprawl of cinder block houses and dirt roads. Each year it attracts as many as 80,000 new workers willing to work for less than \$10 a day, plus benefits, at *maquiladoras*—factories that assemble goods for export. To critics of globalization, these roaring plants simply prove that free trade has triggered a desperate “race to the bottom” by the world's workers.

But that is a distorted picture. As U.S. com-

panies continue to upgrade their Mexican operations to profit from the 1994 North American Free Trade Agreement, they are offering ambitious workers like Aguirre better careers, training, and benefits. Nations such as Hungary, Malaysia, and even China also have made the leap into high-end manufacturing—improving living standards and offering better careers for many workers.

TWO PATHS. What separates the countries whose workers thrive under globalization from those that seem stuck in the screwdriver assembly stage? More than anything, it is governments that make the best use of inflows of foreign investment and know-how. That requires a track record of business-friendly policies to lure multinationals and domestic tycoons alike to train workers, invest in modern technology and nurture local suppliers and managers.

It also means paying more attention to basics such as solid macroeconomic management, good public education, a legal system that protects property rights, and a society where prosperity is widely shared. These are the kind of pro-growth policies that most of East Asia employed to d-

Globalization's Mixed Results

Winners with stronger educational systems enjoy higher growth and lower poverty levels...

	GROSS DOMESTIC PRODUCT AVERAGE PERCENT GROWTH, 1990-98	EDUCATION PERCENT MALES COMPLETING 5TH GRADE	POVERTY PERCENT POPULATION BELOW \$1 A DAY
CHILE	7.9%	100%	4.3%
CHINA	11.2	93	18.5
MALAYSIA	7.4	98	5.6
SOUTH KOREA	6.1	98	<2.0

...While laggards often have lower education standards, more poverty, and lower growth

	GROSS DOMESTIC PRODUCT AVERAGE PERCENT GROWTH, 1990-98	EDUCATION PERCENT MALES COMPLETING 5TH GRADE	POVERTY PERCENT POPULATION BELOW \$1 A DAY
GUATEMALA	4.2%	52%	39.8%
INDIA	6.1	62	44.2
NIGERIA	2.6	70.2	28.9
SOUTH AFRICA	1.9	72	23.7

DATA: WORLD BANK



workers develop skills, as in this Nike factory in Indonesia, they help their country compete for foreign investment

velop from sweatshop havens in the 1960s and 1970s to industrial powers.

Countries that have failed to get these basics right often benefit the least from globalization. Whereas almost everyone in South Korea, Taiwan, Singapore, and Hong Kong received a high-school education when their countries' export drives began decades ago, in much of Central America half of the population never makes it to the fifth grade. Not surprisingly, Central America is mired in horrific poverty.

Weak government also partly explains the appalling working conditions still found in many developing nations. China, for example, has good labor laws. But they often are not enforced. Even in China, though, the issue of labor oppression is complex. Talk to the workers and they'll take issue with many Western stereotypes of exploitation.

You won't get Mao Genhe, 29, for example, to agree that his family would be better off if Nike Inc. had never come to China, as some U.S. activists assert. He and six of his brothers and sisters have left their poor village in Hunan province and taken jobs across the country. An elementary school graduate, Mao works at a Taiwanese-owned tannery in the city of Zhongshan that sup-

plies makers of Nike and Adidas shoes. It's often nasty working inside the hot, dank factory. But Mao sends up to four-fifths of his \$150 monthly earnings to his parents and a blind brother in Hunan. In five years, Mao figures, he and his wife will have the \$1,200 they need to open a small grocery or clothes store at home. "Our goal is we don't want to be farmers," he says.

SPREADING WEALTH. Thanks in large part to \$328 billion in foreign investment, urban per capita incomes in China have grown more than tenfold, to \$705, since reform began in 1978. Chinese industry pumped out \$195 billion in exports last year. Much of the income from the shoe, toy, garment, and electronics factories on China's east coast has spread far into the poverty-ravaged interior.

China also shows that, from humble beginnings, industry can advance rapidly. With two decades of experience with simple assembly plants under its belt, Chinese industry is now making great strides in electronics and machinery. Millions of engineers and scientists have helped the country become a big exporter of computer equipment, auto parts, and telecom gear.

Other countries are just now learning to imi-

One of the telltale signs of countries that have climbed the ladder is a higher level of education

GLOBAL LABOR

tate this pattern of public and private investment. Mexico isn't all the way there, either. While exports have soared fivefold since 1987, to \$137 billion, 47 million people still live in poverty—about half the population. One problem is that half of exports come from assembly operations that have done little to create local industry because they import most parts and materials. Another: Only 50% of Mexicans have completed sixth grade—and just 20% enter high school.

LOTS OF ENGINEERS. Nevertheless, companies such as Delphi are now shifting more sophisticated work to Mexico to take advantage of its supply of well-qualified technicians. Delphi has

opened a research-and-development center in Juárez that employs 700 engineers developing products Delphi sells worldwide. Travel to Guadalajara, and the trend is even more dramatic. Here, IBM, Hewlett-Packard Co., and other companies have long manufactured personal computers. But since NAFTA, there has been an influx of new computer and telecom equipment plants that require modern production lines and lots of engineers. Big contract manufacturing companies such as SCI Systems, Flextronics International, and NatSteel Electronics make everything from Ericsson cell phones to Cisco networking equipment. Since 1995, Guadalajara's joblessness has dropped sharply. And most factory workers now earn at least twice the minimum wage of \$3.72 a day.

"DESPERATE." To encourage high schools to churn out the right kind of workers needed, the Guadalajara government distributes pamphlets listing careers available at companies, along with their salaries. It also subsidizes job training for new hires. And to broaden its industrial base, Guadalajara is wooing multinationals that produce everything from medical equipment to liquid-crystal displays. "We're competing against China, Malaysia, Ireland, Hungary, and Brazil," says Sergio García de Alba, economic-development director for Jalisco state.

One can see in the old Soviet bloc how that competition is dividing Eastern Europe into winners and losers. Hungary and Poland are thriving, while Romania, Bulgaria, and to some extent the Czech Republic are lagging. Different approaches to privatization help explain it. The Czech Republic and Russia essentially issued shares in local factories to its citizens which seemed like a fair way to benefit the public. But that approach put insiders in charge of their enterprises. Hungary, instead, sold factories to both local businessmen and multina-



RESPECT

“The investments have brought us foreign exchange and more training. But we want to work with dignity”

SANDRA GONZALEZ, Guatemalan labor organizer



WHAT BOOM? Surging exports haven't forged a middle class

GUATEMALA'S GAP

A decade after Guatemala began to diversify its agricultural economy, the apparel industry now generates \$440 million in annual exports. Yet up to half of workers still earn less than \$3 a day, the minimum wage, and a third of adults are illiterate.

Why has Guatemala's export push not brought prosperity as quickly as it did to East Asia? The answer starts with Guatemala's fractured, strife-ridden society and includes neglect of investment in its own people and poor economic policies. Half of Guatemalans are indigenous Indians, many of whom still speak little Spanish. The country is just beginning to recover from a 36-year civil war, in which the military massacred entire villages. Unlike much of East Asia, where land reform and far-thinking public housing policies helped peasants rise above the subsistence

economy, just 2% of the people own 70% of the land. Little wonder the savings rate is about a third of Asia's level, meaning the country must depend heavily on foreign investors to grow.

Since the war's end, the government has boosted social spending sharply—from 4.3% to 7.3% of GDP. But Alfonso Portillo, the new populist President who took office in January, must boost tax revenue from 9% of GDP to 12% by 2002 to comply with a 1996 peace accord. But Guatemala's business class, which is dominated by a handful of families, has beaten most reform efforts. Not surprisingly, the country is rife with sweatshops. "We do want work," says Sandra González, who has tried organizing unions in the garment sector. "But we want to work with dignity." That could take decades.

By Elisabeth Malkin in Guatemala City

Call 1-800-OK-CANON,
or visit www.imagerunner.com

Make room.
The new imageRUNNER
is coming.

Staple
Saddle Stitch
Hole Punch

Out with the old, and in with the new digital
imageRUNNER 5000 and all it has to offer.

Like the ability to seamlessly connect to any network. To output
documents at 50 ppm and deliver full-finishing capabilities--right from
the desktop. Plus, it's built on the highly acclaimed imageRUNNER
product platform. So, put a fresh coat of paint on the walls,
something new is headed your way. At Canon, we're giving people the
know-how to realize the full power of the digital office.



imageRUNNER™
5000

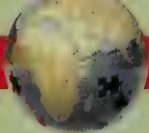
Canon KNOW HOW™

Canon is a registered trademark and imageRUNNER and Canon Know How are trademarks of Canon Inc. IMAGEANYWARE is a trademark of Canon Inc.

There's no bear market

or good ideas.





GLOBAL LABOR

DETAIL

In 1960, the world's 20 richest countries had 30 times more income than the poorest 20%. Now, that wealth gap has grown to 74 times

tionals. That accelerated the restructuring of the manufacturing sector.

Take the story of Tab, a Hungarian town whose economy collapsed when its main business, a components plant for Russian guided missiles, shut down after Moscow recalled its troops. "We were desperate," recalls Mayor Istvan Farkas. At the end of 1992, the plant was sold to a British electronics entrepreneur, who in turn was bought out by Flextronics. The U.S. company reopened the factory and brought in state-of-the-art production machines. Now, after an \$11 million expansion, it employs 1,500 workers—twice as many as under communism—making expensive recordable-CD players, facsimile machines, and stereos for Philips and other Western brands.

Employees say they work harder now than under the Soviets, and there's no union. But

working conditions have improved. "When the communists were here, we paid for a union but they did nothing for us," recalls assembly worker Katalin Keng, 51, who earns \$150 a month. Now many of the most qualified employees are solidly in the middle class.

The problem, of course, is that not all developing nations are run by leaders who pay attention to such basics. If a decade from now these countries are still stuck with low-end sweatshop work, they will have themselves—not just multinationals—to blame. After all, the secrets of development don't belong exclusively to East Asia. The basic requirements are smart policies—and lots of hard work.

By Mark L. Clifford in Hong Kong and Pete Engardio in Guadalajara, with Elisabeth Malkin in Ciudad Juárez, Dexter Roberts in Zhongshan, and William Echikson in Tab



with back supports. In all, TYI, which has \$100 million in annual sales, spent \$2 million of its own money to satisfy Reebok. But to Jung's surprise, "The workers are more productive."

TYI's efforts show how much progress Western companies can make in cleaning up sweatshops. In the early 1990s, many companies adopted codes of conduct requiring contractors to fix harsh or abusive conditions. Based on recent visits to Asia, companies such as Reebok, Nike, Liz Claiborne, and Mattel have finally begun enforcing their codes.

The problem is that such companies are the exceptions. Although many multinationals operate facilities in Asia and Latin Ameri-

A WORLD OF SWEATSHOPS

Walk through Tong Yang Indonesia (TYI) shoe factory, an 8,500-worker complex of hot, dingy buildings outside Jakarta, and company President Jung Moo Young will show you all the improvements he has made in the past two years. He did so at the behest of his biggest customer, Reebok International Ltd., to allay protests by Western activists who accuse the U.S. shoemaker of using sweatshops.

Last year, Jung bought new machinery to apply a water-based solvent to glue on shoe soles instead of toluene, which may be hazardous to workers who breathe it in all day. He installed a new ventilation system and chairs

ca that are as well-run as any in the West, too many still buy from factories with appalling practices—especially in such labor-intensive sectors as garments, shoes, and toys.

Investigators for U.S. labor and human-rights groups estimate thousands of sweatshops make products for U.S. and European companies. "It would be extremely generous to say that even 10% of [Western companies charged with abuses] have done anything meaningful about labor conditions," says S. Prakash Sethi, a Baruch College business professor who helped set up a monitoring system for Mattel Inc.

When accused by activists of buying from sweatshops, brand-name marketers have tended to

THE EPITOME OF PERFORMANCE.



ANNOUNCING HIGH-PERFORMANCE
PROJECT COMMUNICATION SOFTWARE.

Give us one hour. We'll show you how ActiveProject®, our high-performance Web-based project communication software, enables world-class companies to communicate with external partners at extraordinary speed—faster than any traditional method. And we'll demonstrate how it helps you deliver your products to market faster. In return for your time, we'll give you an extraordinary chance to win a high-performance Porsche® 911™ Carrera® worth \$82,290 (MSRP). Visit www.frametech.com/AA or call 888.311.9138 to schedule your private product presentation. You must complete your live demo before November 30, 2000 to enter the sweepstakes. Contact us now—your commute may never be the same again!

ActiveProject

Sweepstakes available only to program managers and above in selected manufacturing companies. You must complete a live presentation/demo by Nov. 30, 2000 to qualify. No purchase necessary. Void where prohibited. View complete rules at www.frametech.com/rules. PORSCHE and CARRERA are registered trademarks. 911 is a trademark, and the distinctive shapes of PORSCHE automobiles are trade dress of Daimler-Benz AG. F. Porsche AG. Used with permission of Porsche Cars North America, Inc. Porsche Cars North America, Inc. and Daimler-Benz AG are not affiliated or associated with this contest in any way.

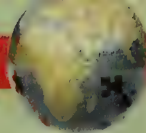


FRAMEWORK
TECHNOLOGIES

PLACE PROJECTS VIRTUALLY ANYWHERE™

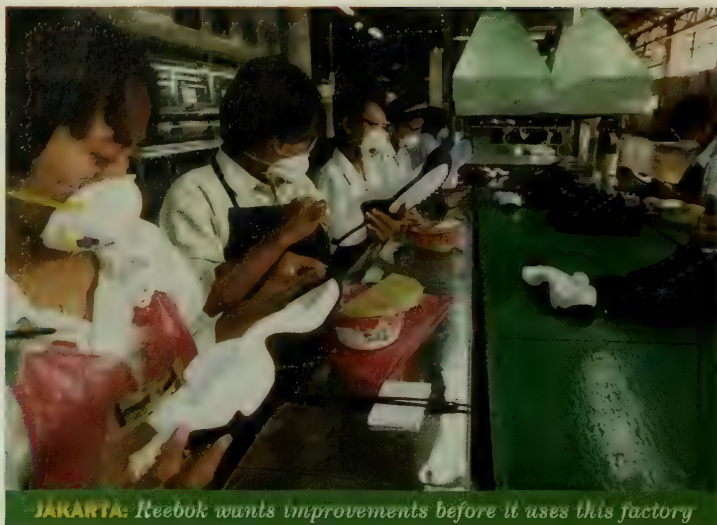
©2000 Framework Technologies Corporation. All rights reserved.

AA



GLOBAL LABOR

A few of the most abusive consumer goods plants overseas are cleaning up their act. But most of them aren't



JAKARTA: Reebok wants improvements before it uses this factory

dismiss the claims. But there's reason to believe the activists are often right. A recent **BUSINESS WEEK** probe found that Wal-Mart Stores Inc. bought Kathie Lee Gifford handbags in a Chinese factory where guards beat workers and owners deducted up to 70% of their pay for food and lodging (BW—Oct. 2). The National Labor Committee, a New York watchdog group, first made that charge in a May report on 16 Chinese factories used by Western companies. Some of the U.S. companies cited in the report, including Timberland Co. and New Balance, say they reexamined the Chinese factories and found most of the charges to be accurate. But others, including Huffy Corp. and Stride Rite Corp., refused to discuss the subject or let **BUSINESS WEEK** visit their factories. Meanwhile, a study from Harvard and other universities found that 13 factories making collegiate logo clothing for U.S. companies were guilty of nonpayment of wages and lax safety.

Liz Claiborne Inc.'s experience shows the dif-

ficulty of the situation. In 1998, the U.S. apparel giant began working with Guatemala's Commission for the Verification of Corporate Codes of Conduct (Coverco), a group of local and U.S. activists, to monitor one supplier, identified by local sources as Choi Shin, a Korean-owned factory near Guatemala City. Choi Shin couldn't refute workers' claims that they never received proper overtime payments and were exposed to hazardous chemicals.

Coverco says the plant is slowly improving, thanks to Liz Claiborne's pressure. Meanwhile, workers often lack the leverage to make much beyond subsistence wages. The Modas Uno Korea plant in the Guatemala City suburb of Villanueva stopped paying workers on time in August and fired 22 who complained to the Labor Ministry. On Sept. 2, workers stormed the plant demanding back pay—and the company relented. But workers who stayed on said they were offered sewing machines instead of severance pay when the factory shut down. No one was present at the closed plant to respond to questions.

OUSTED MANAGERS. Even improvements in working conditions may not boost workers' pay. TYI gets around \$13 for every pair of shoes it makes for Reebok, paying only \$1 for labor. Still, TYI says that after paying for materials and overhead, its margins are just 10%. Says a TYI manager: "If we aren't cheap enough, [customers] will go to Vietnam or elsewhere."

Widespread gains in the workplace are unlikely until workers can organize unions, or a system emerges to punish violators of international codes. Even under the programs set up by Nike and Mattel, they are free to sell their goods in the U.S. if it turns out they were made under abusive conditions. But their experiments do suggest that not every factory has to be a sweatshop to make the global economy work.

By Aaron Bernstein, with Michael Shari in Jakarta, and Elisabeth Malkin in Guatemala City

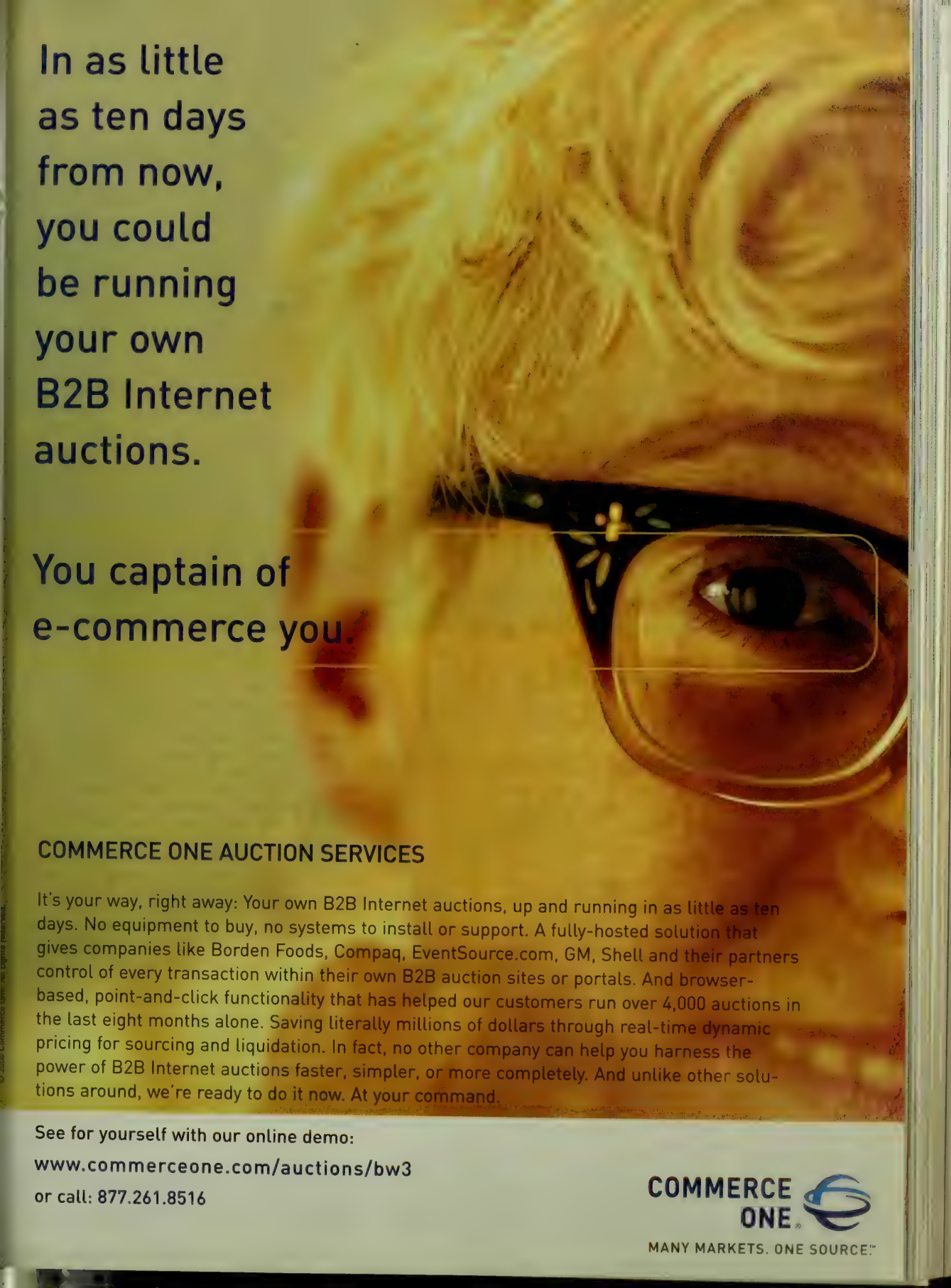
Sweatshops: All Too Common

A May report by the New York-based National Labor Committee found abusive labor conditions in 16 randomly chosen Chinese factories producing for U.S. companies.

Here's a sample of what it found

U.S. COMPANY/PRODUCT	FACTORY/TOWN	LABOR PROBLEMS
HUFFY BICYCLES	Baoan Bicycle Shenzhen, Guangdong	15-hour shifts, 7 days a week. No overtime pay
WAL-MART	Qin Shi Handbag	Guards beat workers for being late
KATHIE LEE HANDBAGS	Zhongshan, Guangdong	Excessive charges for food and lodging mean some workers earn less than 1¢ an hour
STRIDE RITE	Kunshan Sun Hwa Footwear	16-year-old girls apply toxic glues with bare hands and toothbrushes
KEDS SNEAKERS	Kunshan, Jiangsu	Workers locked in factory behind 15 ft. walls
NEW BALANCE SHOES	Lizhan Footwear, Dongguan, Guangdong	Lax safety standards, no overtime pay as required by Chinese law

DATA: NATIONAL LABOR COMMITTEE



In as little
as ten days
from now,
you could
be running
your own
B2B Internet
auctions.

You captain of
e-commerce you.

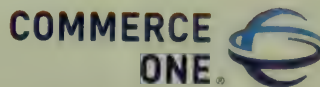
COMMERCE ONE AUCTION SERVICES

It's your way, right away: Your own B2B Internet auctions, up and running in as little as ten days. No equipment to buy, no systems to install or support. A fully-hosted solution that gives companies like Borden Foods, Compaq, EventSource.com, GM, Shell and their partners control of every transaction within their own B2B auction sites or portals. And browser-based, point-and-click functionality that has helped our customers run over 4,000 auctions in the last eight months alone. Saving literally millions of dollars through real-time dynamic pricing for sourcing and liquidation. In fact, no other company can help you harness the power of B2B Internet auctions faster, simpler, or more completely. And unlike other solutions around, we're ready to do it now. At your command.

See for yourself with our online demo:

www.commerceone.com/auctions/bw3

or call: 877.261.8516



MANY MARKETS. ONE SOURCE.™

WHOSE GLOBE?



CHIEF PEREZ: *The U'wa people say Occidental's oil project threatens their way of life*

In the Third World, multinationals face a new era of accountability

DETAIL

The World Bank says 23% of countries where the economy depends on exports of primary commodities suffer military conflict—which is rare in nations with no such exports

Sitting atop a black-rock outcrop in Colombia, Roberto Perez, the political chief of the U'wa people, gazes over the world that he and his ancestors have inhabited for thousands of years. In the valley below, bulldozers and workers in yellow hard hats are clearing land for an exploratory oil well to be drilled by Los Angeles-based Occidental Petroleum Corp. The government believes the land holds more than half of Colombia's oil reserves and has contracted with Occidental to find it.

The nature-worshipping U'wa adamantly oppose the exploration. For them, oil is the "blood of Mother Earth," and in the past they have threatened ritual mass suicide if anyone tries to extract it. "The government says this oil production will bring development for the country," says Perez, chewing a wad of coca leaves. "But it will also destroy the region environmentally, ecologically, and culturally." The U'wa have reason to be concerned: Rebel attacks on an Occidental pipeline north of their land have bled 2.3 million barrels of oil into the ground

since 1986, according to the state oil company, Ecopetrol. The U'wa say the project forced the local people, the Guahibo, into the cities, where many of them now beg for a living.

But Occidental—which emphatically denies that the Guahibo were affected—has held dozens of meetings with community groups and says it is trying to meet U'wa concerns. And the Colombian government remains determined to develop the nation's oil reserves—with or without Occidental and despite U'wa protests. "We are just a contractor," says Occidental spokesman Larry Meriague. "If we pulled out today, that project would not die." The question for Occidental, then, is how to make it as least disruptive to the U'wa as possible.

Not long ago, the words of tribal leaders such as Perez would not have been heard outside the forests where they were uttered. Now, they echo around the world—through myriad Web sites and Western protest campaigns. The plight of indigenous groups is penetrating the boardrooms of multinationals, which are being forced to respond as never before to protect their reputations and brand names. Nowhere are the issues more contentious than in investments, such as Occidental's, that extract natural resources from developing nations. Many of these projects have long been marred by corruption, military atrocities, ecological damage, and social upheaval.

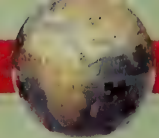
Sorting out the issues gets vastly complex. Developing countries need revenues for development. But studies show that countries heavily dependent on natural resources tend to re-



BLUE MARTINI
S O F T W A R E

GET TO THEM THROUGH US.

Customers are a moving target. They're likely to show up anywhere. So prepare yourself. Blue Martini lets you meet them head-on at the point of sale, wherever that may be. For example, it's not unusual for someone to research a product on the Web, meet with a sales person, then later contact the call center to check on the order. Now, at any point of interaction, Blue Martini is there, delivering a highly personalized, branded experience. To find out more about Blue Martini's total e-business solution, visit www.bluemartini.com/target.



Special Report

GLOBAL INVESTMENT

main underdeveloped, since governments have little incentive to nurture education or industries needed for growth. Some 23% of countries where at least one-quarter of the economy depends on exports of commodities have military conflict, according to the World Bank. Countries with no such exports have a less than 1% chance of conflict.

More often than not, though, local peoples aren't clamoring for foreign oil and mining companies to pull out. What they really want is a more equitable share in the revenues and job opportunities. That's what you will hear from Janas Natkime, a leader of the Amungme tribe in West Papua, Indonesia. Like most of the Amungme, Natkime inhabits a clapboard shack with chicken wire for window panes. Only 40 years ago, most Amungme had never seen an outsider and still lived a Stone Age existence. That changed with the arrival of New Orleans-based Freeport-McMoRan Copper & Gold Inc. Under an agreement with former Indonesian dictator Suharto, Freeport has been extracting the world's largest recoverable gold reserves.

The Amungme see the mine as their only means of economic viability. But they want Freeport to do more to clean up ugly mine tailings and share more revenues with the community. "In the era of globalization, I want the Amungme to hold an equal share and an equal position with Freeport," says Natkime. There's some progress: In August, Freeport pledged to build modern housing and provide more jobs.

Such examples illustrate how global investing is changing. Multinationals that were once able to brush off environmental or human-rights concerns in the Third World now have to answer to activists and shareholders. And

they must meet increasingly stringent environmental and social standards to get financing and political-risk guarantees from the World Bank. "There is an increasing demand for accountability," says Gerard P. Matthews, a London-based Royal Dutch/Shell Group executive.

The result is shaping up as a new era of corporate responsibility. Multinationals are hiring human-rights advisers, drafting and enforcing codes of conduct, appointing monitors, and improving operating practices. They are developing global standards of conduct, such as procedures

for security of their installations. They are putting local people on boards of directors and urging government ministers and generals to adhere to international human-rights standards, lest their misdeeds reflect poorly on investors, too. "Acknowledging that is a huge change, and very few companies were doing it until just a few years ago," says Aron Cramer, vice-president of San Francisco-based Business for Social Responsibility, which helps companies establish human rights and labor standards.

Shell has emerged as a leader of late, in part because it has had to make amends for past offenses. Condemnation of the oil giant's operations in Nigeria peaked in 1995, when the government hanged Ken Saro-Wiwa for allegedly inciting violence. An internationally known writer, Saro-Wiwa had crusaded for his Ogoni people, who were getting virtually no economic benefits from the oil extracted from their land but had to suffer environmental consequences. Shell was blamed for tolerating these conditions and not doing enough to save Saro-Wiwa's life. After a huge public outcry, Shell became the first oil company ever to acknowledge a responsibility for human rights. It has since pulled out of controversial projects elsewhere and is trying to improve its environmental and human-rights practices in Nigeria. Human Rights Watch Program Director Arvind Ganesan lauds the turnaround. "There's a willingness to be as proactive as possible and make sure their operations don't contribute to human-rights violations," he says, noting that Shell's reports on its human-rights progress and environmental impact are models for others.

As important as such efforts are, only a handful of multinationals have gotten serious about cleaning up corporate practices. And even if they are well-intentioned, the real test is whether the new standards and codes will mean anything in practice. In the new, wired world, there are few places a multinational can avoid scrutiny.

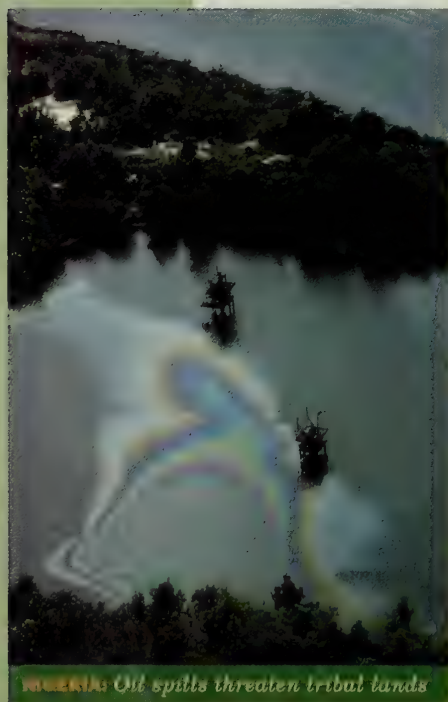
By Paul Raeburn and Sheridan Prasso in New York, with Suzanne Timmons in Cubará, Colombia, and Michael Shari in West Papua



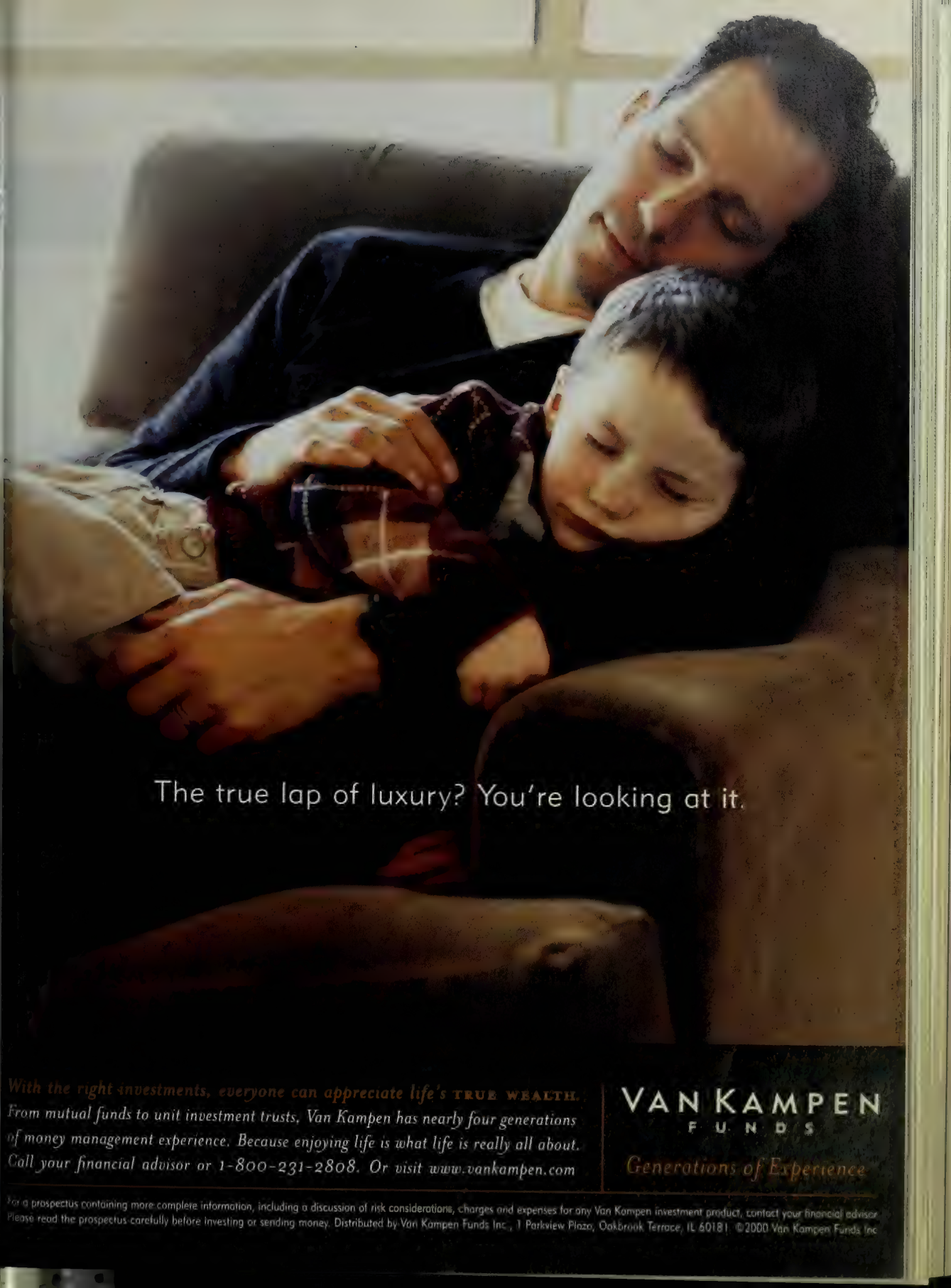
A PIECE OF THE ACTION

“We don’t want to close the Freeport mine. But we want to hold an equal share”

JANAS NATKIME, Amungme tribal leader, West Papua



NIGERIA: Oil spills threaten tribal lands



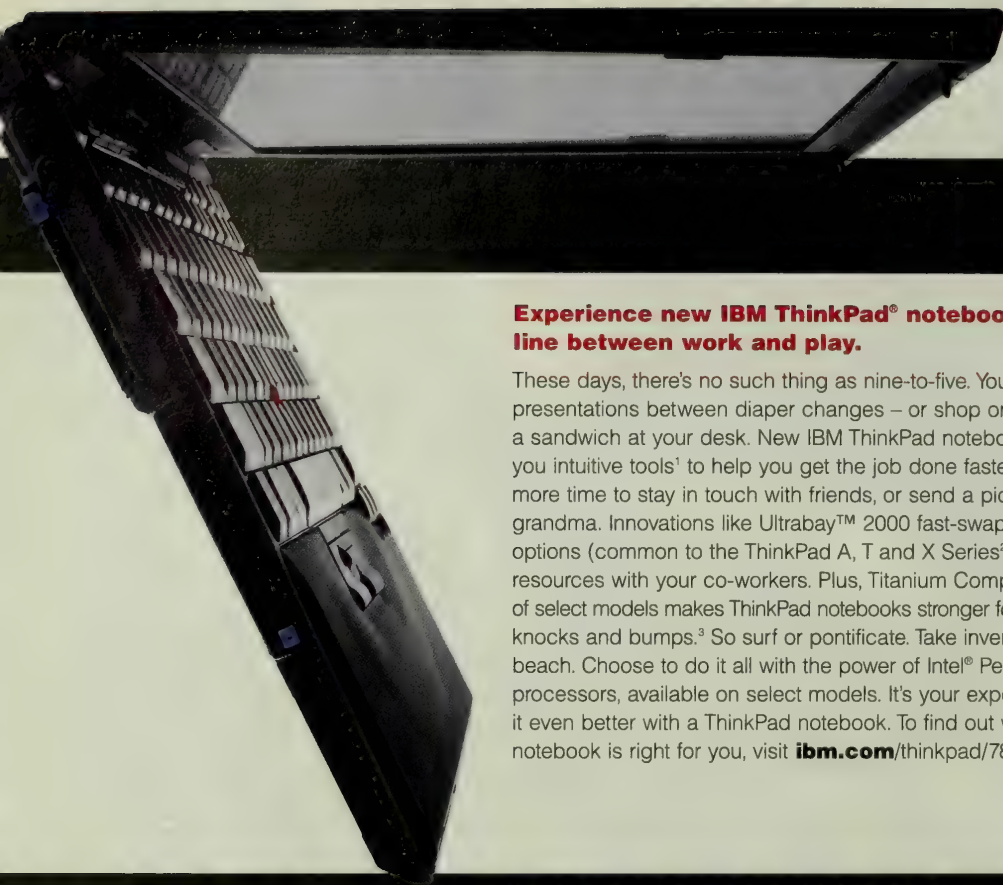
The true lap of luxury? You're looking at it.

With the right investments, everyone can appreciate life's TRUE WEALTH. From mutual funds to unit investment trusts, Van Kampen has nearly four generations of money management experience. Because enjoying life is what life is really all about. Call your financial advisor or 1-800-231-2808. Or visit www.vankampen.com

VAN KAMPEN
FUNDS

Generations of Experience

For a prospectus containing more complete information, including a discussion of risk considerations, charges and expenses for any Van Kampen investment product, contact your financial advisor. Please read the prospectus carefully before investing or sending money. Distributed by Van Kampen Funds Inc., 1 Parkview Plaza, Oakbrook Terrace, IL 60181. ©2000 Van Kampen Funds Inc.



Experience new IBM ThinkPad® notebooks, and blur the line between work and play.

These days, there's no such thing as nine-to-five. You might work on presentations between diaper changes – or shop online while you scarf a sandwich at your desk. New IBM ThinkPad notebooks give you intuitive tools¹ to help you get the job done faster – easier – leaving more time to stay in touch with friends, or send a picture of the kids to grandma. Innovations like Ultrabay™ 2000 fast-swappable media drive options (common to the ThinkPad A, T and X Series²) let you share resources with your co-workers. Plus, Titanium Composite in the covers of select models makes ThinkPad notebooks stronger for those unexpected knocks and bumps.³ So surf or pontificate. Take inventory or take it to the beach. Choose to do it all with the power of Intel® Pentium® III processors, available on select models. It's your experience – make it even better with a ThinkPad notebook. To find out which ThinkPad notebook is right for you, visit ibm.com/thinkpad/7875

Which ThinkPad is right for you?



The most affordable ThinkPad notebook for growing businesses, education or individual productivity.

IBM ThinkPad i Series
Mobile Intel Celeron™ processor at up to 600MHz⁴

Up to 13.3" TFT SVGA display
About 6 lbs.⁵

Starting at \$1,149*



A wide range of desktop alternative notebooks for users who want power and performance that they can take with them.

IBM ThinkPad A Series
Mobile Pentium III processor at up to 850MHz featuring Intel SpeedStep™ technology

Up to 15" UXGA display
6.2-7.2 lbs.

Starting at \$1,999*



The extra-light and extra-small ultraportable notebook for the most demanding mobile users who are constantly on the move.

IBM ThinkPad X Series
Mobile Intel Celeron processor at 500MHz

12.1" TFT SVGA display
3.1-3.5 lbs.

Starting at \$2,199*



The perfect balance of performance and portability; ideal for users who need a large display in a thin and light design for travel.

IBM ThinkPad T Series
Mobile Pentium III processor at up to 850MHz featuring Intel SpeedStep technology

Up to 14.1" SXGA display
4.6-4.9 lbs.

Starting at \$3,199*



pentium® III

IBM recommends Microsoft® Windows® 2000 Professional for business.

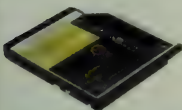
*Not all features available on all models. Visit ibm.com/thinkpad for full details. ¹With the optional UltraBase™ X2 media slice or the ThinkPad Dock, X Series models can use the Ultrabay 2000 media devices. ²Titanium Composite Carbon Fiber Reinforced Plastic has three times the strength of ABS plastic as tested by IBM using the high flex modulus test on 2/28/00. Available on select models. ³MHz/GHz only measures microprocessor internal clock speed, many factors affect application performance. For Mobile Intel Pentium III processors featuring SpeedStep technology, this denotes maximum performance mode, battery optimization mode, or approximately 80% of maximum performance mode. ⁴Weight and thickness may vary due to vendor components, manufacturing process and options. Weight includes battery (and optional Travel Bezel in the

A POWERFUL CASE FOR MIXING **BUSINESS** WITH **PLEASURE.**



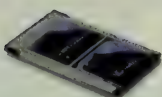
Push here for answers

The ThinkPad Button provides access to online information,⁷ standard upkeep tips, or the answer to "Oh no. What did I just do?"



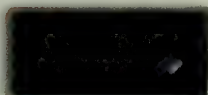
Pick your passion

Easy-loading, fast-swap options – like SuperDisk (LS-120), a DVD-ROM, a CD-RW, and more – let you crank up your new tunes, or back up your files.



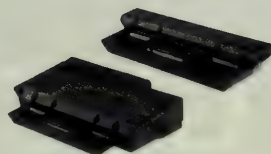
Big technology, small size

That's right, one gig of storage in one tiny little device. The 1GB⁸ microdrive – it's less to weigh you down.



Give me strength

Available on select models, Titanium Composite makes ThinkPad covers up to three times stronger than ABS plastic.⁹



Get hooked up

When you have to be in the office, use the optional ThinkPad Port Replicator or ThinkPad Dock to tie into desktop peripherals and networked resources.



Cut the cord

Zap e-mails and access network capabilities and resources like printers and scanners, without cords. Enjoy wireless technology options with the IBM 802.11b PC card and LAN Access Point.

GET IT **NOW**



go to **ibm.com/thinkpad/7875**

or call 1 888 **ShopIBM**, advantage code 7875
to buy direct or to locate an IBM reseller.

5). *Prices shown are prices available from IBM directly; reseller prices may vary for ThinkPad i Series, A Series, X Series and T Series. IBM price does not include tax or shipping and is subject to change without notice. **Requires Internet access account, available separately. *GB means one billion bytes when referring to hard drive capacity. Accessible capacity may vary. All products ship with an operating system. All IBM product names are registered trademarks or trademarks of International Business Machines Corporation. Intel, the Intel Inside logo and Pentium are registered trademarks and Celeron and SpeedStep are trademarks of Intel Corporation. Microsoft and Windows are registered trademarks of Microsoft Corporation. Other company, product and service names may be trademarks or service marks of others. ©2000 IBM Corp. All rights reserved.



A GUSHER FOR EVERYONE?

UNMINED BLACK GOLD: Oil was discovered in Chad in the 1960s, but civil war prevented its develop.

GLOBAL INVESTMENT

DETAIL

Success could lead other corporations to pay greater attention to human rights and the environment

Chad pipeline could help investors and the poor

The villages, farms, and scrub-covered fields of southern Chad do not inspire visions of great wealth. The villagers, mostly farmers, live in small one-room huts with brown thatched roofs and walls of yellow, sun-baked brick. The tallest objects in the landscape are the mango trees, standing like church steeples over clearings that serve as village squares.

It's a pre-industrial economy, with few cars, telephones, electric lights, TVs, or refrigerators. Only a few Chadians can afford a metal pushcart or a cow to pull the plow through their fields of corn, millet, and manioc. Indeed, with annual per capita income of \$230, Chad is one of the poorest countries on earth. On the U.N.'s human development index, which includes measures of health, education, and income, Chad is 167th out of 174 countries. Babies born in Chad have a life expectancy of 47.5 years, a little more than half that of babies born in the U.S. In the capital city, N'Djamena, many drivers buy their gas from roadside entrepreneurs, who set up wooden tables and sell it in cast-off one- and two-liter bottles.

Now, however, Chad is about to enter the 21st

century. Roughly a mile below farmers' fields lie at least 1 billion barrels of what oilmen say is sweet, heavy crude—viscous, low-sulfur oil worth more than \$30 billion at today's prices. In mid-October, Exxon Mobil Corp. launched an ambitious plan to construct a 650-mile pipeline that will carry some 225,000 barrels of oil per day from landlocked Chad, near the geographic center of Africa, across Cameroon to an offshore export terminal. Soon, the humming of great clouds of insects will give way to the shouts of construction crews, the clang of well casing, and the growl of big yellow earthmovers.

The \$3.5 billion project could bring Chad about \$200 million per year for the next 25 years, roughly doubling the government's annual budget. If used wisely, it could help rescue Chadians from their crushing poverty. "There is no alternative," says Abderahman Dadi, secretary general of the presidency of Chad. "To develop a country, you need revenue."

UNCERTAIN FUTURE. Because of political instability in Chad and Cameroon, ExxonMobil set up the project in an unusual way: It invited the World Bank to participate. The bank wants to show that Big Oil projects can both make money for corporate investors and improve the lot of the poor. It also wants to defuse criticism from Western activists, who have made the pipeline a centerpiece of their war against globalization. ExxonMobil

wants the World Bank to help guarantee the cooperation of the governments of Chad and Cameroon. "If the project is not able to repay those loans because we are nationalized, for example, or there is a major civil war, we would be excused from repayment," explains Andre Madec, a senior ExxonMobil executive on the project, in his room at the Novotel in N'Djamena. If the project succeeds, other multinational corporations might decide that they, too, can turn a profit from incorporating humanitarian goals into their plans. (ExxonMobil's original partners in the project, ElfTotalFina and the Royal Dutch Shell Groups, pulled out in 1999, citing other commitments, and were replaced by Chevron Corp. and Petronas, Malaysia's state-owned oil company.)

The bank has gone to unprecedented lengths to make sure the project succeeds. It insisted on many changes in the pipeline's route in Cameroon to minimize damage to virgin rain forests and endangered wildlife. The bank also insisted on equitable sharing of the oil revenues. Under a law passed by Chad's Parliament two years ago, 10% of the revenues will be held in trust for future generations. Eighty percent of the funds are to be used for education, health, and rural developments.

Many at the World Bank saw participation in this project as an obligation. "When one of the poorest countries in the world gets a windfall like this, you can't walk away," says Frederick E. Brusberg, a social scientist and environmental expert with the International Finance Corp., the bank's private investment arm.

Some critics say the World Bank's agreements are not strong enough to ensure the project's success. Activist Soumaine Adoum, coordinator of Swissaid Chad in N'Djamena, is among the most knowledgeable skeptics. "We hope the government doesn't use the money for arms or bombs," he says, "but we can't be sure." Unlike many critics in the West, however, Adoum doesn't want to stop the project; he wants it to be fixed. "We support the project because we think the money will help the country," he says.

KILLING FIELDS. Chad occupies a ragged rectangle of land extending 800 miles from Libya and the Sahara Desert to the tropical forests of the Central African Republic. It is roughly the size of California, Nevada, Arizona, and New Mexico combined and has only 7 million people. Muslim herdsman roam the country's fiery northern deserts, but most Chadians cluster in the south, where an annual rainy season makes farming possible. Even there, temperatures reach 115F.

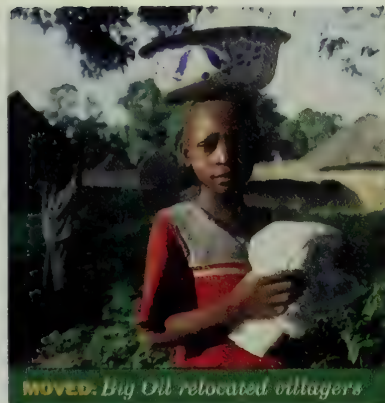
As is true of most of sub-Saharan Africa, Chad has a troubled history. The country was under French control for 50 years, until 1960, when it won its inde-

pendence. For 30 years, it was ravaged by civil war, until its current President, Idriss Deby, seized power in 1990 in a coup. Five years later, he won an election widely believed to be fraudulent. But rebel activity has declined, continuing only in the north, where, according to U.S. diplomats, desert sands conceal anywhere from 100,000 to 1 million land mines.

According to the U.S. State Dept.'s most recent report on human rights, Chad's state security forces have been guilty of killings, torture, beatings, and rape—and they are rarely prosecuted for these offenses. Urbain Moyombaye, a farmer in the oil region and the spokesman for a local farmers' rights organization, says killings are common in his region. He estimates that from 1993 to 1998, more than 100 people were killed, "and it's still going on," he says. "I'm not sure who is killing whom. But soldiers use the excuse of rebel activity to fire on the population." Secretary General Abderahman Dadi, the government's spokesman for the oil project, said he could not comment on such charges.

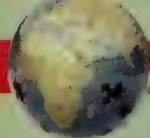
Some Chadians would like to see stiffer environmental and revenue-sharing commitments, fearing the government will renege. But whether or not that happens, this experiment in global capitalism is now under way. In September, factories in Germany and France began fabricating pipe for the project. Next year, work will begin on a 10,000-foot airstrip near the oil fields to accommodate a steady stream of cargo planes hauling machinery and supplies. By the end of 2003, ExxonMobil hopes to be pumping its first oil, and revenues will begin flowing into the treasuries of Chad and Cameroon. That's when the project's backers, and its critics, will find out whether the people of Chad and Cameroon will truly benefit—and whether multinationals can change their way of doing business in the developing world.

By Paul Raeburn in Chad



ExxonMobil and the World Bank aim to prove that Big Oil projects can benefit both investors and the world's poor





After the financial crises in Mexico, Asia, and Russia, what's developing is a more realistic view of open markets



FRUSTRATING: Foreign investors are still leery of Thailand, despite its financial reforms

GOING SOLO

Poor nations must manage their own money flows

On the honor roll of nations that have done the most to improve their financial systems in the past decade, Poland ranks near the top. Since the socialist era ended, Poland has taken its capitalist medicine: It has cleaned up banks, privatized state enterprises, floated its currency, and made it easy for investors to come and go. Foreigners have anointed Poland the success story of the old Soviet bloc and are pouring cash into the country.

But Jaroslaw Bauc, Poland's young Finance Minister, is anything but cocky. He knows many foreign investors keep their money in securities that are lucrative but can be sold fast, such as 52-week Polish Treasury bills, which now yield around 18%. He knows that if investors suddenly bolted, the value of the zloty would plunge and spark "a dramatic slowdown that would be devastating for the economic transformation."

Poland faces the central dilemma of the early 21st century emerging market: It needs a steady diet of

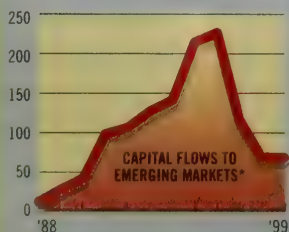
foreign investment to thrive but must constantly worry that its overseas sustenance will be taken away. In the past six years alone, capital crises have jolted emerging markets three times—the 1994 Mexican peso crash, the '97 Asian meltdown, and the '98 Russian collapse. As a result, investors are allergic to the sector. Net private capital flows to emerging markets were only \$68 billion last year, well below their 1996 peak of \$226 billion, the IMF says.

PREEMPTIVE ACTION. Can it happen again? Of course. The grim truth is that in the fight against hot money, emerging markets are largely on their own. Some global reforms, now being put in place, may help. But it's up to leaders in individual countries to figure out how to get the most from short-term money flows without courting disaster.

Wide-open capital markets have always been controversial. Countries with opaque banks and small, poorly managed economies become overly dependent on short-term foreign capital. When the flow reverses, devastation usually results. The majority of Mexicans, for instance, have not fully recovered from the devaluation and economic crisis that followed in 1995.

Since then, some leaders have questioned

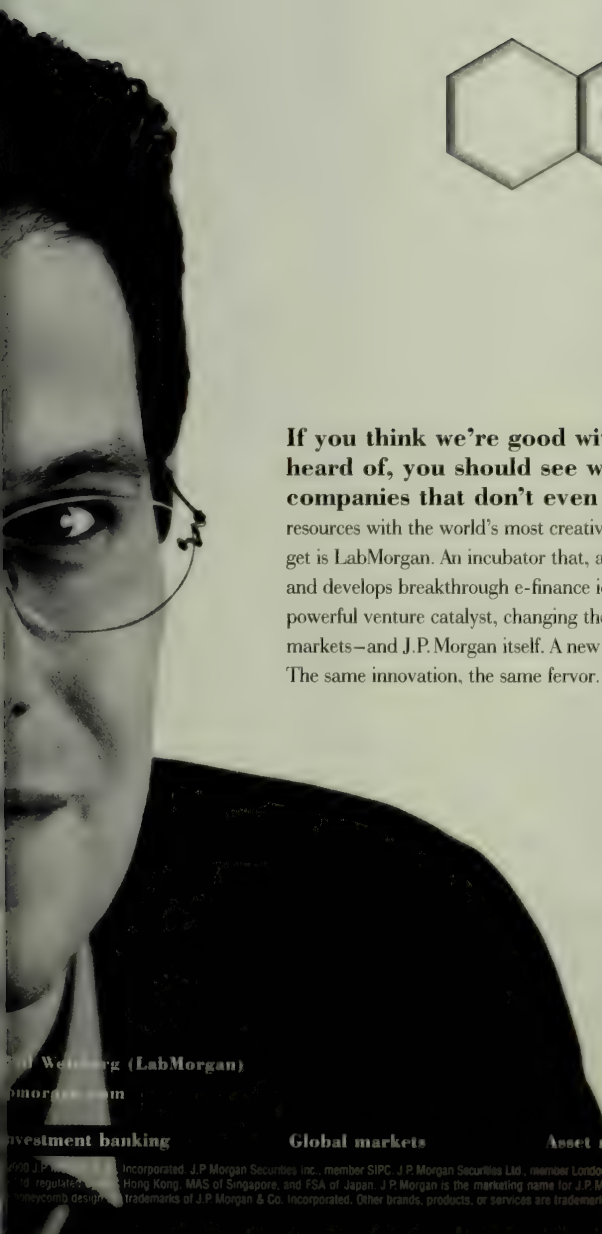
GUSHING IN, GUSHING OUT



▲ BILLIONS OF DOLLARS

* INCLUDES ALL FORMS OF DIRECT AND PORTFOLIO INVESTMENT

DATA: INTERNATIONAL MONETARY FUND



LabMorgan



If you think we're good with companies you've heard of, you should see what we can do with companies that don't even exist. Merge J.P. Morgan's global resources with the world's most creative and visionary minds, and what you get is LabMorgan. An incubator that, along with our partners, accelerates and develops breakthrough e-finance ideas into successful companies. A powerful venture catalyst, changing the workings of the world's financial markets—and J.P. Morgan itself. A new opportunity, a new paradigm. The same innovation, the same fervor.

JPMorgan

Paul Weber (LabMorgan)
jp.morgan.com

Investment banking

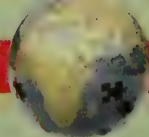
Global markets

Asset management

Private banking

Private equity

©2000 J.P. Morgan & Co. Incorporated. J.P. Morgan Securities Inc., member SIPC. J.P. Morgan Securities Ltd., member London Stock Exchange regulated by FSA. Morgan Guaranty Trust Company of New York, member NYSE, member NASD, member SEC. J.P. Morgan is the marketing name for J.P. Morgan & Co. Incorporated and its subsidiaries worldwide. J.P. Morgan, LabMorgan, MorganMarkets, Morgan OnLine, and the hexagon design are trademarks of J.P. Morgan & Co. Incorporated. Other brands, products, or services are trademarks or registered trademarks of their respective holders.



Special Report

GLOBAL INVESTMENT

DETAIL

Only 27 countries take in more than 90% of all the private capital flows to emerging markets. And 10 of those countries suffered deep financial crises between 1997 and 1999.

the orthodoxy that capital must always be free to work. Even champions of free markets have concluded they need some way to call a halt when things go awry. In 1998, Hong Kong intervened in its stock market to fend off fierce speculation. Its leaders still have no regrets. "Globalization means that if a problem erupts in São Paulo, we will be affected," says Hong Kong Financial Secretary Donald Tsang. "Every three or four years or so, we all have to start preparing for another crisis."

What's emerging is a more realistic view of what open capital markets can and cannot accomplish. A country that absorbs a lot of hot money stands to see a lot of it rush out. If Poland chooses to put more controls or taxes on foreign capital, less money will come in, but it may be able to moderate the flow. To try to avoid future shocks, lenders, regulators, and multinational agencies such as the International Monetary Fund are asking for three categories of reform:

- **Better disclosure.** Countries that publish foreign reserve and other financial data frequently, as Hong Kong and Mexico now do, are an open book for investors.

- **More flexible banking and legal systems** that can react to a buildup of nonperforming loans quickly.

- **More willingness on the part of Western investors and lenders** to write off debt during workouts. Western banks and corporations still tend to expect an IMF or government bailout when their bets go bad.

These general goals are prompting some specific steps. New IMF Managing Director Horst Köhler recently set up a capital-markets working group, which brings private lenders together with official agencies to discuss ways to improve the stability of the financial system. And the Bank for International Settlements, a policy and coordinating body for central banks, has set rules for how banks treat loans to official and private-sector borrowers in emerging markets so they better

reflect the risk of those assets.

One country that has taken seriously the need for reform is Thailand, whose devaluation of the baht in 1997 sparked the Asian financial crisis. Since the meltdown, Chatu Mongol Sonakul, Thailand's central banker, has radically beefed up supervision of the banking sector, keeping close tabs on short-term capital flows and external borrowing. He has restructured the Bank of Thailand in his bid to make it "the most transparent central bank in all of Asia." Thailand also no longer pegs its currency to the dollar as it did before the crisis. And the government has been pushing companies to reduce foreign debt, which has dropped from 150% of GDP in 1997 to less than half that today.

What Chatu Mongol knows is that Thailand and other emerging markets desperately need foreign cash to fund growth. "The good thing is that if countries do change their behavior, the capital markets respond favorably and speedily," says Charles Dallara, managing director of the Institute of International Finance, a trade group of top global banks.

Whether they like it or not, in the decade ahead, developing countries will continue to operate in the Darwinian environment of global markets. "To close the door would shut out a transfer of capital from rich countries to poor countries. And nobody should want that," says Paul Collier, the World Bank's director of development research. What governments need to do is learn from the capital crises of the 1990s before the first disaster of the new century comes crashing down on them.

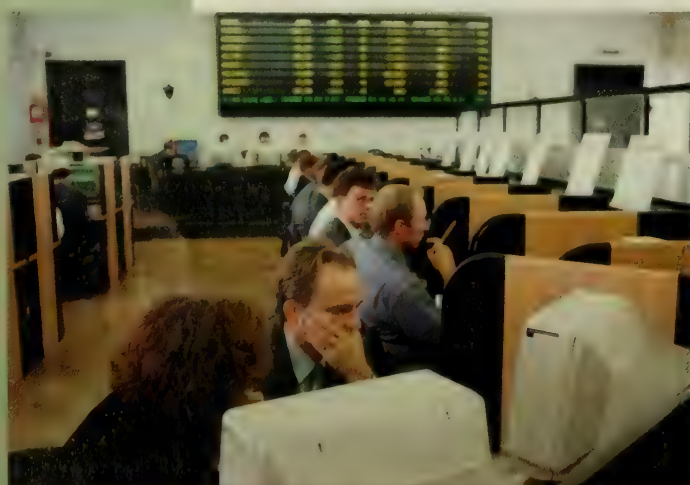
By Julia Lichtblau in New York, Brian Bremner in Tokyo, and David Fairlamb in Prague, with Frederik Balfour in Bangkok and bureau reports



ON ALERT

“Globalization means that if a problem erupts in São Paulo, we will be affected. Every three or four years, we all have to start preparing for another crisis”

DONALD TSANG,
Hong Kong
Financial Secretary



WARRIOR EXCHANGE: Foreigners are pouring cash in—for now



ncredible

They said it couldn't be done. Having an intelligent real-time view of your overall business. But Allstate, Microsoft, and Sony thought it possible. They discovered i-business, a software solution from Information Builders. And now all anyone is saying is "incredible." Why? Because we allow them to immediately integrate and leverage data from disparate or complex systems and deliver it as useable information via the Web. You can finally share accurate information across your organization, with all employees, business partners and customers alike. i-business puts the intelligence in e-business, enabling you to outperform competitors and become a market leader. Now that's incredible.

i-business changes everything

Information Builders®

www.informationbuilders.com

1.800.969.INFO

©2000 Information Builders, Inc. All trademarks, registered marks and service marks are the property of their respective owners. All rights reserved.

COMMENTARY
BY PAUL
MAGNUSSON

Problem:
*How to get
 developing
 nations to
 accept
 standards
 for the
 environment
 and labor.*

Solution:
*Tone down
 the West's
 rhetoric*

TAKE A BREAK, TRADE BULLIES

It seems obvious. Along with the gains from trade and investment, there are often some harsh side effects. So doesn't it follow that trade agreements among nations should address such issues as the clear-cutting of rain forests, the enslavement of children, or the jailing of abused workers who try to organize unions? To hear many activists tell it, international institutions are doing nothing to curb these abuses.

This argument is fast becoming outdated. Almost unnoticed, in a multitude of ways, bodies like the World Bank and Organization for Economic Cooperation and Development are tackling labor rights, corruption, and environmental concerns. The U.S. also is building social concerns into new trade pacts with Cambodia and Jordan. Some of the same groups that have led protests are even playing a direct role in proposing rules and monitoring corporate compliance. "We are at the table, finally, and it is a stark difference from 10 years ago," concedes Andrea Durbin, international programs director at Friends of the Earth.

DEADLOCKED TALKS. All well and good. But for labor and environmental standards to take root, the world's developing nations also must be at the table. So far, that's been the biggest stumbling block. Poor nations view Western attempts to inject social issues into trade regimes as a cloaked protectionism. "Now that you've exploited your own resources, you are saying to us: 'Don't cut down your own trees or we won't trade with you,'" says Liberian Finance Minister Nathaniel Barnes. As a result, the West and developing countries have been deadlocked in negotiations for a new global trade round.

The West would be wise to heed these complaints. The Third World rightly views trade negotiations over the past decade as a one-way street where rich nations press for intellectual-property rights and lower tariffs—but greater access to Western markets for food and apparel never quite materializes. Developing nations also learned a harsh lesson in

the 1990s, when they agreed to let foreign capital gush in, and then saw their economies collapse when it poured out. Now, the West has new social demands, some of which seem to undercut what little competitive edge poor nations have.

How to break the impasse? First, the West should listen carefully. Some of the most outspoken critics of Western sermonizing are democracies, like India and Mexico. It's not that they're proud of sweatshops or oil spills. Indeed, they face plenty of pressure at home

to address these problems. Most nations have signed agreements barring trade in endangered species, counterfeits, and prison goods. And they've signed on to a new worker's rights initiative pushed by the International Labor Organization.

CARROTS. But Third World leaders are struggling to balance these issues with the need to create jobs for huge populations and maintain social stability. Poor nations must see tangible benefits to labor rights and the environmental reforms. Giving them greater access to Western

markets would help. Developing nations also should recognize that it's better to have clear rules than to just have Western companies cave in to pressure groups back home, without regard for the economic impact.

This means they can reach a consensus through international bodies such as the ILO that aren't seen as fronts for Washington. Another is by expanding accords that most nations have already signed. Instead of wielding the blunt weapon of sanctions, such pacts often use moral suasion or punishment of specific companies that violate rules. Without cooperation by all sides, they're usually toothless. But when governments commit to making guidelines work, then there is a good chance that the global capitalism of the 21st century will be guided by rules under which everyone can prosper.

Magnusson covers international trade and economics in Washington.

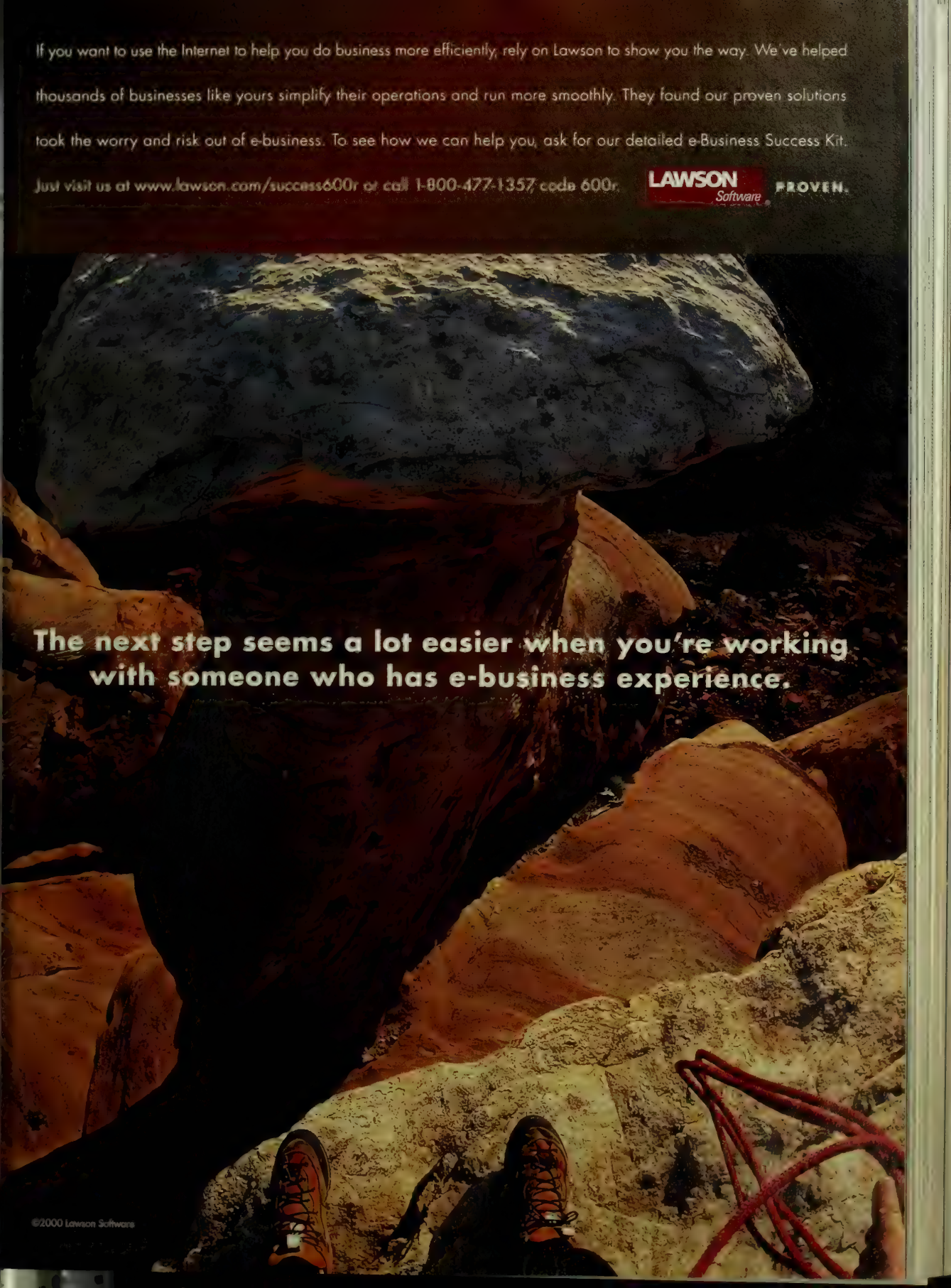


If you want to use the Internet to help you do business more efficiently, rely on Lawson to show you the way. We've helped thousands of businesses like yours simplify their operations and run more smoothly. They found our proven solutions took the worry and risk out of e-business. To see how we can help you, ask for our detailed e-Business Success Kit.

Just visit us at www.lawson.com/success600r or call 1-800-477-1357 code 600r.

LAWSON
Software

PROVEN.



**The next step seems a lot easier when you're working
with someone who has e-business experience.**



INTRODUCING THE WORLD'S FIRST
ALL-OPTICAL
NETWORK.
NOT THE PROMISE OF ONE.
THE ONE.

We're proud to present the network we've all been dreaming about: all-optical from beginning to end. Which means starting today, your network can be simpler, more reliable, faster and more affordable than it was yesterday. Welcome to accountability. Welcome to Broadwing. Call 1-800-BROADWING or visit broadwing.com today.



STRATEGIES

REPUTATION AT STAKE

Site CEO Jeanne Jackson must match Wal-Mart's record as the king of retail logistics

WILL WALMART.COM GET IT RIGHT THIS TIME?

After four years of false starts, the retailer needs to prove it can master the Web

When Walmart.com warned visitors in late September that the online store would close several weeks for remodeling, some Web watchers scratched their heads. Other e-tailers managed to run their old sites while preparing new ones—why not Wal-Mart Stores Inc.? The huge discounter seemed to be handing its online rivals a golden opportunity. The latest Walmart.com incarnation will be launched before the peak of the Christmas shopping season without a splashy TV ad campaign, and shoppers won't find such bells and whistles as personalized promotions or 3-D graphics. Amazon.com "couldn't have scripted a better story for the holiday season,"

says analyst Emme P. Kozloff of Sanford C. Bernstein & Co. "The evil Wal-Mart grinch will not steal Christmas at all."

After more than four years of false starts, is Wal-Mart losing its zeal for the Web? Such a shift might be understandable, since e-tailers seem to be falling by the wayside while Wal-Mart's real-world stores keep chugging along with double-digit sales and earnings growth. But rivals who mistake Wal-Mart's slow and steady approach for a lack of commitment will be sorely disappointed, insists Walmart.com CEO Jeanne P. Jackson. She dismisses any suggestion of cold feet at Wal-Mart's Bentonville (Ark.) headquarters. In a refrain that's often repeated at her own

Menlo Park (Calif.) offices, Jackson says "This is a marathon. It's not a sprint."

That's not to say that Jackson, the former CEO of Gap Inc.'s Banana Republic public unit and head of Gap's online efforts, hasn't been doing plenty of sprinting since arriving at Walmart.com in April. The now separate company, formed by Wal-Mart and venture-capital firm Accel Partners, is scrambling to assemble a retail- and tech-savvy management team while building a reliable technology platform based on assets acquired from the now-defunct Home Warehouse.com. Taking the site down for several weeks made it easier to overhaul the system's front and back ends and to transfer mounds of inven-

Avatar – the world's first internet-based virtual newscaster.

Produced with kind permission of the copyright owner, Avataria Limited.

Vision. Between a problem and the right solution

lies a world of possibilities. We've built a network of 13,000 open minds in 40 countries, all looking ahead at new ideas, challenges and opportunities. With new perspectives on investment banking and securities to offer, UBS Warburg can provide solutions as effective as they are visionary. In technology, in cyberspace, in virtual communications – and in every other business sector. Because we have one common focus. More client success. www.ubswarburg.com

Success demands more.



UBS Warburg

**Bob's got a guy who knows
e-mail.**

**Gene's got a guy who knows
LANs.**

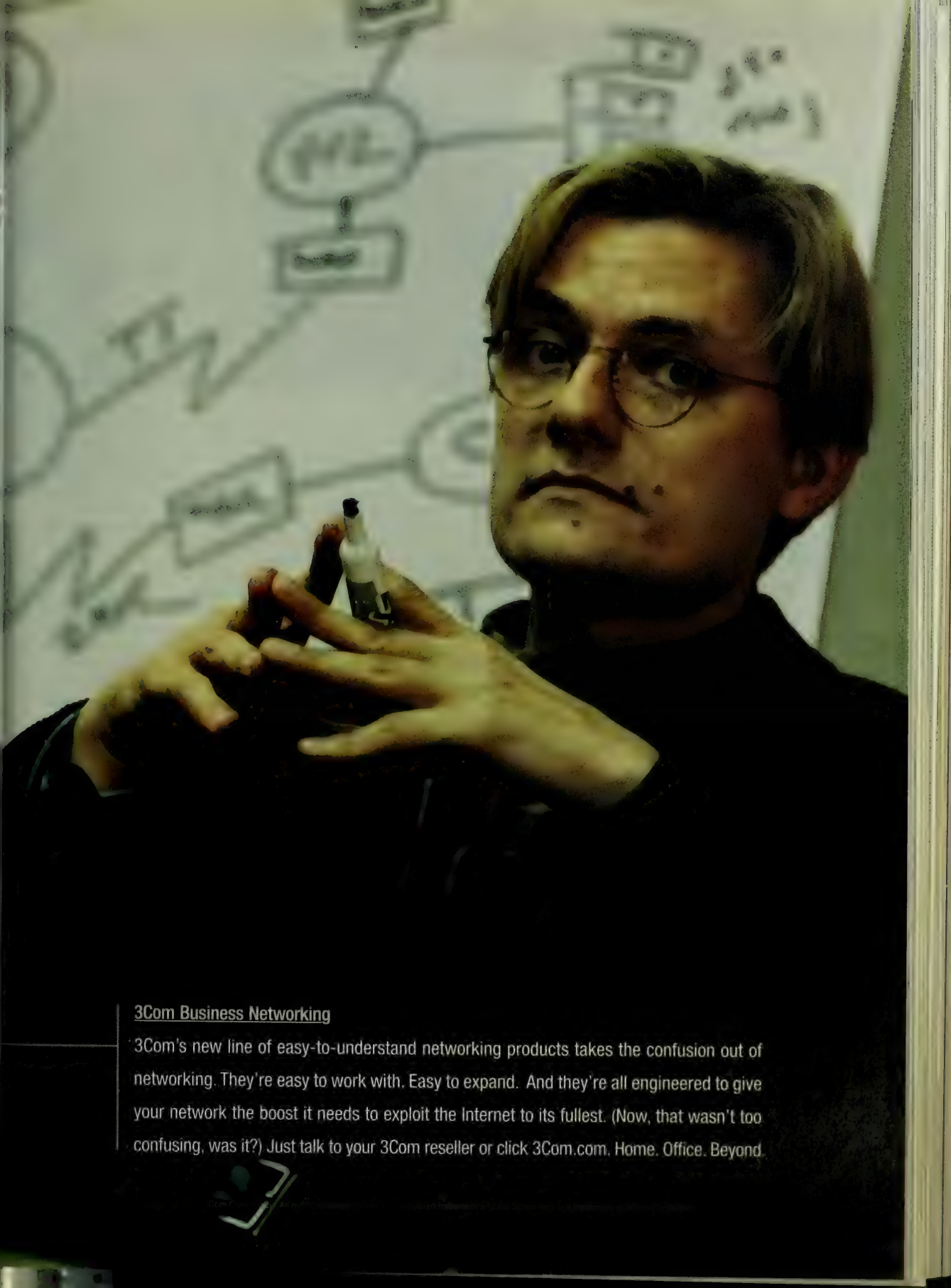
**Alex's got a guy who just
confuses the hell out of you.**

SIMPLE NETWORKING. NOVOXAT.



3COM

Simple sets you free.



3Com Business Networking

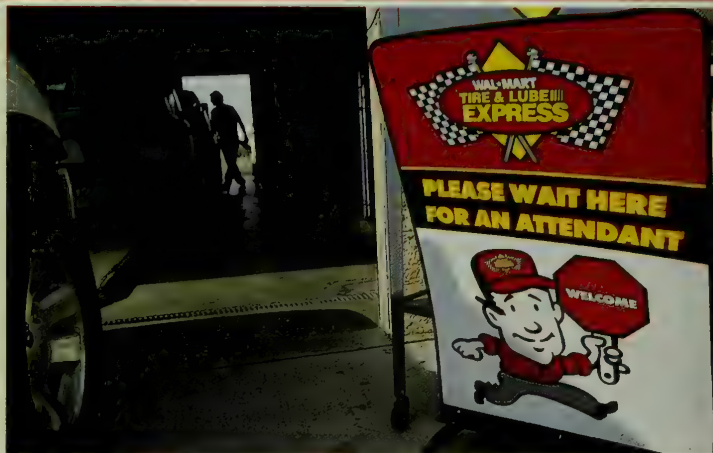
3Com's new line of easy-to-understand networking products takes the confusion out of networking. They're easy to work with. Easy to expand. And they're all engineered to give your network the boost it needs to exploit the Internet to its fullest. (Now, that wasn't too confusing, was it?) Just talk to your 3Com reseller or click 3Com.com. Home. Office. Beyond.



The Corporation

IF AT FIRST YOU DON'T SUCCEED: WAL-MART'S NEW WEB STRATEGY

- ▶ Start with a reliable, easy-to-use Web site this holiday season. Forget bells and whistles.
- ▶ Strip away products that make no sense on the Web, like 25¢ plastic cups.
- ▶ Expand categories that complement limited store offerings, such as patio furniture.
- ▶ Take shipping and customer-service control away from outside companies.
- ▶ Integrate stores and the Web, for example letting customers order tires and schedule installations online.



tory data, Wal-Mart says. At the same time, Jackson is trying to blend the best of the \$195 billion retail goliath with the 180-person online startup.

"NOT TERRIBLY SEXY." The failures of rivals ranging from cosmetics e-tailer Eve.com to name-your-price discounter WebHouse Club have certainly eased the pressure to deliver fast results. And the online efforts of big-store retailers like Sears Roebuck, Kmart, and Target are still in their infancy. Jackson nonetheless faces huge challenges. For starters, she must prove that Wal-Mart can serve up a reliable, easy-to-use Web site with flawless shipping and customer service. Last year, Wal-Mart, the king of store logistics, was forced to warn online customers that it couldn't guarantee Christmas delivery of goods ordered after Dec. 14. And an expanded site that debuted in February was widely panned for its cumbersome design, slow downloading time, and poor search engine. In September, it ranked 47th out of 50 retail sites based on the number of visitors measured by Media Metrix, part of Jupiter Media Metrix.

Will Wal-Mart get it right? A recent preview of the site showed a "very streamlined and intuitive layout" and a much-improved search function, says analyst Bill Dreher of Robertson Stephens. Wal-Mart.com Creative Director Erik Hagerman says he took his cues from Wal-Mart's easy-to-use supercenters, with their wide aisles and plentiful signage. "This is not a terribly sexy home page," he says, "but it will load like lightning." Indeed, Wal-Mart CEO H. Lee Scott Jr. insists that the focus for now is on reliability: "We care about the numbers, but the primary concern this Christmas has got to be customer service and establishing a base that you can build on in the future."

If Wal-Mart stumbles again this holiday season, it will hardly be a financial

disaster. After all, online sales are still a tiny part of the retail industry—2% in the fourth quarter, according to one estimate. Analysts say Walmart.com is investing about \$100 million this year—compared with \$8.5 billion that Wal-Mart plans to spend next year on store expansion. Still, says Jupiter analyst Ken Cassar, if Wal-Mart fails again, "they will have missed a substantial opportunity. The online-only retailers are by and large strapped for cash."

Indeed, Wal-Mart's staying power has suddenly become a big draw in the online world. James W. Breyer, managing partner at Accel Partners, which holds a 20% stake in Walmart.com, says he intends to build up the site's capabilities by purchasing other online outfits and has been getting a dozen calls a week from hopeful candidates. But to take advantage of this shifting landscape, Jackson must maintain the attention of executives back in Bentonville who are

keenly focused on expanding Wal-Mart's bricks-and-mortar stronghold and fixing problems in its fledgling foreign-store operations. As a result, one major supplier claims, Jackson is "often getting compliance but not passion" from the staff back at the mother ship.

Jackson insists that's not the case and that she's getting plenty of devotion, especially at the top: "I don't think we've met anybody who's what you would call a blocker." Wal-Mart CEO Scott and Chairman S. Robson Walton sit on the four-person Walmart.com board. They attend monthly meetings and call or e-mail Jackson and Breyer the other two directors, every few days. Jackson's team also meets regularly with lower-level executives, such as six district managers who help coordinate the transfer of "Wal-Mart DNA," she says.

That melding of "bricks and clicks" is now considered the best route to Web profitability. But it demands innovation and seamless execution. Walmart.com's first mistake last year was to try to mimic the stores, offering a jumble of product categories and selling items that simply weren't economical online. Back then, it couldn't promise last-minute deliveries. A leader in delivering truckloads of goods to its stores, Wal-Mart wasn't adept at handling individual packages. Adding to the problems, Wal-Mart and outside fulfillment vendor Fingerhut didn't properly integrate their information systems. Some customers were told that goods were in stock when they weren't, and vice versa.

New Chief Logistics Officer John Rittenhouse, formerly of LVMH and Target, is in charge of making sure those nightmares aren't repeated. Walmart.com is still using outsiders for fulfillment—Fingerhut and newcomer Airborne Logistics Services. But in time Walmart.com will take control with i

For Now, Walmart.com Barely Registers

A lot of large bricks-and-mortar retailers are making a bigger splash on the Web

TOTAL USERS IN SEPTEMBER	
barnesandnoble.com	5,615,000
jcpenney.com	2,727,000
sears.com	2,289,000
bestbuy.com	2,073,000
bluelight.com*	2,050,000
staples.com	1,748,000
officemax.com	1,668,000
officedepot.com	1,666,000
target.com	1,559,000
toysrus.com	1,491,000
walmart.com	1,423,000

*Kmart's site

DATA: MEDIA METRIX

WARNING:

object shown may
dramatically improve
your appearance.

You won't believe how easy it is. Whether you seek
a springier step or a svelter silhouette, SportBrain is the simplest,
most elegant way to help you achieve your goals. Just clip it on
your waistband and go. While you stroll
at the mall or race along
wilderness trails, SportBrain records
your efforts and then automatically displays
your results on your personalized Web page. Cheer your
progress. Share your triumph with friends. And earn rewards
with every step. All for just \$99.⁹⁹. Call 1-888-235-9608 or visit
www.sportbrain.com to begin your transformation.



S P O R T B R A I N™

Also available at:



Your markets know what goes for our logistics

China

Brazil

Canada

USA

France

Thailand

Australia

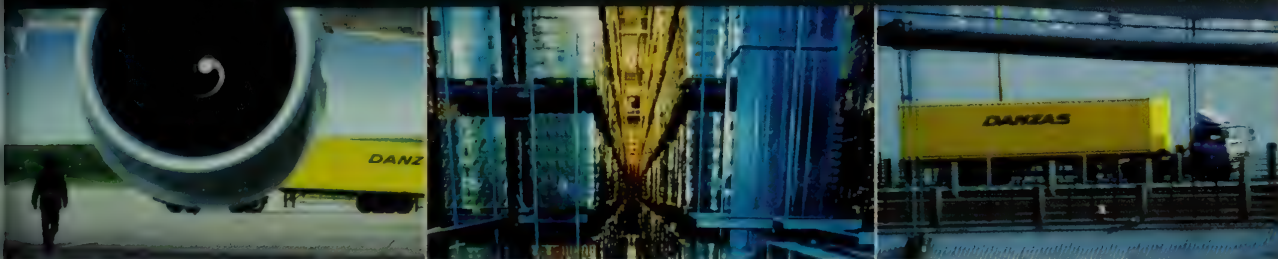
Mexico

Sweden

Deutsche Post  World Net

MAIL EXPRESS LOGISTICS FINANCE

bounds. The same



Danzas provides all logistics services from a single source. That saves valuable time, and gives you the necessary scope to focus fully on what you do best – your core business.

For us, one-stop-shopping is not just a turn of phrase, it's a way of life. Thanks to the integration of Nedlloyd ETD, ASG and AEI, we're perfectly poised to meet our lofty aspiration day in, day out in each of our three business units. Danzas Solutions covers the entire field of supply chain management; Danzas AEI Intercontinental takes care of global air and ocean freight and project forwarding; and Danzas Eurocargo lives up to its name when it comes to European transport services. The result? Whatever your logistics needs, Danzas offers you seamless solutions tailored to suit.

Not only do we think ahead, we also go the extra mile for our customers. Danzas single-handedly delivers the entire spectrum of logistics services, from warehousing and fulfilment through co-packing and transport all the way to price labelling, invoicing and processing returns. Sales promotion measures are also as much a part of the picture as financing packages and insurance. Making sure you never lose sight of what matters most: your business.

Danzas Group-Logistics. Worldwide.

- Worldwide No. 1 in air freight
- Global leader in ocean freight
- Leading in European overland transport
- Customized supply chain management
- eBusiness partner
- Represented in 150 countries

www.danzas.com

DANZAS

own dedicated distribution centers. Rittenhouse contrasts that gradual ramp-up to Amazon.com Inc.'s expensive effort to build distribution capacity well in advance of demand. Amazon.com spokesman Bill Curry responds: "The proof of the pudding was last Christmas. More than 99% of our orders were delivered on time."

Jackson, meanwhile, is lopping items off Walmart.com's 600,000-product offering. She keeps a 25¢ plastic cup in her office—whose cost of two-day shipping was \$8—as a reminder of what doesn't work. At the same time, she's looking for opportunities to extend Wal-Mart's reach in such categories as patio furniture and appliances—products that

take up a lot of floor space in stores.

Because her online customers are seeking convenience as much as low prices, Jackson will also focus on creating new services. For instance, sometime next year, Walmart.com should be able to offer online listings of real-time inventories in individual stores. Customers could then decide whether to head to the store or buy it online. Also on her to-do list: a system for ordering virtually any car tire online, while allowing customers to schedule a store visit for installation. And Walmart.com has joined up with RealNetworks Inc., an Accel-backed company, to create a system for easily downloading music. That could be crucial to protecting Wal-

Mart's huge in-store sales of music. "If we're not figuring out how to be part of the new way music is delivered to customers," Jackson says, "then I think we're going to be caught flat-footed, and that's something Wal-Mart never is."

Few rivals profess to be worried about Wal-Mart's moves on the Web. In fact, Mark H. Goldstein, CEO of Kmart-backed BlueLight.com, says he's rooting for Walmart.com: "It will convince people that big-box retail is how you should buy online." Goldstein, of course, is already a believer. But many others are waiting to see if Wal-Mart will be a winner in this marathon.

By Wendy Zellner in Menlo Park, Calif.

WHY BANANA REPUBLIC'S STAR JUMPED TO WAL-MART

When Jeanne P. Jackson, the merchant who transformed Banana Republic into a chic, urbane shopping destination, joined Walmart.com this spring as CEO, some analysts considered it an odd mix of cultures. But while the world's biggest discounter is a far cry from upscale Banana, Jackson, 49, felt immediately at home when she attended a Saturday morning management meeting at Wal-Mart Stores Inc. headquarters in Bentonville, Ark., before taking the job. To her amazement, then-CEO David D. Glass was sifting through store-by-store sales reports. "David Glass is concerned about how many lawn mowers were being sold in Poughkeepsie last week. I was blown away," says Jackson, who considers herself a fanatic about retail detail after 22 years in the business.

Up until that day, Jackson had rejected repeated overtures to lead Walmart.com, established by Wal-Mart and venture capital firm Accel Partners. But Accel managing partner James W. Breyer says the companies persisted because Jackson "was absolutely our first choice."

CAMPUS PUB. No wonder. Jackson had established herself as a superstar since joining Gap Inc. in 1995. In one gutsy move, she persuaded Banana Republic's parent to open large, expensive flagship stores in key markets to sell the Banana Republic lifestyle. Banana Repub-

lic grew rapidly under her leadership, jumping from an estimated \$750 million in sales to \$1.5 billion in four years. That included reviving the chain's lapsed catalog. "She has taken



JEANNE P. JACKSON

BORN Aug. 10, 1951, Denver

EDUCATION Harvard MBA, 1978; BS, finance, University of Colorado, 1974

CURRENT JOB CEO, Walmart.com

PREVIOUS EXPERIENCE CEO, Gap's catalog and Web operations; CEO of Banana Republic (above); stints at Victoria's Secret, Walt Disney, Saks Fifth Avenue, and Federated

WHAT SHE MISSES ABOUT GAP Having time for lunch and shopping trips to Paris, New York, and Chicago

FAMILY Husband, Doug; two young children

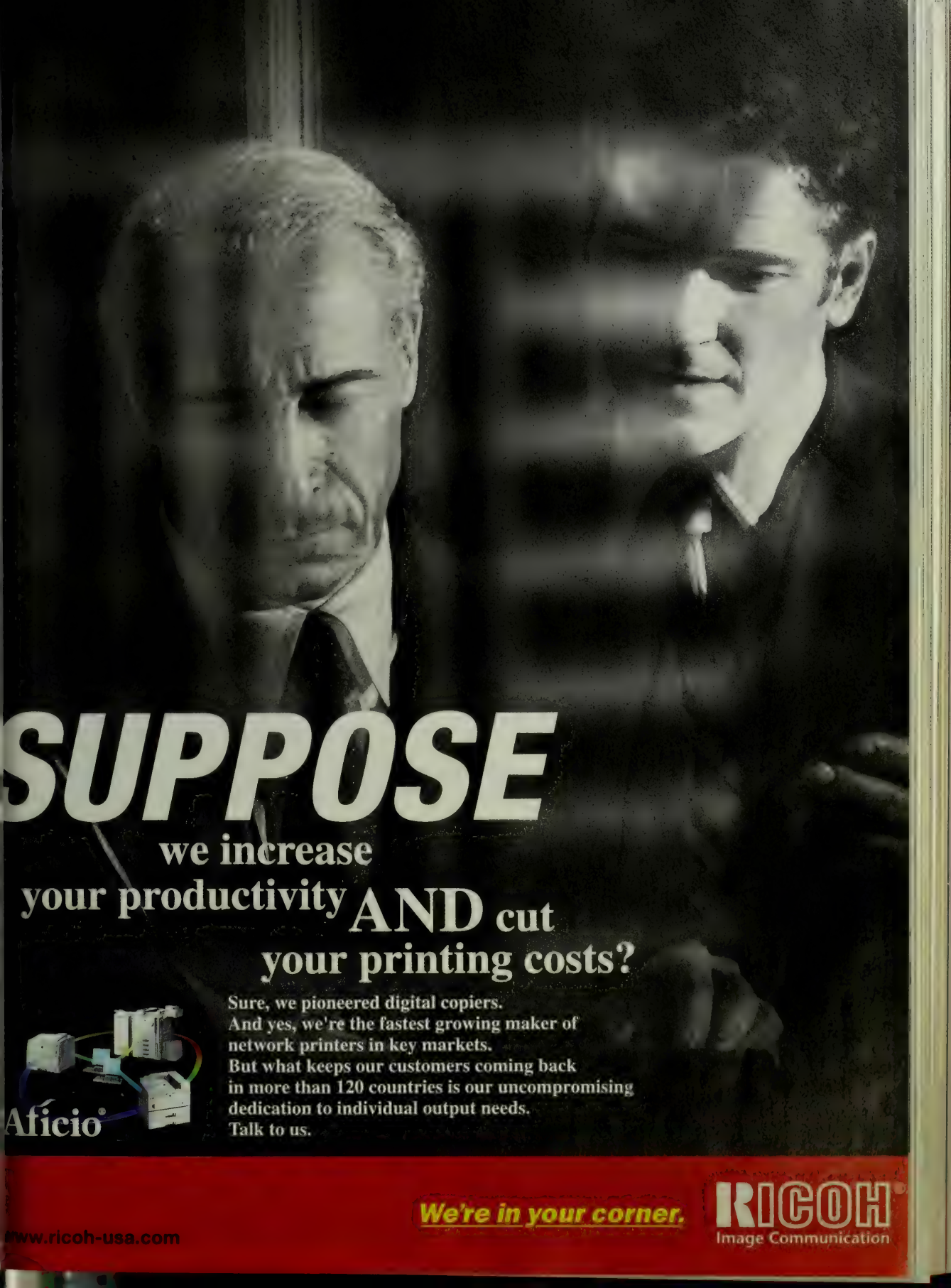
WAL-MART ADJUSTMENT To fit cost-conscious culture, sometimes cooks dinner at home for job candidates

[Banana Republic] from a niche brand to a mega-brand," says Gap Executive Vice-President Ronald R. Beegle. In 1998, Jackson took over Gap's Direct division, which included managing its Internet sites.

The daughter of a Colorado architect, Jackson stumbled into retailing. While working her way through Harvard Business School, she caught the attention of a department store CEO who was attending an executive program. He frequented the campus pub, managed by Jackson and three male partners. Jackson was there first thing in the morning as the short-order cook, and she was back at night as the bartender. Anyone so tireless should be in retailing, he told her. Jackson was persuaded to give up her plan to go into packaged goods, and joined Federated's vaunted management training program. She later did stints at Saks Fifth Avenue, Walt Disney, and Victoria's Secret.

A mother of two who now travels to Arkansas almost every other week, Jackson hasn't changed much from those early days. She'll need that energy and quick mind as she attempts to extend the largest bricks-and-mortar brand onto the Web. Says Russell Stravitz, who hired her at Federated's Bullock's unit in Los Angeles: "The world is watching, and the pressure is on."

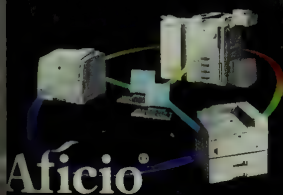
By Wendy Zellner in Menlo Park, Calif.



SUPPOSE

we increase
your productivity **AND** cut
your printing costs?

Sure, we pioneered digital copiers.
And yes, we're the fastest growing maker of
network printers in key markets.
But what keeps our customers coming back
in more than 120 countries is our uncompromising
dedication to individual output needs.
Talk to us.



We're in your corner.

RICOH
Image Communication

We develop innovative pharmaceuticals for the treatment of cancer.

So that cancer doesn't stand in the way

Millions of people are diagnosed with cancer every year. This disease hampers the prospects of many for a long and full life. At Aventis, one of the world's leading pharmaceutical companies, we offer innovative drugs for the treatment of common cancers, such as breast, lung and colorectal cancer. Our scientists are utilizing new technologies, including gene therapy and immunology to develop new agents for the treatment of head and neck, lung and gastric cancer. Our goal is to develop more effective treatments for cancer; ones that give people a better chance to make their dreams come true.

Aventis, Strasbourg (France), is listed on the stock exchanges in Paris, Frankfurt and New York. www.aventis.com



f your dreams.



Our Challenge is Life



EBAY STEAMS INTO EUROPE

France is its latest port of call

On a September afternoon, Thierry Peuchot stops by Arkham Comics, a funky shop on the Left Bank in Paris crammed with comic books and movie memorabilia. But Peuchot, a 30-year-old marketing manager for online auctioneer eBay Inc., isn't looking for a Darth Vader action figure or an old Spider-Man edition. He wants Arkham's customers—who, he hopes, will soon trade on the French site eBay is launching on Oct. 5.

After some amicable haggling, Peuchot strikes a deal with Arkham's owners: They'll let eBay hand out T-shirts, caps, and pins at a toy collectors' show they are sponsoring. In return, eBay will promote the event by auctioning off items from Arkham on its French site. It's hardly a great victory in the annals of e-commerce. But little steps like this could add up to a big win for eBay in Europe.

A year after crossing the Atlantic, the U.S. auction giant is on a roll across Europe. It has conquered Germany and erased the lead of Britain's QXL.com PLC. Now, eBay is heading into France to take on iBazar, which runs France's top auction site. eBay's French-born founder and chairman, Pierre Omidyar, has returned to help oversee the launch. "We won't win overnight," says Matthew J. Bannick, vice-president for international business. "But we will in 12 to 18 months."

Maybe. In the meantime, the strategies in this coming war diverge. QXL and iBazar spend heavily on advertising: iBazar puts \$8 million a year into its French ads. With relatively low Internet usage in Europe, both figure they need to drum up business through traditional outlets. eBay is using its U.S. formula—and shunning ads. It hires grass-roots marketers such as

Peuchot to target potential users.

eBay's five-person staff in France includes a former antiques dealer and a music promoter who use their contacts for advice and promotional help.

JITTERY. Besides costing less, the approach seems to produce better customers. In Britain, QXL has almost 50% more users than eBay. But eBay users average 90 minutes a month on the site, compared with under 20 minutes for QXL, according to Net research service MMXI Europe. "eBay has been more successful in converting members into buyers or sellers," says George Garafas, an analyst at Lehman Brothers Inc.

Although the companies don't release country-by-country figures, eBay's first-quarter European sales, the most recent reported, were \$87 million; QXL

and Ricardo.de, a German site QXL is acquiring, had sales of \$38 million in the same period. Such figures are crucial because auctioneers make money only when a sale is completed. QXL investors are jittery. Its shares have plunged to \$3.12 on the Nasdaq, from a peak of \$117 earlier this year. QXL's plan to buy Ricardo.de, which badly

trails eBay, is also unnerving investors.

iBazar could prove to be a tougher contender. While the privately held company doesn't release sales figures, it has a strong brand name in France, where it conducts more than 300,000 auctions a month. Marketing chief Andre Haddad says that while eBay's U.S. customers might spend hours browsing, that's unlikely in Europe, where most people pay per-minute phone charges for Internet access. Haddad says iBazar's advertising-based strategy is intended to compensate by building a large user base. It's also making trading as rapid as possible.

For eBay, Europe is an important prize. With an estimated 85% of the U.S. online auction market, eBay has little room to grow at home. And as in the U.S., European markets are likely to become near-monopolies: As the biggest site draws more buyers and sellers, the smaller ones become less competitive.

To win, though, eBay may need to bulk up. Several months ago, it negotiated to buy iBazar; while the talks did not go far, analysts think the companies would make a good fit. Apart from its top spot in France, iBazar is a major player in Italy and Spain. iBazar Chief Executive Marc Piquemal even has a little bargaining chip: Anticipating eBay's arrival, he acquired the domain name ebay.fr—forcing eBay to launch as eBayfrance.com. All's fair in auctions and war, it seems.

By Carol Matlack in Paris



THREE-PRONGED DRIVE

Germany The American auction site is far ahead of rival QXLricardo —and probably unbeatable.

Britain More of a contest. QXL draws more visitors, but eBay's users spend more.

France Launched Oct. 5. Faces strong competition from local champion iBazar.

DATA: ANALYSTS' REPORTS, BUSINESS WEEK

RAISING PRICES | WHERE TO INVEST

BusinessWeek

THE MAGAZINE FOR ENTREPRENEURS

frontier

What makes
a company
more than
just a bunch
of desks?
Great design

Dream Offices

A curved table adds
a playful touch to Toni
Steedman's ad agency



HERE'S YOUR CHANCE TO MAKE UP FOR THOSE SCRATCH-AND-SNIFF BUSINESS CARDS.

Okay, it seemed like a good idea at the time. But not all decisions are as easy as choosing America's most popular car* for your company's fleet. For one thing, everybody who has to drive one is bound to be happier for it. But best of all, management will recognize Camry's ability to retain its value as smart fiscal thinking on your part. And while everybody's patting you on the back, you can bring up your idea about replacing the office coffee with beef bouillon.

 **TOYOTA FLEET**



**FRONTIER
ONLINE**

The Entrepreneur's Web Site

frontier.businessweek.com

Look for more news and advice every weekday at frontier Online

TECHNOLOGY

Read the online version of Digital Manager every Tuesday. Consult our Buyer's Guide every day

FINANCE

Look for regular updates on interest rates for small companies and venture capital

WORK & FAMILY

Bill Hamburg Coplan and Pam Mendels balance personal and business lives, Monday and Wednesday

SMART ANSWERS

The online version of our help column for managers of small companies every Tuesday and Thursday

DIARIES

Joing Global: "Asian Entrepreneur" follows former investment banker Randy Oh as she chronicles her adventures at an Internet startup in Singapore. Look for it on Fridays

PLUS: Create your own sales leads, free online loan searches, and a start-up guide for budding entrepreneurs.

USO: Keep in touch with our weekly e-mail newsletter. Send your subscription request to frontier@businessweek.com

Frontier

Supplement of Business Week Magazine
221 Avenue of the Americas
New York, NY 10020

E-MAIL: frontier@businessweek.com

PHONE: 212 512-2511

EDITOR: Rick Green

MANAGING EDITOR: Fred Strasser

DEPUTY EDITORS: Larry Kanter, Robin D. Chaz

STAFF EDITOR: Kimberly Weisul

ONLINE MANAGING EDITOR: Robin J. Phillips

COPY CHIEF: Marc Miller

LOSE EDITOR: Sarah B. Davis

PRODUCTION DIRECTOR: Peter K. Niceberg

PHOTO EDITOR: Kathleen Moore

DESIGN: Don Morris Design

NOVEMBER 6, 2000

Contents

11.6.00



F.18 Dream Offices

A porno theater or a Victorian house turned into a sleek headquarters. All the furniture on wheels. A communal kitchen to die for. Lighting that looks like candy. That's how to make a business more than just a collection of desks.

F.30 Investing for Entrepreneurs

Here's some advice about investment advice: Forget everything you've heard. The familiar strategies are fine for wage-earners but potentially disastrous for business owners. How to design the right portfolio. Why stock-picking is for chumps.

F.38 Sell Out, Stay On

Some ex-owners just can't bear to leave, even if they really do want to cash in. So they're signing on as employees. All the fun, none of the headaches?



Departments

F.4 InBox

A postage stamp to honor small business, advice on the Web, what startups really want now.



F.8 Trends

Minority groups now hold 20% of the country's buying power—a market too big to ignore.

F.10 Who's Hot

A maker of specialty oil paints is especially good at making green. **Plus:** Instant Expert gives a short course on the Family and Medical Leave Act.

F.12 What Works

How to push through a price hike and make your customers like it.

F.14 Keeping Score

If you've been slow to pay SBA loans, bad news: The agency is selling its portfolio to private investors who want their money.

F.48 My Company

One day, Kevin Kelly plunged his fist through the Sheetrock in his hallway. Now our man's getting serious about stress management.



F.50 Under 30

"Jezebel" is usually a name for a shameless woman. These entrepreneurs think it's a name for hip Atlantans.

Cover photograph by Brian Smith

He'll Lick 'Em Yet

REAL ESTATE DEVELOPER Arthur Sweet's latest project is the size of a postage stamp. Indeed, it is a postage stamp. Sweet, 74, wants the U.S. Postal Service to pay philatelic tribute to America's small businesses.

So far, the idea hasn't stuck. The Postal Service's Citizens Stamp Advisory Committee receives about 40,000 proposals for new stamps every year, and Sweet's was returned to sender in October, 1999. A Postal Service spokesperson says small business "may be too general a topic. The idea is to commemorate something historical."

But Sweet thinks he'll put his stamp on things yet. He hopes a public outcry will save his project, just as it saved the Elvis Presley and Audie Murphy stamps. "We're the economic engine of the 21st century," says Sweet. "We deserve a stamp." Sweet has persuaded 61 members of Congress to sign a letter in support. You can post your support at www.nsbu.org/stamp/signpetition.htm—no postage required.



CRUSADER: Sweet wants a small-biz stamp

You Read It Where?

The Web is a font of information and advice on every subject, and small business is no exception. But what's it worth? Here's a sampling of what's out there.

THE GOOD

ASKME.COM

@skme.com

Short and to the point. Can search by subject matter or by the names of "experts" you like.

EHOW.COM

eHow.com

Rates each task by its difficulty. Lets visitors add their own tips to those of the site's experts.

LEARN.COM

Learn.com

Includes a good lesson on incorporation vs. LLCs and S corps.

SOYOUWANNA.COM

soyouwanna.com

Advice with attitude. Best primer on writing a business plan.

THE BAD

Advice on reading an income statement verges on haiku. Often, its experts just refer you to another site.

"How to finance a small business" is rated "moderate." You could get a loan faster than some pages load.

Advice for writing a business plan contains gems like "provide a table of contents," and "don't exaggerate."

Says VCs invest in exchange for a percentage of profits. Not quite. They usually take a share of the whole company.

Credit Scorning

FINANCIAL WEBSITES can't buy a break. Redbricks.com is under reconstruction and CapitalThinking is thinking again. Both hoped to eliminate mortgage brokers' fees by using the Web to link commercial real estate financiers with



small-biz customers. But the borrowers never materialized: It turns out they're happy to pay a fee to guarantee their loan will close. So now the sites are trying to sell their technology to lenders. While the brokering sites regroup, thebizbank.com—an online bank which also planned to court small business—is seeking a buyer before even clearing all regulatory hurdles. The live loan agent may not be ready for the tar pit after all.

SO THEY SAY

"In the last twelve months, a lot of small-business people in technology got real rich and then real poor, real fast."

—HAROLD EVENSKY, a Coral Gables (Fla.) financial planner (page F.30).

SOMETHING TO BUILD ON

10%

of Latina entrepreneurs own businesses in the construction industry

ONE IOTA

Hearing the phrase
"essential resource"
makes most people think of water.

We think of printers.

Color printers to be exact. Clearly we're obsessive, but consider the upside. Who better to buy a printer from than a fanatic?

Case in point: the **magicolor® 2200** desktop color laser printer. It combines color and monochrome printing in one printer, so you no longer need to buy a monochrome printer and an inkjet for color. Plus it's fast. The 2200 can print up to 20 ppm in monochrome or up to 5 ppm in color. We even offer standard network interface for group printing—an extra cost with HP*—because we're not only obsessive, we're nice too.

So whether you consider printers to be the center of your universe or just an indispensable tool, you'll find **MINOLTA-QMS** printers provide all the essentials of imaging. For more information about the complete line of **MINOLTA-QMS** color laser and monochrome printers, call **1-800-49COLOR** or visit us at: www.minolta-qms.com



The essentials of imaging

MINOLTA
QMS

© 2000 MINOLTA-QMS, Inc. All rights reserved. The MINOLTA-QMS logo, magicolor, and Crown are trademarks or registered trademarks of MINOLTA-QMS, Inc. Minolta Co., Ltd., Osaka, Japan. All other trademarks are the property of their respective owners. *Comparing magicolor 2200 color laser to HP color LaserJet 4550

Follow The Monet

FORGET THE government-sponsored venture fund and the tax credits for worker training. What attracts budding entrepreneurs is ample outdoor recreation, hip arts scenes, and good mass transit, according to researchers at Carnegie Mellon University.

The professors ranked cities by their cultural offerings, then tallied the number of highly educated residents. Low-ranking El Paso, for example, had only one resident with a graduate degree for every seven high school dropouts. In culture-heavy Boston, there were three postgrads for every four dropouts.

How does that lead to new businesses? Companies will go where the talent is, says CMU professor Richard Florida. And if they don't? "Every one of these people has a business plan in their back pocket," he says.

Sure beats a slide rule.



**FRONTIER
ONLINE**

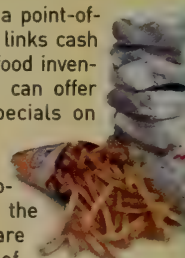
News and advice from our small-business Web site

Cashing in on Soggy Fries

So maybe priceline.com didn't make it in the grocery business. Founder Jay Walker is hardly out of ideas. Now he's trying to super-size fast-food sales.

Walker's latest brainstorm is "Digital Deal," a point-of-sale system. It links cash registers with food inventory, so clerks can offer last-minute specials on perishables in lieu of change.

Say an order totals \$3.39, and the apple pies are near the end of their 15-minute shelf life. Digital Deal might prompt a clerk to offer the customer an apple pie—normally 89¢—for 61¢, bringing the total to \$4. If the customer bites, the restaurant sells an extra pie and the clerk doesn't have to count out change. A manager at a Burger King in Stamford, Conn., says up to 40% of customers are taking the bait.



More Rate Hikes Ahead?

Interest rates on small-business loans rose again, says the Federal Reserve's third-quarter report, and private surveys suggest rates haven't peaked yet. The Fed pegged the average rate on loans of less than \$100,000 at 10.36%, up from 9.94% in the prior quarter and 9.04% a year ago. On loans up to \$1 million, the average was 9.67%, up from 9.26% in the prior quarter and 8.22% a year ago.

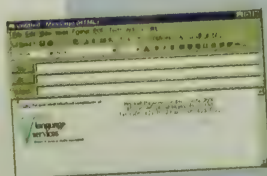
And it's not over yet: 21% of members surveyed in September by The National Federation of Independent Business reported higher rates, and Phoenix Management Services Inc., a Chadds Ford (Pa.) turnaround specialist, found most of the 76 banks it surveyed expect rates to rise a quarter- to a half-point in the fourth quarter.



For the full stories, click Online Extras at frontier.businessweek.com

Designer E-Mail

YOUR LETTERHEAD MAY have personality, but your e-mail's probably a bore: black type, white background.



Well, now you can put your logo into outgoing e-mail. You just upload the logo to logorilla.com, then download

the artwork in a compressed file. It will be embedded automatically in every mail you send out. A few catches: It only works with Microsoft Outlook, and if you don't "opt out," you'll get a load of e-mail promotions later.

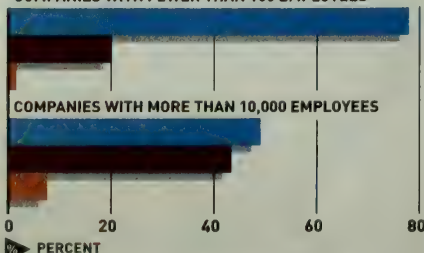
Loyalty in Numbers

WHAT KEEPS WORKERS in their jobs? Challenging work and work-life balance, says Fortune Personnel Consultants. Pay ranks third. Small companies must be delivering—their employees are much more loyal.

EMPLOYEE RESPONSES TO THE QUESTION, "HOW LOYAL DO YOU FEEL TOWARD YOUR COMPANY?"

■ VERY LOYAL ■ SOMEWHAT LOYAL ■ NOT AT ALL LOYAL

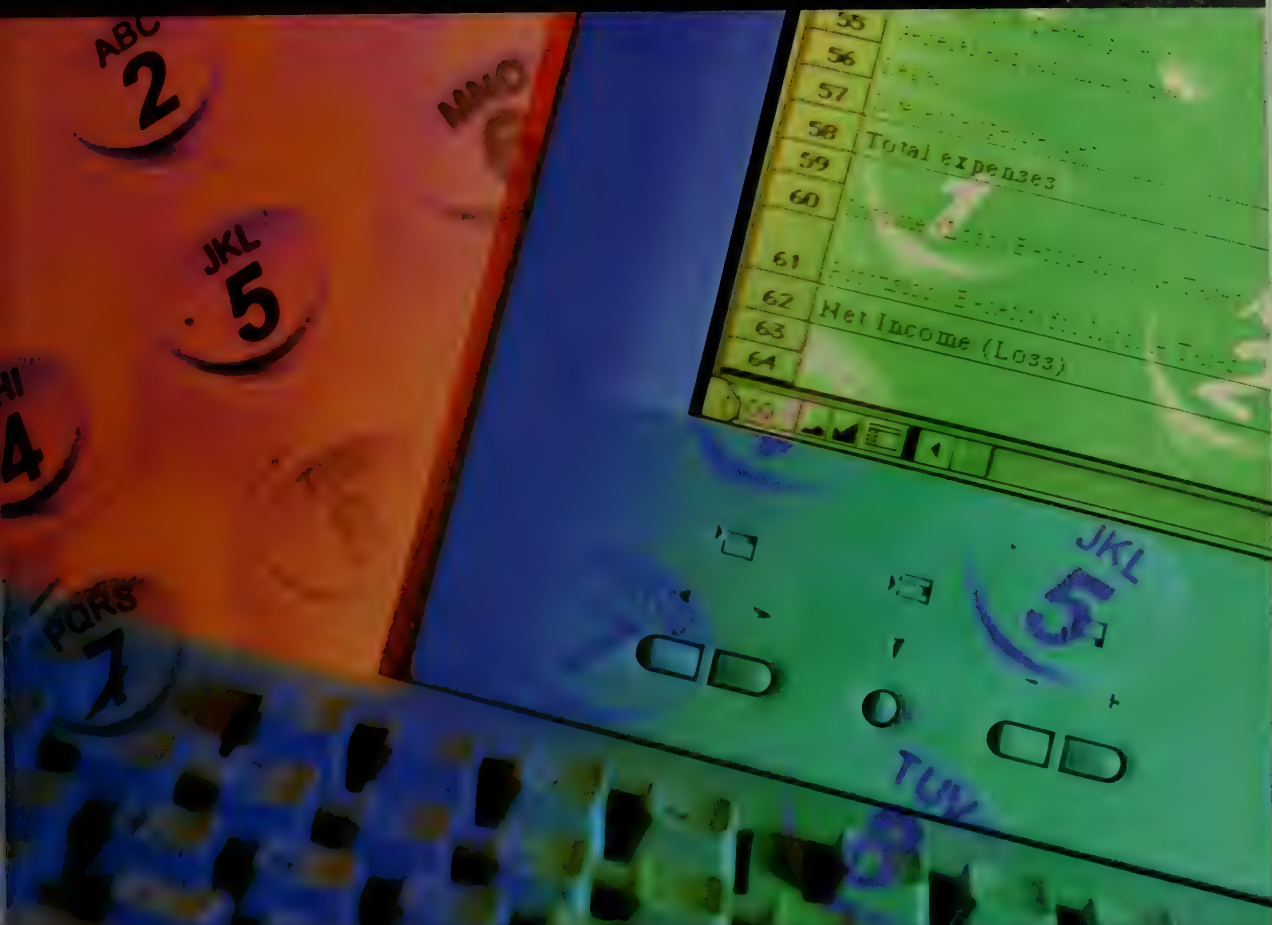
COMPANIES WITH FEWER THAN 100 EMPLOYEES



DATA: FORTUNE PERSONNEL CONSULTANTS

Same great Lucent equipment.

New Expanets™ products & services.



Lucent's Growing and Emerging Markets Division is now Expanets

At Expanets, we're leading a revolution in the way your business communicates, providing solutions to help you stay connected no matter what technology you're using.

That's because we'll unify all of your different communications systems into one seamless network. Make your phone system compatible with your computers. Get your fax machine talking to your website. We even offer local and long distance service for a total communications solution.

Plus, we're the largest distributor of Lucent's mid-market communications technology and strategic partner of giants like Cisco, HP and IBM, so you can take advantage of the best names in the industry without having to manage multiple vendors. *All of which means you'll spend less time keeping up with technology and more time making use of it.*

Ready to learn more? Call us today 1-800-247-7000 Prompt 2.

Exp@nets

We Listen. We Connect.™

AVAYA
communication

The Platinum Business Account Group of
Lucent Technologies



Communications



Networking



e-Solutions

Melting Pot of Gold

Don't underestimate the spending power of minorities

THE HOTTEST NEW MARKET for your business isn't across a great ocean. It's right next door.

The combined buying power of U.S. minority groups totals \$1.3 trillion, or some 20% of the country's purchasing power, according to the U.S. Commerce Dept. African American buying power alone is five times larger than the value of U.S. exports to the European Union, ac-

Jeffrey M. Humphreys. "Small business is missing many opportunities."

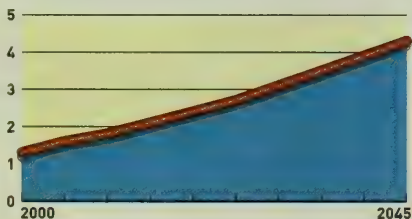
In many cases, it may be too late for small companies to grab "first mover" status. But that doesn't mean there aren't unfilled niches to target. There are 26 million foreign-born consumers in the U.S., the highest number in the nation's history, according to the Census Bureau. WorldByNET.com has built an entire business on this fact. The Houston-based Internet startup targets immigrant communities with 12 Web sites, such as IrelandByNET.com, that offer e-commerce and advertising. When the 50-employee outfit launched in 1999, deep-pocketed competitors already were well entrenched in Mexican-American and other Hispanic markets. So WorldByNET tapped into other ethnic markets. The sites now draw 150,000 page views a month—modest by most measures, but a strong showing in terms of reaching Vietnamese and Russian communities, says spokeswoman Laura Young.

It's not too late for entrepreneurs to seek out and serve other untapped niches. According to the Selig Center, Asian purchasing power will have increased 125% between 1990 and 2001, and Hispanic buying power 118%. Each of these groups is remarkably diverse in its own right, comprised of numerous distinct sub-niches. A generic marketing message will not work—making minority markets the perfect size for small, nimble companies.

—ALISON STEIN WELLNER
and KIMBERLY WEISUL

Color of Money

MINORITY PURCHASING POWER IS PROJECTED TO EXPLODE



▲ TRILLIONS OF DOLLARS
DATA: COMMERCE DEPT.

According to the Selig Center for Economic Growth at the University of Georgia.

And that's nothing compared with what's ahead. Thanks to continued immigration and a comparatively low birth rate among whites, minority purchasing power is on a steady march upward. The Commerce Dept. estimates that disposable income of non-whites will reach \$4.3 trillion, or 32% of the total, by 2045 (chart).

This is no secret to Corporate America, which has been spending millions on sophisticated campaigns to reach minority consumers. But entrepreneurs have been less aggressive, says Selig Center Director

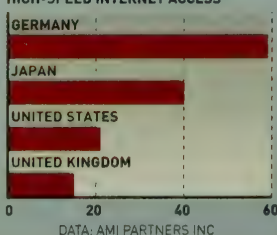


To learn more about multicultural marketing, click Online Extras at frontier.businessweek.com

The Need for Speed

U.S. entrepreneurs are the world's most wired, but they waste a lot of time waiting for Web pages to load. Only 21% of small- and medium-size companies in the U.S. have high-speed Internet access, says AMI Partners, compared with 59% in Germany and 40% in Japan. Why are we so slow? Overseas telecoms rolled out affordable high-speed services, says AMI's Anindya Bose, while U.S. companies spent years unsuccessfully hawking more expensive T-1 lines. Bose expects the gap to close within two years.

PERCENTAGE OF SMALL AND MEDIUM BUSINESSES WITH HIGH-SPEED INTERNET ACCESS



CURRENTS

Back to School

If you can't understand the tax code, don't feel bad: Neither can the Internal Revenue Service or commercial Web sites that tout expert tax advice.

The disheartening news surfaced from a test performed recently by the Treasury Dept.'s Inspector General for Tax Administration. The IG submitted 50 tax-law questions, all related to small business or self-employment, to the IRS' Web site, then queried three undisclosed commercial tax-help Web sites. The tally: The IRS got only 54% of the answers right. The commercial sites did even worse, scoring a dismal 47%. (They did, however, answer in a more timely fashion than the Feds). There were 12 questions that no one managed to answer correctly.

The IRS Web site responded to 262,000 tax law questions last year and is projected to answer 350,000 this year. The IRS maintains that overall, its Web site provides correct answers to 80% of the e-mails it receives. Close enough for government work?

A Peacock Gets Plucked

The small-biz business just keeps getting tougher. In yet another lesson that marketing to entrepreneurs on the Web isn't as easy as it sounds, NBC Internet Inc. plans to shed its money-losing AllBusiness.com unit. The service will be merged into a joint venture with Bigvine.com, a Redwood Shores (Calif.)-based barter exchange, leaving NBCi to focus on consumer mass markets.

That's quite an about-face. Only last February, San Francisco-based NBCi paid about \$225 million in stock to buy AllBusiness when it was barely more than a year old. Back then, NBCi stock was trading for more than \$100 a share. With its shares now below \$5, NBCi's entire market cap is just \$280 million. No wonder they want to change the channel.

Radical, innovative, and revolutionary are all words used to describe business on the Internet.



Hey, we've got one.

Microsoft®



Easy.

Here's a radical new vision for your business—Microsoft® bCentral™ now makes it easy for any small business to launch a complete Web presence. With our Business Web Services, you'll get your own Web address, making it easy for customers to find you. You'll have powerful business e-mail, including scheduling and Web file storage. You'll get the tools you need to build your own e-commerce-ready Web site in just minutes. And you'll find easy ways to promote your business to thousands of new prospects. It's so perfectly simple, it's positively revolutionary.

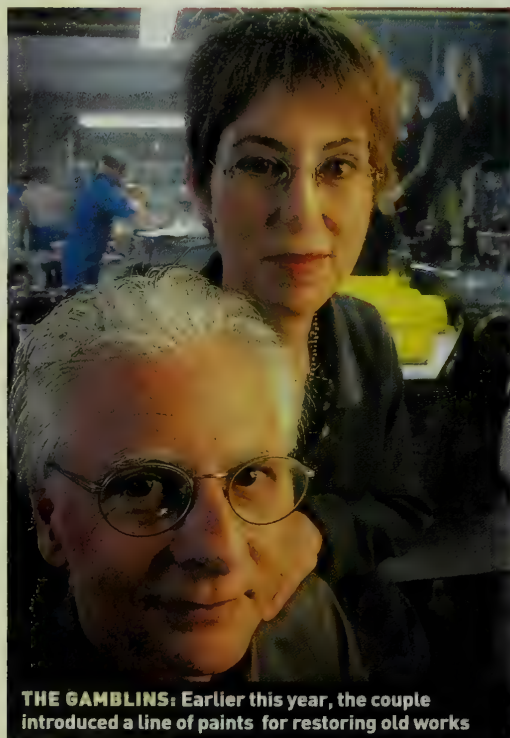
Do it the easy way. Get Microsoft bCentral Business Web Services for just \$24.95 a month at www.bcentral.com

Where do you want to go today?

Microsoft®

Paint By Numbers

Gamblin Artists Colors turns feelings into a palette of hues popular with the likes of David Hockney



THE GAMBLINS: Earlier this year, the couple introduced a line of paints for restoring old works

MARTHA AND ROBERT GAMBLIN'S work hangs in some of the world's top art museums. But don't bother looking for their names on gallery walls.

The Gamblins toil behind the scenes, manufacturing some of the world's finest oil paints. Each year, Gamblin Artists Colors in Portland, Ore., ships more than 500,000 tubes and cans of paint in some 150 colors to artists and supply stores worldwide. Leading painters such as David Hockney and Chuck Close swear by them. "They make colors other companies just don't," says Wolf Kahn, a West Brattleboro (Vt.) landscape painter whose work is on display in museums nationwide.

Robert Gamblin was a struggling oil painter when he founded the company. Determined to make a living in the art world, he began mixing paints in his garage in the early 1980s, pick-

ing up fans along the way, before launching the company in 1987 with his wife, Martha. Now, with 15 employees and \$3 million in sales, the company creates colors in specially designed high-speed mixers. Linseed oil and ground-up minerals are fed into the machines, then run through a series of metal rollers, which results in a brilliant paste—a technique that's 150 years old. "What we do is make essences of emotions that are reflected in colors," says Robert Gamblin, 51. "Then we put them into tubes."

Martha, 50, runs the factory with a somewhat less poetic approach. Computers track every bag of pigment and every tube of paint, allowing the company to run a just-in-time inventory system. The paints retail for \$10 to \$16 per tube. Sales have been increasing at about 15% annually. Earlier this year, the company introduced Gamblin Conservation Colors, a special line designed for restoring old paintings—which are used by the Metropolitan Museum of Art in New York and the National Gallery in London.

But even as they help restore the past, the Gamblins keep an eye on the future. Each fall, Martha pores through design magazines, searching for the latest color schemes. That's because art buyers will soon want paintings to go with newly redecorated rooms. Who knows? Perhaps you have a Gamblin on your own living room wall.

—DOUGLAS GANTENBEIN



For more profiles of leading entrepreneurs, click Online Extras at frontier.businessweek.com

INSTANT EXPERT

Family Leave

The Family & Medical Leave Act requires companies with 50 or more employees to offer up to 12 weeks of unpaid leave to care for a sick parent. But even if you're not legally obligated, it's not a bad idea to offer some assistance.

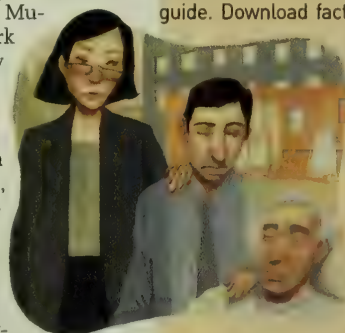
CASE IN POINT

Expensive elder-care benefits are out of reach for Dillon Works! Inc., a 35-employee custom-design and fabrication company in Mukilteo (Wash.). So Dillon has instituted a "policy of compassion." On an individual basis, employees are granted paid leave to handle caregiving needs. In the last 12 months, one worker took off two weeks, with less than a day's notice, to care for her ill father. Others are granted flex time to care for their loved ones. "As a small company, we're like a family, and we can operate like one," says Leslie Wilder, the company's sales and marketing manager. "We do everything we can to keep people here."

RESOURCES

To learn if your company is covered by the Family & Medical Leave Act, go to the Labor Dept.'s e-laws adviser program (www.dol.gov/elaws/fmla.htm). There, click on the FMLA's home page, where you can download a compliance guide. Download fact sheets about caregiver programs at www.caregiver.org, the Web site of the Family Caregiver Alliance. For tips on setting up a dependent-care program check *Small Business Legal Smarts*, by Deborah L. Jacobs (Bloomberg, 1998, \$16.95).

Help employees find free or low-cost assistance with the Eldercare Locator, a government-sponsored database of taxpayer-supported services (800 677-1116). If an employee needs data about a specific illness, direct them to the National Alliance for Care Giving (www.caregiving.org). —ALISON STEIN WELLNER





Log in NOW
www.hp.com/go/business9

You don't need more help.

Just the right help.

The right help starts with a visit to the HP Business Center. Because it can help you spend less time on technology, and more time on your business. It's the one-stop source for companies like yours that need integrated business services and solutions. Hard to believe? Check out HP's Web Wizard—it's the easy way to create a website for your company—complete with e-commerce capabilities. And it only takes 30 minutes, start to finish! HP will provide you with the services of a web hosting consultant, to help you get the most from your website—absolutely free! Plus, we'll waive the initial set-up fee.

**SAVE
UP TO
\$39.95**

To take advantage of this special offer, or find out more about HP's business services, just visit www.hp.com/go/business9. You can set up e-mail for the whole office. Access professional services like printing, binding and distribution. Host meetings on-line and more! Some services are free, some have a fee. Just pick what's right for you, and leave the rest to HP.

Register today and create your company website in minutes, and for a limited time only we'll waive the initial set-up fee. Visit www.hp.com/go/business9



For complete HP Web Wizard offer terms and conditions go to www.hp.com/go/business9.

©2000 Hewlett-Packard Company.

The Delicate Art of Price Hikes

Entrepreneurs are finding they can charge more—without driving away customers

LIKE MOST OTHER SMALL companies scrambling for market share, Mi8 Corp. was reluctant to raise prices. But then, the Manhattan application service provider, which rents and services Microsoft server software over the Web, learned that Microsoft Corp. was planning to raise its prices. In response, Mi8 hiked its own rates by 14%. The response? Not one complaint and not one lost customer.

After years of little or no inflation, entrepreneurs are feeling newfound pricing power. A net 13% of small companies reported raising prices in September, compared with just 8% a year earlier, according to the National Federation of Independent Business. The challenge for entrepreneurs is how to flex that muscle without battering your customers. Mi8 offered customers a 90-day grace period and also gave them the chance to lock in a lower rate—if they signed a yearlong contract. Few took the offer. "Most seemed to want to go month to month, even if it meant paying more," says Patrick Feterman, vice-president for marketing.

That's a lesson many small companies never learn, says Al Osborne, director of the Price Center for Entrepreneurial Studies at the University of California at Los Angeles. "If you es-



The trick is to make it stick without making customers feel they've been stuck

establish a niche, you can charge whatever the market will bear," he says. But instead of basing prices on market conditions, many entrepreneurs let their costs drive their prices, he says.

Still, a little finesse goes a long way.

start by defining your business and the skills needed to run it. In many cases, a company's founder has never written down exactly what he does, or defined the roles he plays in the company. You might consider hiring a business consultant to bring an outside perspective.

If no current employees fit the bill, take your successor profile to people who can refer candidates. Contact engineering and business professors at local universities; money managers; other en-

Pompanoosuc Mills Corp., a furniture maker in East Thetford, Vt., raised its prices 7% in May in response to rising costs of labor and raw materials. The company alerted customers by sending out postcards. Since raising prices, the company hasn't heard any complaints, says Rob Chapin, Pompanoosuc's director of marketing. "We try to hold the line, but we needed to keep our margins," he says.

Even heftier increases can be palatable if presented the right way. In June, Berland Technology Inc., a custom-software developer in Culver City, Calif., raised its hourly rates 50%, to \$225 an hour. The move was largely dictated by the higher salaries the company pays its 40 employees. To cushion the blow, Berland offered to complete any work in progress at the old rate. Those who balked were permitted to switch to a flat fee, rather than an hourly rate. "Some customers just seem to feel better with a fixed price," says Executive Vice-President Bill Craig. The result? Nobody jumped ship.

The most important thing is to be decisive. "The market will allow you to raise your prices this year, but it may not let you do it again for another five years," says UCLA's Osborne. Just be gentle: Customers bruise easily.

—MICHELLE LEDER

f For more on how to raise your prices, click Online Extras at frontier.businessweek.com

Smart Answers

Q: I'm an 83-year-old engineer and need advice on hiring a successor so my 50-year-old company can continue after I retire.

—H.D., Long Island City, N.Y.

A: If you are just now looking for a successor at age 83, one has to wonder whether you are so tied to your company that subconsciously you feel no one can take your place. But if you really are ready to hand over the reins,

trepreneurs; and executives at banks, law firms, and accounting firms. "If the business is sound, then this is a terrific opportunity and people will be eager," says Peter Cowen, a Westwood (Calif.)-based investment banker. Making the transition out of a company can be a lengthy process. Don't dawdle: It's time to get to work.

—KAREN E. KLEIN

Have a question about running your small company? Send an e-mail to frontier@businessweek.com

Some helpful advice when shopping around
for a new local phone company.

No network. No thanks.



High-speed Internet



Local/Long Distance

Our **OWN** network

Lots of communications companies are nothing more than middlemen. Buying and re-selling capacity on someone else's old copper wire network. But at Teligent we've built our own high-performance communications networks. Which means your company can get high-quality local and long distance—plus lightning-fast Internet access and data transfer—all for surprisingly affordable prices. So forget about those other companies that pretend to have a powerful network. Go with someone who really does. *For more information, visit us at teligent.com.*

Teligent
The Smart Way To Communicate

©2000 Teligent, Inc. Teligent and The Smart Way To Communicate are exclusive trademarks of Teligent, Inc.

Deadbeats Beware

The SBA is getting out of the loan-collection business—and private outfits won't be so lenient

FOR YEARS, THE SMALL Business Administration has been one the country's most forgiving creditors. No payment? No problem. Compared with private lenders, the SBA was slow to collect and loath to foreclose.

The agency's not about to start breaking legs, but change is on the way for anyone who's late on a small-business or disaster loan. That's because the SBA is getting out of the collections business, selling its loan portfolio to private-sector institutions. Such outfits tend to be less patient than government collectors—bad news for those unwilling or unable to repay.

The SBA is required to make loans, currently at 4%, to uninsured disaster victims. It also guarantees business loans, at 80% of their value, made by commercial lenders to entrepreneurs who otherwise might not be eligible for financing. If the loans go bad, they come back to the SBA for collection.

Pressure. And go bad they do. At the SBA's most recent loan auction, in August, 24% of business loans made under the disaster program and 47% of nondisaster loans were in default—a consequence of allowing nonperforming loans to drift for years. Leniency played a big role. "The SBA would never squeeze someone," says John Boyd, a former SBA liaison in the Virgin Islands. By contrast, commercial lenders are far more likely to restructure loans, pressure recipients, or foreclose and seize collateral. "Some banks will foreclose on a \$140,000 house to get \$20,000," Boyd says.

Behind the move is a congressional

authorization for all federal agencies to sell their loan assets to the private sector. As part of the push, the SBA plans to unload its entire \$10 billion direct-loan portfolio by 2003, and up to \$1 billion in new loans every year



The agency intends to unload its entire \$10 billion portfolio by 2003

thereafter. The move makes sense, says Richard Blewett, the agency's director of asset sales, because commercial institutions possess sophisticated loan-servicing methods that the SBA lacks. "They can throw the necessary resources at these loans," Blewett says.

Private financiers are snatching up the loans for an average of 50¢ to 60¢ on the dollar. In August, for example,

a package of debt with unpaid balances of \$1.2 billion sold for just \$530 million.

The high default rates don't appear to be deterring buyers. "It's a judgment call," admits Jeff Leu, executive vice-president of the financial-markets group at the Watzata (Minn.) conglomerate Cargill Inc., which recently bought a package of SBA guaranteed loans. But the deep discounts make it a gamble worth taking, he says. Other major buyers, including affiliates of Beal-Bank in Dallas, apparently agree.

"Wasteful." Some critics cite the fire-sale prices as evidence that the SBA should abandon the lending business. "Selling for 60¢ on the dollar unveils how wasteful it is," says Scott Hodge, executive director of the Tax Foundation, a Washington group that monitors fiscal policy.

SBA supporters, who argue the merits of the program, agree the discounts are big, but point out they're still more than the agency would get if it tried to collect the bad loans itself. "It's appropriate to get the bad loans off the books and have the money available for the next disaster," says Roberto Barragan, president of Valley Economic Development Center Inc., a Van Nuys (Calif.) small-business consulting firm.

Of course, SBA borrowers won't be thinking about policy debates when more efficient debt collectors come knocking. They'll probably just wish the bureaucrats were still in charge.

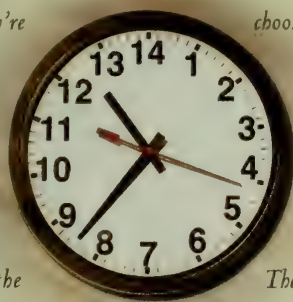
—THERESA FORSMAN



For more on SBA disaster loans, click Online Extras at frontier.businessweek.com

"I Work 24-7 (I'd work longer if I could)"

☞ Of course you would. You eat fire. You're a strong leader. You started the company. You carry the torch. And the people who work for you follow your lead. But they're not tireless. They're human. And they need an incentive. A little something beyond the next paycheck. Something that makes them feel like you care beyond the next presentation. Like a 401(k) plan. Yes, it can be expensive. But not this one. ☞ impact401k.com has features comparable to



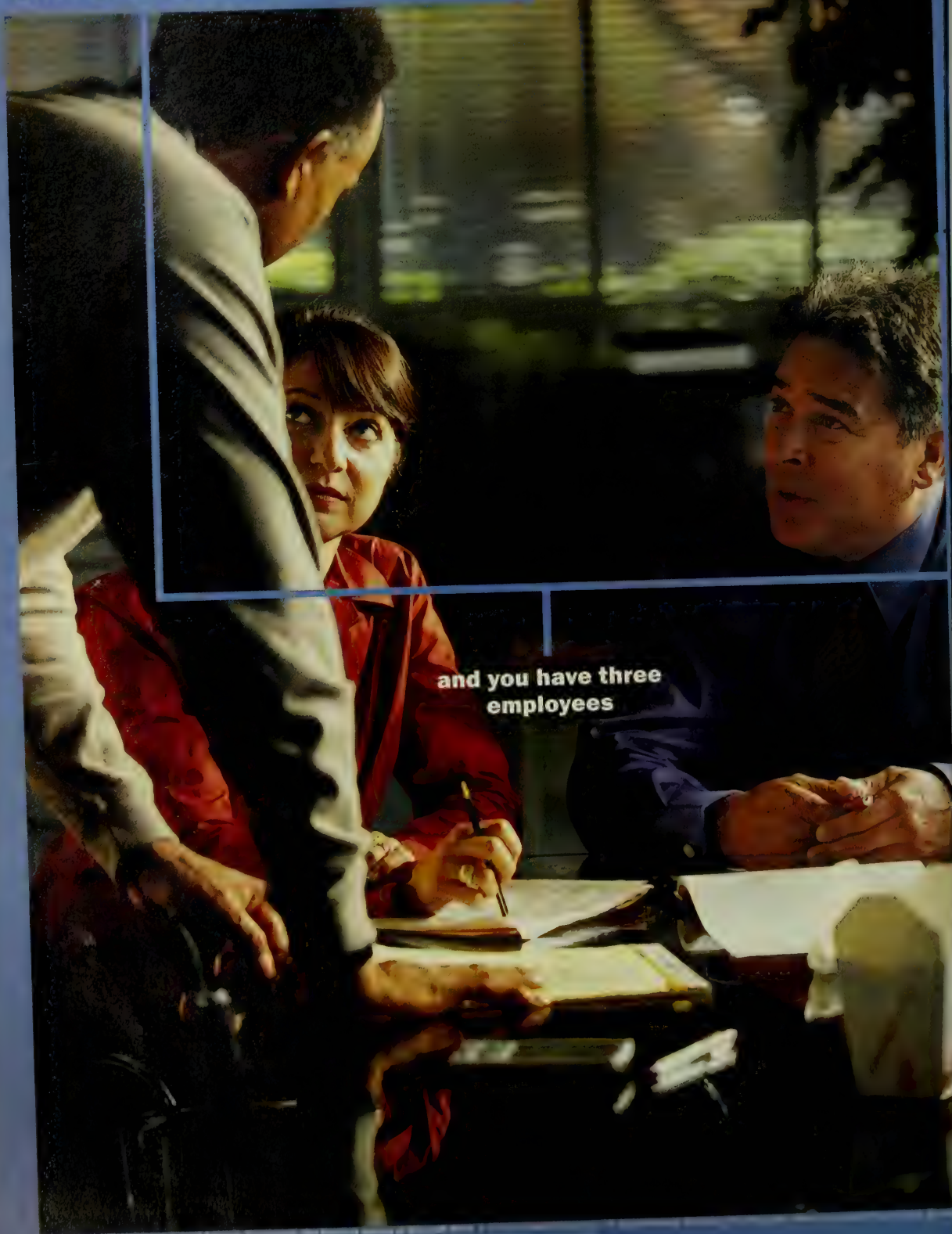
plans reserved for much larger companies. Yet, it's low in cost (there are no sales charges, nor is there a penalty should you choose to leave the program). And, it's easy to enroll in. Just log on. ☞ Lastly, it's empowered by the Principal Financial Group.* [In fact, more employers choose The Principal® for their 401(k) plans than any bank, mutual fund or insurance company.*] ☞ Take a moment to enroll your people. They're worth it. Aren't they?

©2000 Principal Life Insurance Company, Des Moines, IA 50392. Group annuities and other products and services offered through Principal Life Insurance Company (The Principal®), its subsidiaries and affiliates. *CFO Magazine, April/May 2000, Senior Financial Executive Ranking.

impact401k.com™

Empowered by the Principal Financial Group

**If your employees can be three
times more reliable**



**and you have three
employees**

**does that mean you
now have nine?**

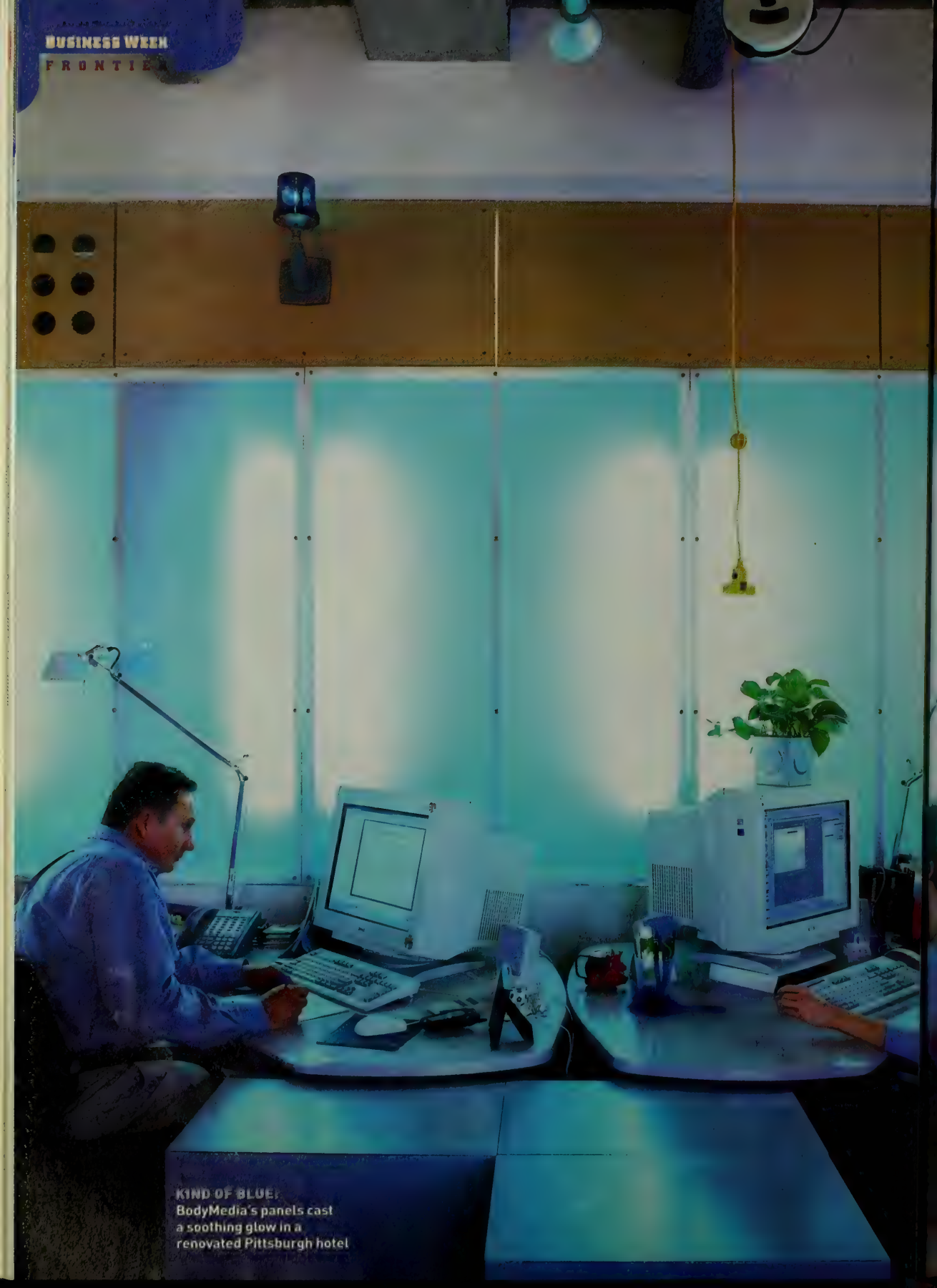


When hiring, you want employees that go the extra mile for your business. You should expect the same from your technology investments. Outfit your business with PCs preinstalled with Microsoft® Windows® 2000 Professional and Office 2000 and make the most of your time and your people. Running the 2000 generation of software from Microsoft ensures your PCs are powered by the most reliable Windows operating system. And you'll be able to do more with what you have using the world's leading productivity suite—complete with tools* specially designed to help smaller companies better manage their finances, serve their customers, and reach new markets. Choose Windows 2000 Professional and Office 2000 and watch your business multiply.

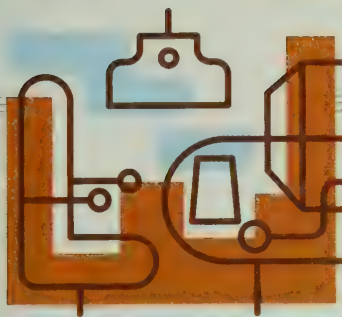
To learn more, visit www.microsoft.com/businessdesktop

Where do you want to go today?

Microsoft®

A man in a light blue shirt is seated at a white desk, working on a computer. The desk is equipped with a CRT monitor, a keyboard, a mouse, and a telephone. A desk lamp is positioned to the left of the man. To the right of the man, another person's hand is visible, typing on a keyboard. The desk is situated in front of a large window with vertical blinds. The wall above the window is covered with large, rectangular panels. A potted plant sits on a shelf above the desk. A small, blue, cylindrical object is mounted on the wall above the desk. A yellow cord hangs from the ceiling. The overall atmosphere is professional and modern.

KIND OF BLUE:
BodyMedia's panels cast
a soothing glow in a
renovated Pittsburgh hotel



Dream Offices

What does it take to turn a drab workplace into a perfect environment? A little cash and a lot of creativity

by Larry Kanter AN OFFICE IS MORE THAN a place to house employees. These days, it's a place to seek the inspiration of an urban skyline or a peaceful sunset. Not to mention a place to shoot a few hoops, play some ping-pong, take a nap, sip an espresso—or build a little buzz. ■ Today's small companies seek an environment

that quickly communicates an image of success and creativity, one that wows potential clients, reassures investors, attracts hard-to-find recruits, and helps employees forget how hard they're working. Achieving all that can mean going to extraordinary lengths.

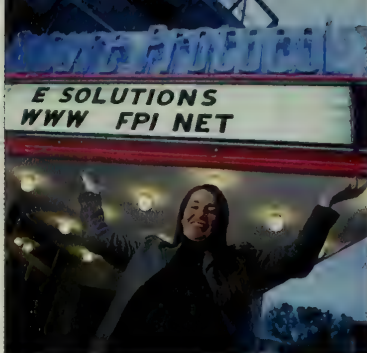
Consider Future Protocol Inc. The Austin (Tex.) computer network design company spent most of its five years in a stodgy, uninspiring office complex. When their lease expired, the partners asked their real estate brokers for something really different, and they got it: an abandoned adult-movie theater.

To convert the former porno palace into a high-tech headquarters, Future Protocol punched windows into the walls, added skylights, and tore out the theater's seats to make room for workstations. The balcony was extended to add a second level of offices and conference rooms. The theater's marquee is now used for free advertising. The price tag? Just \$200,000 (not counting exterior improvements paid for by the

building's owner). Not only did the renovation generate considerable publicity, but the company's 25 employees love it. "I've seen the motivation level climb to a new height," says Jennifer Hussey, Future Protocol's 34-year-old CEO. "People seem to get here a little earlier, stay a little longer."

Indeed, attracting employees in the first place and enticing them to stick around motivates many of the most innovative office designs. Bob Cagle, CEO of Thuridion, a Santa Cruz (Calif.) software developer with 48 employees, offers a light-soaked, 15,000-square-foot office, packed with amenities like a communal kitchen and coffee bar, a comfy upstairs lounge, and a balcony where employees can hook up to the Internet and enjoy the ocean views. "It gives people—both job candidates and customers—the feeling that they are going to be treated well here," says Cagle, 41.

Image may not be everything, but it certainly comes close. In the following pages, frontier



Future Protocol's Hussey beneath the old porn-palace marquee

takes a look at companies that have creatively defined their dream offices, often by utilizing startlingly simple and inexpensive materials and making the most of their building's innate virtues. While some of these entrepreneurs admittedly have splurged on their spaces, they know that a really good-looking office, like the right clothes, often pays for itself many times over.

While everyone expects freshly minted dot-coms to strive for coolness, they're not the only ones on the creative edge. GMA Capital has managed to portray a solid, dependable image but hint at its techie sophistication by letting Victorian charm and a cool contemporary interior merrily clash. David Oakey Designs built a new office that fully exploits its bucolic setting and in the process makes a statement about the entrepreneur's own source of inspiration. Toni Steedman, CEO of Steedman Wilson, eschews the popular trend of office-as-playground, but all the same she manages to inject visual excitement into her ad agency's offices with bold

furniture and textile designs.

While open space prevails in most of these offices, the cubicle isn't dead just yet. It's being redefined with inventive fabrics by companies like BodyMedia. When there are private offices, walls and partitions are usually put on wheels. Drywall is definitely out, and industrial chic is in—with plenty of concrete and exposed ducts.

The ultimate, drop-dead office can cost a million bucks, as in the case of Version2 Editing, but even a splash of color, softer lighting, and some movable partitions can go a long way toward improving your existing space (below). And if you can't get the office you know you deserve just yet, it never hurts to dream a little.

Profiles and pictures begin on **PAGE F.24**



Want to see more dream offices? Click Online Extras at frontier.businessweek.com for more photographs of creative office design.

Design Tips That Won't Bust Your Budget



COLOR SCHEME

Color it interesting. Make sure the hues of communal spaces don't rankle anyone—but don't use a boring palette. Instead of off-white, try beige, brown, green, or gray.

Use undertones. Does the color have a blue, red, or yellow cast? Choose warmer colors for cooler climates and vice versa.

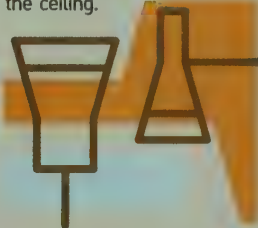
Convey a mood. Earth tones suggest stability. Blue-gray is great for conference rooms, suggesting calm, reasoned thought. Pale, relaxing colors are best for lunchrooms.

LIGHTING

Light up your image. Trendy right now: the sleek, high-tech look of brushed metal and aluminum fixtures. Or go for

dramatic lighting in lobbies and reception areas to express your corporate identity.

Diffuse it. Minimize computer-screen glare and make sure workstations have fully adjustable task lighting. Avoid overhead fixtures that beam down on workers. Choose diffused lighting from suspended fixtures that bounce light off the ceiling.



SPACE PLANNING

Open it up. Open spaces can encourage teamwork and collaboration. Make sure staffers have a private space to handle confidential matters or concentrate on a big project.

Rethink the cube. The Dilbert-style cubicle isn't dead, but divider walls can be scaled down to admit more natural light.

Move it around. Folding screens and lightweight, movable partitions available at many suppliers of used office furniture can increase flexibility. Or make your own dividers by hinging together sections of plywood and painting them.

Expose hidden charms. Remove drywall to reveal quaint old brick. Get rid of dropped ceilings to expose duct work and rip up carpets to show off concrete floors.

Plan it out. Take advantage of free planning services that use computer-generated graphics, offered at such stores as IKEA, Nextoffice.com, and OfficeMax. Or pay a designer an hourly rate to help you rearrange what you have.



FURNITURE

Think modular. Modular systems can be reconfigured or expanded. Choose a line from an established manufacturer that won't be discontinued soon, so that adding pieces later won't be a problem.

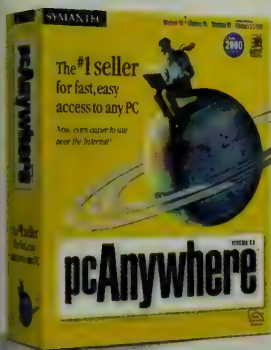
Choose your image. Light woods suggest a youthful business. Darker ones send a more conservative message.

Be ergonomically correct. To help limit crippling workplace injuries, go for fully adjustable chairs and workstations that can be used by everyone with equal comfort.

Bargain-hunt. Save up to 50% at dealers of refurbished office furniture. Try liquidation sales, auctions, and rental company closeouts.



**Helpdesk.
Troubleshoot.
Telecommute.
Anywhere, anytime.**



No matter where you are in the world, here is the #1 seller for fast, easy access to any remote computer. If your job takes you on the road, pcAnywhere lets you retrieve information, transfer files, and run desktop applications—as if you were back in your office. If you're troubleshooting systems and providing helpdesk support for mobile users, it lets you quickly and conveniently resolve user problems and manage mission-critical workstations servers by remote control—without leaving your desk. Helpdesk, troubleshoot, telecommute? There's no better way. pcAnywhere 9.2 now Windows® 2000 certified!

Visit www.symantec.com/pca or see your local retailer for pcAnywhere 9.2.



Symantec, the Symantec logo, and pcAnywhere are U.S. registered trademarks of Symantec Corporation. Microsoft, Windows, Windows NT, the Windows logo are registered trademarks of Microsoft Corporation in the United States and/or other countries. Copyright © 2000 Symantec Corporation. All rights reserved. 9/00 Printed in the U.S.A.

SYMANTEC.

**AT THESE
PRICES, WHO'S
THE PERFECT
HOST?**





Are you confident that your current Webhosting solution can handle your business growth? Don't pay to be squeezed on to a cramped shared Webhosting server. Team up with Dell,[™] an E-Commerce leader. With dedicated Webhosting services starting at only \$199 per month, we'll base your network on its own dedicated Dell PowerEdge[™] or PowerApp[™] server, featuring Intel[®] Pentium[®] III processors, which is monitored 24x7. It's scalable and flexible enough to reconfigure as your business needs grow. In other words, perfect.

DELL[™] HOSTING SOLUTIONS:

DEDICATED WEBHOSTING SOLUTION

DellHost[™] D-2950

- Dell[™] PowerApp.web[™] 100 Server Appliance
- Intel[®] Pentium[®] III Processor at 600MHz
- 64MB RAM; 1X 9GB⁵, 7.2K SCSI HD
- 2X 10/100 Embedded NICs; Red Hat[®] Linux[™] 6.2 OS
- Dedicated 21GB Monthly Transfer (Metered)
- TrellixWeb[™] and NetObjects[®] Website Design Tools
- 99.9% Uptime Guarantee⁷; 7x24 Site Monitoring

\$199/mo.

PLUS \$299 ONE-TIME SETUP FEE

- Optional Weekly Back-up Services \$75/mo., plus \$150 One-time Setup Fee
- E-Com Options: Add Mercantec[®] Softcart[®] Pro for \$99/mo. with \$99 Setup Fee, Transaction Fees Extra
- Add Traffic Analysis and Tools, Starting at \$9.95

DEDICATED WEBHOSTING SOLUTION

DellHost[™] D-3250

- Dell[™] PowerEdge[™] 2450 Server
- 2X Intel[®] Pentium[®] III Processor at 866MHz with 256K Cache
- 512MB RAM; 2X 9GB⁵, 10K SCSI HD
- Redundant Power; 2X 10/100 Embedded NICs
- Red Hat[®] Linux[™] 6.2 OS, Single-channel RAID1
- Dedicated 21GB Monthly Transfer (Metered)
- NetObjects[®] Fusion[®] 5 at No Additional Charge
- 99.9% Uptime Guarantee⁷; 7x24 Site Monitoring

\$549/mo.

PLUS \$350 ONE-TIME SETUP FEE

- E-Com Options: Mercantec[®] SoftCart[®] Pro \$99/mo., plus \$99 One-time Setup Fee, Transaction Fees Extra
- Add Weekly Back-up for \$75/mo., plus \$150 Setup Fee
- Add Traffic Analysis and Tools, Starting at \$9.95

DEDICATED WEBHOSTING SOLUTION

DellHost[™] D-3350

- Dell[™] PowerEdge[™] 2450 Server
- 2X Intel[®] Pentium[®] III Processor at 933MHz with 256K Cache
- 1GB RAM; 3X 9GB⁵, 10K SCSI HD
- Redundant Power; 2X 10/100 Embedded NICs
- Red Hat[®] Linux[™] 6.2 OS, Single-channel RAID5
- Dedicated 21GB Monthly Transfer (Metered)
- NetObjects[®] Fusion[®] 5 at No Additional Charge
- 99.9% Uptime Guarantee⁷; 7x24 Site Monitoring

\$799/mo.

PLUS \$350 ONE-TIME SETUP FEE

- E-Com Options: Mercantec[®] SoftCart[®] Pro \$99/mo., plus \$99 One-time Setup Fee, Transaction Fees Extra
- Add Weekly Back-up for \$75/mo., plus \$150 Setup Fee

WEBSITE STARTER KIT

- One Year Domain Name Registration from Network Solutions (\$25 value)
- Professionally Designed 3-page Website from Dell[™] Design Services (\$389 value)
- One Year of Shared Hosting (\$215 value)
 - 100MB Storage
 - 5GB Transfer Rate
 - 10 E-Mail Accounts

\$399 for kit

PLUS \$20 ONE-TIME SETUP FEE



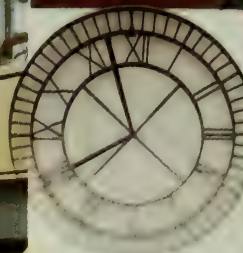
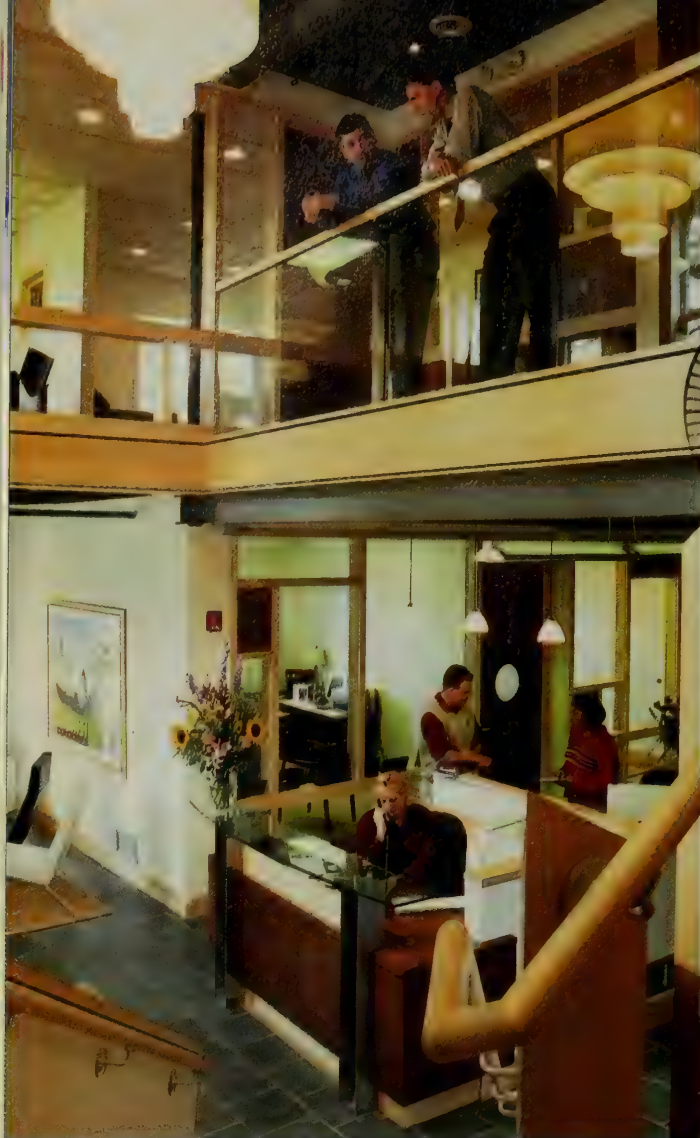
GET EXACTLY WHAT YOUR BUSINESS IS LOOKING FOR

800.727.4239

WWW.DELLHOST.COM

GSA Contract #GS-35F-4076D

Prices, specifications, and availability may change without notice. Taxes and shipping charges extra, and vary. Cannot be combined with other offers or discounts. © 2000 Dell Computer Corporation. All rights reserved. Limited Warranties, write Dell USA L.P., Attn: Warranties, One Dell Way, Round Rock, Texas 78682. For hard drives, GB means 1 billion bytes. Dell, the Dell logo, and Dell.com are trademarks of Dell Computer Corporation. E logo, E-Value, DellHost, PowerEdge and PowerApp web are trademarks of Dell Computer Corporation. Intel, the Intel Inside logo, and Pentium are registered trademarks of Intel Corporation. TrellixWeb and NetObjects are trademarks of Trellix Corporation. Red Hat and Linux are trademarks of Red Hat Software, Inc. and Celeron are trademarks of Intel Corporation. ©2000 Dell Computer Corporation. All rights reserved.



A sparkling jewel in the suburbs of Detroit: On the outside, GMA Capital's new headquarters in Farmington Hills, Mich., appears to be a stately Victorian home from the 1880s—and it is. But step inside and you'll find a sleek, modern interior that Rothstein (lower right) says reflects the firm's high-tech focus



21st Century Gingerbread

GMA Capital LLC

Farmington Hills, Mich.

WHAT IT DOES: Investment banking

EMPLOYEES: 10

GOAL: To blend the old with the new for an image of solid dependability and sophistication.

COST: \$2.25 million

Walk up to the front door of GMA Capital's new offices, and you might wonder whether you've traveled in time back to the 1880s. The headquarters of the Farmington Hills (Mich.) investment bank and venture-capital firm is a 115-year-old Victorian house with a sunny yellow paint job, a stately

front porch, and fanciful gingerbread trim.

But go inside, and you'll find yourself in a cool, thoroughly 21st century interior—more suited to Silicon Valley than suburban Detroit. That disconnect suits Charles Rothstein, GMA Capital's founder and managing director, just fine. "The building is symbolic of what we stand for," he says. "We have a traditional business, but bring a new energy to it."

New energy is exactly what Rothstein, 41, was looking for when the lease expired on GMA's

previous home, an undistinguished, 3,500-square-foot space in an upscale suburban office complex. The firm, which has some \$100 million under management, was ready for a new look, one that befit its high-tech specialty.

When a partner first showed Rothstein the Victorian house, he was less than impressed. Although

it had been built more than a century ago by a prominent local farmer, it had later been converted into a warren of dark and musty offices. Nevertheless, he asked his architect friend Ken Neumann to take a look. Neumann was so impressed by its potential that he offered to take on the project himself.

Neumann faithfully restored the exterior of the National Historic



Bringing Nature Indoors

David Oakey Designs

LaGrange, Ga.

WHAT IT DOES: Textile design and manufacture

EMPLOYEES: 12

GOAL: To inspire creativity and make the best use of natural materials and the landscape.

COST: \$1.4 million

When designer David Oakey creates his soft, muted textile and carpet patterns, he often draws inspiration from the countryside around him. So it was only natural to set up shop among the rolling hills of LaGrange, Ga., an hour's drive from Atlanta.

Welcome to Pond Studios, David Oakey Designs' 12,000-square-foot headquarters, named for its picturesque meditation pond. Formerly housed in an old Coca-Cola Co. bottling plant in LaGrange, the company moved in 1997 to a custom-built headquarters on six wooded acres.

Designed by the St. Louis firm

of Rubio/Durham Architects, the two-story steel-and-concrete building is actually three separate, connected structures: a design studio, a conference and display area, and a small manufacturing facility. Floor-to-ceiling windows keep employees in touch with nature and create a light and airy ambience. Adhering to Oakey's green esthetic, his architects designed an energy-efficient building and chose local building materials, such as Georgia cedar siding and the rustic touch of exposed nailheads.

Bringing the great outdoors indoors has proved to be every bit as inspirational as Oakey had hoped. He recently designed a new line of carpet tiles that mimic the random patterns in a field of grass. What could be more natural?

—STEPHANIE B. GOLDBERG

Oakey's separate but connected studio/display area/manufacturing facility has an airy, leafy ambience



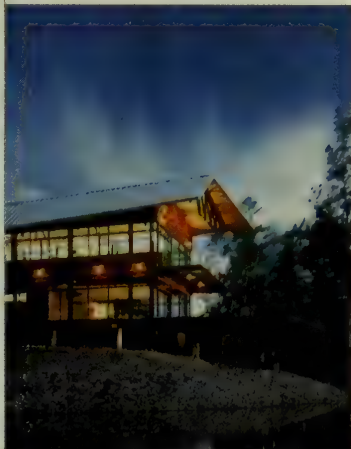
"It was a great business investment. It's given us a new identity"

CHARLES ROTHSTEIN, FOUNDER

Register property, but gutted the insides completely. He added thoroughly modern touches—marble floor tiles, dramatic glass paneling, and sleek blond-wood furnishings.

So far, visitors seem impressed. "There's an efficiency to their organization that's reflected not only in their people, but also in their facility," says James Mault, CEO of Health-Tech Inc., a Golden (Colo.) outfit that GMA invested in.

A pricey renovation, the cost included \$675,000 to buy the house. "It was probably an awful real estate investment," Rothstein admits with a laugh. "But it was a great business investment. It's given us a new identity." A perfect marriage of something old, something new.





Focus on Function

Steedman Wilson
Charlotte, N.C.

WHAT IT DOES: Advertising agency
EMPLOYEES: 15

GOAL: To create a highly functional workplace—visually appealing but not frivolous.

COST: \$900,000

Ceilings in the former textile warehouse soar 30-feet high. Snack drawers beat out vending machines in the pantry. Curved desks help enliven the space

Before moving into her new headquarters, Charlotte (N.C.) advertising pro Toni Steedman spent a lot of time scrutinizing current trends in office design.

The whole world, it seemed, was scrambling to appear young and hip, adding foosball tables, nap rooms, even basketball courts. Sure, Steedman wanted to project a fresh image to attract both clients and employees. But, she wondered, did anyone get any work done in these spaces?

She opted not to find out. When Steedman, 45, was ready to move

Steedman Wilson, her 15-person ad agency, into an 80-year-old, 6,100-square-foot former textile warehouse on Charlotte's "Dot-com Alley," she kept the focus on function, not frivolity. With \$5 million in 2000 revenues and clients in traditional industries such as health care and financial services, she needed to maintain "a certain professionalism.... I'm not sure I want to send the message that this is where you come to play basketball."

Nearly every detail of the agency's new office design invites employees to work efficiently and creatively. In designing her dream office with architect John Gardner and designer Diane Tucker, Steedman went so far as to measure the distance between desks and

light-tables to minimize art directors' steps. She also created a filing system to track paperwork and stock images, and two libraries.

Functional as it is, the space defies boredom. The ceilings, with exposed beams and ducts, soar 30-feet high; the desks and

conference tables curve seductively amid brightly colored walls and checkerboard-patterned chairs. Employees can't

play ball, but they can relax in the inviting, fully stocked kitchen.

While there are closed offices for executives, all but two walls are temporary. "As she expands, the entire office can be moved into a different configuration," says Tucker. Just don't expect one of them to include a half-court.



"I'm not sure I want to send the message that this is where you come to play basketball." TONI STEEDMAN, CEO



An Avant-Garde Sandbox

BodyMedia Inc. Pittsburgh

EMPLOYEES: 40

WHAT IT DOES: Makes wearable health-monitoring devices

GOAL: To create a cutting-edge and flexible workspace

COST: \$225,000

There are cubicles, and then there are cubicles. At BodyMedia Inc.'s 4,000-square-foot headquarters, there's nothing Dilbert-esque about the office partitions, which are formed by stretching sheer Lycra fabric sail-like between the desks. When figures move behind the

cloth, they are seen as silhouettes.

A bit avant garde, perhaps, but they provide just the right sort of image and design flexibility for techy BodyMedia. The company, founded originally as Sandbox Advanced Development by four classmates at Carnegie Mellon University, has raised \$8 million to make wearable health-monitoring devices that are used with Web-based software to keep track of heart rate, sleeping patterns, and other bodily functions.

The partners wanted their space to promote collaboration yet provide some privacy. Also important: impressing potential investors and recruits alike. "Space can be a terrific marketing tool, as far as showing off some real Boy Scout ingenuity, and making you look successful even though you're still young," says Pittsburgh architect Gerard Damiani, who refurbished Body-

Media's offices for \$25 a square foot.

Based on the 10th and 12th floors of an 80-year-old hotel, the space evokes the city's industrial past, with exposed beams, heating ducts, and plumbing. In a nod to the New Economy, a Ping-Pong table sits next to the CEO's office, and there's a giant sandbox, a playful reference to the company's

origins.

For a flexible work area, the partners opted to put most furniture on wheels. Desks can be rolled together for impromptu meetings; walls, which double as pin-up boards, reconfigure to create instant conference rooms. "We like to encourage the serendipitous exchange of ideas," says co-founder Chris Pacione.

Even if it does mean your neighbor can see a shadowy version of you, dozing off behind the Lycra.

The partners wanted to promote collaboration yet provide some privacy. Pacione (above, far left) says they put furniture on wheels to add flexibility



"We want people to like coming to work. Part of the excitement is just being here." CHRIS PACIONE, CO-FOUN



Manhattan Mellow Drama

Version2 Editing

New York

EMPLOYEES: 17

WHAT IT DOES: Audio and video postproduction

GOAL: To create a strong corporate image and provide an impressive high-tech workspace for clients.

COST: \$1 million

For Vito DeSario, a good-looking office is more than a luxury: It's the way to stand out from the competition. So when the president of Version2 Editing, a New York-based post-production studio, needed a new headquarters, he splurged on a lease for a 2,500-

square-foot space on the 15th floor of the trendy Starret-Lehigh building, a onetime manufacturing complex now housing style maven Martha Stewart and fashion designer Hugo Boss.

DeSario wanted both impressive creature comforts and state-of-the-art technology to please his clients, including some of the city's leading ad agencies.

Of particular appeal are the striking floor-to-ceiling windows and a 360-degree wraparound deck with a breathtaking skyline view. "It's nice to be able to see what goes on outside, rather than being

in a dark box all day," says client Chris Cocco, a producer for Merkley Newman Harty, a Manhattan-based advertising agency.

DeSario's architects, New York-based Bogdanow Partners Architects, kept the industrial slab concrete floors, ceilings, and columns but added teak paneling and walnut doors for a warmer look. "I did this to be inspired by my own business again," says DeSario, who spent 10 years in increasingly cramped quarters.

It seems to have worked. Since relocating in March, DeSario has aggressively drummed up new business, including a deal with a London-based editing shop so V2 can expand overseas. Here's a case where looking like the million bucks you spent is paying off.



Among the creature comforts at DeSario's office: Sleek public spaces, floor-to-ceiling windows, and elegant teak paneling



Go to www.port.com and

**ENTER
TO WIN!**

GRAND PRIZE:

- HP Jornada
- Targus Stowaway Folding Keyboard for HP Jornada
- Targus Leather Wallet for HP Jornada
- Targus Stylus/Pen

Contest ends 12/15/00. See port.com for a complete rules description.

We've Just
Added More Than
100 **NEW** Accessories For
Hassle-Free Mobile Computing.

port.com

*"just what I need for
my mobile office."*



power
ACCESSORIES

Power/Charge Your
Notebook or Cell Phone
On The Ground or
In The Air!



Targus
Universal
Auto/Air™
Power Adapter
Price \$119.99

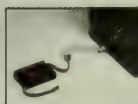
communication
ACCESSORIES

NEW!

Targus
Retractable
Network/
ISDN Cord
Price \$24.99



8 ft. of RJ-45
Ethernet/ISDN Cord
In a Self-Retracting
PC Card-Size Reel



security
ACCESSORIES

NEW!

Now You Can Access USB, Parallel,
Serial, and PS/2 Devices Through
Your USB Port... All At Once!



Targus
Mobile Port
Expansion Hub
Price \$149.99

input
ACCESSORIES

carrying cases

The Most Thought Out,
Best Designed Notebook
Carrying Cases... Ever!

PORT 2.1 Series
Notebook
Carrying Cases
Price \$79-\$149



port.com knows mobile
computing — so they
know just what mobile
accessories make me the
most productive I can be.

When I needed a CD-RW
PC Card Drive for my
storage needs, they had it.
Connectivity to the home
office... securing my note-
book anywhere I go... a
power adapter that works
both in my car and on the
plane, they're one step
ahead of me. And when it
came to a carrying case
with patented notebook
protection for my portable,
who else could I go to.

**port.com... it's where
you'll find over 500 mobile
accessories that make
computing hassle-free!**

For a catalog
or to order, call
800-995-4720

or log on to

port.com

The Essential WebSite
For Portable Computing



Investing for Entrepreneurs

**What's right for most people
is wrong for you. Small-biz
execs need a plan all their own**

by Lynn Brenner "INVEST IN WHAT YOU KNOW." It's the mantra of do-it-yourself stock pickers, the reality check against Wall Street fads, the gold standard of common sense. It's also perhaps the most dangerous advice an entrepreneur can get. ♦ Buying things you understand may be a great strategy for wage earners because it lowers the risk that they'll be wrong. But for an entrepreneur, it compounds the risk by putting more of

your money in the same industry where you already have your biggest asset—your company. The result: Your portfolio might collapse at the same time your business is struggling, dealing a double whammy to your net worth.

As the current year's stock market shows, this is not a theoretical problem. For instance, do you own a tech-oriented company? Let's hope you didn't put your expertise to work in the Nasdaq market, which has plummeted 33% since its March peak. "In the last twelve months, a lot of small-business people in technology got real rich and then real poor, real fast," says Harold Evensky, a Coral Gables (Fla.) financial planner. Hubris, usually an entrepreneur's ally, can make things worse. "Business owners tend to overestimate how much influence they have over how well their company does," says Ross Levin, an Edina (Minn.) adviser. "Even incredibly well-run companies are subject to the business cycle."

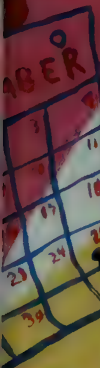
The solution: Entrepreneurs need to diversify even more than ordinary investors, and put aside their hunches and insights even if they are well-founded. "I know some financial-services companies are very strong," says Janet Briaud, a planner in Bryan, Tex., "but I wouldn't invest in them because my business is related to the markets.... You want to invest in something that will do well when your business doesn't do well."

That's the whole point of portfolio theory: If you own a variety of assets, with a mix of high- and low-risk holdings that don't move in lockstep, the gains in some classes will make up for the inevitable losses in others. The result is a smoother ride with less risk of an untimely plunge in your overall net worth. Better still, you'll spend less time managing your portfolio, leaving more time to run your company—and wind up richer in the end. Why? Because your company is your largest investment, and a well-run small business should



CLASS "A"

MUTUAL FUNDS
CASH
BONDS
INDEX FUNDS



PRESIDENT

Contact

Dorfield

produce higher returns than the stock market.

What you need is an investment plan that provides consistent long-term growth, a cushion against setbacks during your working years, and a comfortable income for your retirement—with minimal maintenance along the way. The building blocks for this strategy:

A professional adviser. This is no different from delegating other tasks that you don't have time to do yourself. Sure, it's hard to listen to your friends brag at cocktail parties about their latest stock find. But running a company doesn't leave time to run a portfolio properly, says Ed Emerman, 43, owner of

Eagle Public Relations in Princeton, N.J. Emerman may soon turn over part of his holdings to a certified financial planner. Many CFPs charge fees—flat, hourly, or as a percentage of assets—rather than commissions,

which helps keep them objective, and they often have a broad knowledge of different investments and tax rules. "There's a lot at stake," says Emerman, who is counting on his portfolio to provide a comfortable retirement for himself and his wife Wendy, 40, and college for their 9- and 12-year-old daughters. "And there are probably smarter people out there than I am at managing assets."

Mary Anne Graf, 53, feels the same way. "If something isn't your area of expertise, why mess with it?" says the president of Health Care Innova-

tions, a 15-year-old hospital consulting firm in Salt Lake City. Her friends talk constantly about their winning stocks. ("All—the—time," she says in mock exasperation. "Daily. Hourly.") But Graf, who employs three staffers and 15 consultants, can't remember offhand which investments she owns. "I'm so busy. I can't keep track of this stuff... I like to take risks, and I try to keep people around me who can balance off that tendency."

In this case, it's Bonnie Cavill, a broker at A.G. Edwards in Salt Lake City. She found a unit trust that gives Graf both diversity and bragging rights. A unit trust resembles a mutual fund, but there's no portfolio turnover: It buys and holds a preset list of stocks. The downside is high cost—commissions can run a hefty 4%. But Cavill says tax planning is easier, and entrepreneurs get some stock names to drop. "It's nice for a cocktail party," she points out.

Like Graf, you might want to seek an adviser whose outlook is different from yours. "Entrepreneurs are vulnerable to buying a story from a very high-energy, take-charge financial person," says Frances Twiddy, a St. Clair (Mich.) financial planner. "The person for whom you feel the greatest affinity may not be the one to entrust with your finances."

A written investment plan. Most business owners invest haphazardly, says Marilyn Bergen, a Portland (Ore.) financial planner. "Having a written plan—a business plan for your portfolio—really helps you to stay focused when the market is driving short-term greed or fear."

A good adviser will insist that you spell out how your portfolio should be divided between stocks

Your investment pro should have some views that challenge your own outlook

The Right Portfolio

What investments should an entrepreneur own, and how much should go in each one? It depends on your age, your tolerance for risk, and how well your business is doing. Below and on the following pages are some examples of portfolio allocations composed at *frontier's* request by R. W. Rogé & Co., a financial planning firm that often deals with small-business owners.

THE YOUNG BEGINNER



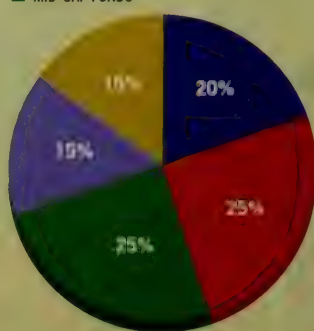
The business founded by this 30-year-old architect is beginning to throw off extra income. She has \$80,000 in a savings account (plus six months' living expenses in a money-market fund, which is not reflected in the following portfolio). She wants to begin saving to educate her children and fund her retirement. A conservative investor, she knows she needs to take some additional risk to help achieve her long-term goals.

STRATEGY: A young person has a long time horizon, which allows her to recover from any short-term market dips. So the portfolio is heavily weighted toward equities, using dollar-

cost-averaging to make small but regularly timed investments over many years, regardless of what the market is doing. Over time, this should help her learn to deal with a more aggressive portfolio than she would normally be comfortable with.

Asset Allocation

- MUNI BONDS
- LARGE-CAP FUNDS
- MID-CAP FUNDS
- SMALL-CAP FUNDS
- INT'L FUNDS



Business owner today.



Customized
WEBSITE
\$69

PER MONTH
Includes name registration,
semi-custom design by Verio,
and shared hosting.

Online entrepreneur next week.

SiteMerlin™ It's never been faster or easier to take your business online. Verio, the world's leading Web hosting company, is now offering a professionally designed and hosted Website for just \$69 per month with a one time set-up fee of \$50. Included in the price is domain name registration, shared hosting on Verio's state-of-the-art servers, and a monthly maintenance allowance that lets you modify graphics and add links at no extra charge. Best of all, with Verio's amazing SiteMerlin service, you'll be online and open for business in just days.

Get started now at www.sitemerlin.com or 877-837-4693

VERIO
The new world of business

and bonds, what annual return you expect, what degree of volatility you can live with, what types of stock you'll overweight or underweight, and what areas you'll never invest in—such as your own industry. "If you supply windshields to Ford, for example, we'd screen out auto companies for you," Levin says. "If they do well, so will your business."

A prudent mix. That means a money-market fund or very short-term, high-quality bonds for liquidity, plus a mix of large-, mid-, and small-cap stocks for growth. If you're in a high tax bracket, short-term municipal bonds make sense. "Keep enough cash reserves to meet your overall business plan. You want to make sure you don't starve the golden goose," says William Newell, president of Atlantic Capital Management Inc. in Sherborn, Mass.

Since you have a big venture-capital investment, keep a smaller percentage of your portfolio in stocks than the average person, says Richard Stevens, a principal at Vanguard. "If you're someone who'd normally invest 80% in stocks, 20% in bonds, for example, we'd be inclined to adjust it to 70/30."

If you want to spice up your portfolio with volatile investments such as emerging markets, real estate investment trusts, or commodities, keep them small. Evensky allocates 5% of the total to com-



EXPERT ADVICE: "If something isn't your area of expertise, why mess with it? I'm so busy. I can't keep track of this stuff," says hospital consultant Graf

modities, for example. He uses Oppenheimer Real Asset, a mutual fund designed to mimic the Goldman Sachs Commodity Index.

Once a year, rebalance your portfolio to return to your original allocation. In other words, sell some winners, and buy some losers. "Think of it as taking some of your profit to buy things that are on sale," says Bergen.

Broad-based mutual funds. Buying such funds is the simplest way to get a diversified portfolio, and the cheapest if you use index funds. The latter don't

THE MID-LIFE CRUNCH



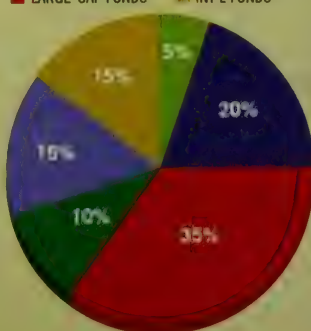
This 50-year-old faces a conundrum: His company is healthy and worth a considerable sum, but he's not planning to sell anytime soon. He has put away \$100,000, but that's not a lot when he's staring down the double barrel of college tuition and wedding costs for his kids, not to mention retirement.

STRATEGY: The entrepreneur needs to set up an emergency fund for setbacks in the business or his health. So he puts aside a 5% cash position in the portfolio, which will be increased until it equals six months of living expenses. Next, bonds will fund obligations that he knows are coming up. Start

with a 20% allocation to help pay for a 21-year-old daughter's wedding and a 13-year-old son's future college tuition. Once college and weddings are covered, the portfolio will be reallocated toward growth stocks to provide for retirement.

Asset Allocation

■ CASH ■ MID-CAP FUNDS
■ MUNI BONDS ■ SMALL-CAP FUNDS
■ LARGE-CAP FUNDS ■ INT'L FUNDS





You.

Us.

ewausau.com™

Small business insurance online from someone you trust.

pick stocks. They just buy whatever is in a broad market gauge such as the Standard & Poor's 500-stock index, which eliminates most costs associated with management, research, and trading. True, you'll never beat the market, but you'll virtually match it—and over the past decade, that's better than 80% of all diversified mutual funds.

Don't limit yourself to the S&P 500, which represents only big-cap stocks and is now heavily skewed to technology. Several sponsors offer small- or mid-cap index funds and funds that track the entire stock market. Look for tax-managed funds that avoid transactions that might create a big capital-gains bill. Vanguard's Tax-Managed Capital Appreciation Fund, which tracks the Russell 1000 Index, hasn't paid a capital gain since its launch in 1994.

The S&P 500, which has only big-caps, is now heavily skewed to technology

Does this mean you can't do any of your own investing? Of course it doesn't. The trick is to limit your play money to a small percentage—perhaps 10% to 20% of your portfolio—

so that you can't do any serious damage. Look at Emerman of Eagle PR. He holds a perfectly sensible mix of Fidelity mutual funds, a few riskier sector funds, some government bonds, and utility stocks given to him by his dad. But he also owns shares in Dell Computer, Cisco Systems, and General Electric. "They're fun," he says. "For the most part, mutual funds are rather boring. And although I wouldn't say there's peer pressure, when you're around others who are involved in individual stocks, it kind of seeps into you."

More often than not, though, entrepreneurs are disappointed by stocks that they "know," because their knowledge often turns out to be superficial,



THICK HEDGES: "Invest in something that will do well when your business doesn't," says Braud

warns Ron Rogé, a Bohemia (N.Y.) financial planner. "They base their opinion on customer service. They haven't seen the balance sheet and the income statement or talked to management. They just don't have time." Such entrepreneurs would be better off spending time on their own company, where returns are higher, and they're intimately acquainted with the balance sheet and management. It's the one case where "invest in what you know" looks like a sure thing.



Test your portfolio allocation and find the right mutual funds right for you. Click Online Extras at frontier.businessweek.com.

READY TO RETIRE



This entrepreneur has made it. At 60 years old, he just sold his business for \$12 million. Now he needs \$150,000 annual income to meet retirement living expenses, but he also wants to leave something to his children, grandkids, and charity.

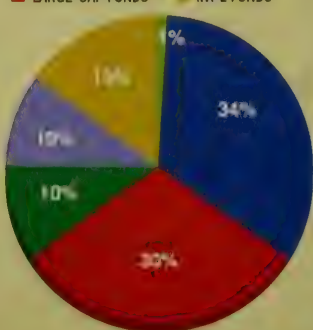
STRATEGY: At current interest rates, this portfolio should provide more than \$170,000 in tax-free income—and still leave 65% of portfolio in equities for growth. Given today's life spans, this ex-workaholic may well spend as much time in retirement as he did working, so he'll need some stocks for growth in the portfolio so he can keep

up with inflation and ensure something is left over for the estate. That said, the allocation and fund choices are more conservative, since the entrepreneur won't have new money coming in to make up for capital losses.

SOURCE: R. W. ROGE & CO.

Asset Allocation

- CASH
- MUNI BONDS
- LARGE-CAP FUNDS
- MID-CAP FUNDS
- SMALL-CAP FUNDS
- INT'L FUNDS



WHAT DOES THE E STAND FOR?

HOW DO YOU PUT AN E IN FRONT OF YOUR BUSINESS

WHAT'S AN APP?

WILL IT WORK?

ARE THESE APP'S

REALLY ALL THAT?

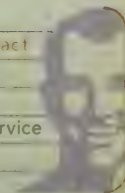


Relax. We'll help you with all this confusing e-stuff.

Micronpc.com is where you can get all the key building blocks for your e-business in one place. And your one point of contact will walk you through the entire process. Beginning with the gateway to your e-business, our ClientPro® desktop, which features the Intel® Pentium® III processor. Start making the most of e-business today.

Visit micronpc.com/ebiz13 or call 1-888-807-5801.

▶ 1 point of contact
e-business PCs
web hosting
e-support & service
online training



micronpc.com

Think beyond the box.™

Selling out

by Ellen Neuborne and Marc Perton Like any other mountain biker at a crossroads, Steve Christini, 28, relies on experience to choose the best path. In deciding which way to go on selling his mountain bike company, he relied on something else: a cold calculation of the chances Christini Technologies Inc. could ever, on its own, become the big, successful bike manufacturer he dreamed of. ♦ The problem was not a lack of inspiration. Christini had devised an ingenious design for a two-wheel-drive bicycle—the biking equivalent of a sport-utility vehicle—while he was still a mechanical engineering student at Villanova University in 1994. Two years later, with help from his patent-attorney brother, he launched his Philadelphia-based company and set out on what would prove to be a long uphill journey. ♦ After raising about \$500,000 from credit cards, family, and a state loan, he spent the first two years perfecting his design and patenting it. Over the next two, he built prototypes and cobbled together a distribution deal to sell bikes through a larger company. “We pulled a lot of all-nighters,” he says. “I was sleeping on the office floor, running power tools without sleeping for three days.” The hard work paid off. Christini’s prototypes, displayed at trade shows, started to build buzz among biking enthusiasts and manufacturers. ♦ However, by late 1999, Christini faced a choice: Seek additional financing to make the bikes himself as a high-priced premium product, or find a buyer for his company. In August, he agreed to sell his fledgling business in an all-cash deal to Stamford (Conn.) biking giant Derby Cycle Corp. The sale is expected to close shortly. “People don’t realize how difficult it is to make it on your own as a manufacturing company,” he says.

NOVEMBER 6, 2000



staying

So what if you're
not the CEO
anymore. The
best way to make
your business
grow might be
to sell it

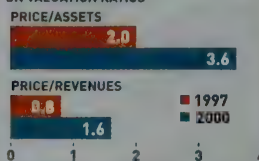
DEARHEAD: Christini's deal frees
him to turn from financing to
marketing and designing bikes

Will Christini now pedal off into the sunset, cash in hand? Not likely. He looks forward to running his small Philadelphia group of engineers and product developers as a tiny unit of a well-financed, 3,000-employee concern. The deal also means his company will be able to produce a lot more bikes, at a lower price than he could have on his own. "Instead of spending half my day on the phone with investment people, I can focus on what I do best, which is the design and marketing of products," says Christini, who is negotiating a three-year employment agreement with Derby Cycle.

While selling out and staying on may strike most entrepreneurs as the worst of both worlds, that's just what a pragmatic new breed of owners is doing. These owners view the sale of their companies not as a get-rich-quick exit strategy but as a long-term investment to help take their businesses to the next level. And, to get there, they're willing to

Value Added

SMALL COMPANIES ARE FETCHING HIGHER PRICES IN ACQUISITIONS, BASED ON VALUATION RATIOS*



*UP TO \$10 MILLION SALE PRICE
DATA: NVST.COM/DONEDALS

about deciding where the company will be most successful."

CONSIDER THE ALTERNATIVES

Take expansion. It's expensive, but if you don't grow, you risk losing out to better-financed competitors. An acquiring company may be able to provide resources, connections, and expertise you lack. Then, too, consider the alternatives: Seeking a venture capital firm's investment isn't problem-free either, as they're likely to demand a big stake in your company. And even if you're game, finding a willing vc these days isn't easy, particularly for Internet startups. Ditto for going public. Meanwhile,

Tight labor can mean you and your staff are welcome to stay

rising interest rates are making debt financing less attractive to many entrepreneurs.

While the long-running boom doesn't guarantee your company will fetch a strong price, experts say it has contributed to both a rise in mergers and acquisitions among small companies and higher sale prices (chart). In 1995, nearly 37,000 small companies were acquired, says Lori King, president of NVST Inc., a Bellevue (Wash.) subscription service that tracks mergers and acquisitions. This year, King estimates about 57,000 small companies will be sold.

"Everything is high today: The stock market is high, housing prices are going out of sight, and small business owners know the mood," says Tom West, author of *Business Brokerage Basics*. "When everything is high, it's a good time to get out."

But it's also a good time to sell out and stay on. The persistent tight labor market means that many companies are likely to want both you and your staff. "When management wants to stay and grow with the new owner, that's a great situation," says Brian Murphy, president of Acquisition Management Services Inc. in King of Prussia, Pa., which represents companies looking to acquire entrepreneur-



COVERLET GIRL:
Her tech problems solved, Chase focuses on her craft site

We All Know Who Invented The Airplane

Visioneer Invented One Touch Scanning

Visioneer's revolutionary OneTouch technology is changing the way people think about and use scanners. Visioneer's OneTouch 8650 uses a JET (JPEG Enhancement Technology) compression engine and an Automatic Document Feeder to fly through multi-page documents at 3 pages per minute. It even scans legal size documents—up to 50 pages at a time.

Take off with the latest Intelligent Imaging Solution from Visioneer and find out how simple it is to fax, copy, e-mail and store all your documents and images with the OneTouch 8650. It's fast, easy and affordable.



visioneer

ONETOUCH™

8650



Features

- 50 page capacity Automatic Document Feeder
- 3 PPM at 200 dpi in black and white
- 600 x 1200 dpi, 36-bit color
- 7 buttons: scan, copy/print, fax, OCR, email, custom and cancel
- Dual USB and Parallel Interface
- Affordable technology—\$299.99

 **visioneer®**
Intelligent Imaging Solutions

www.visioneer.com/onetouch

Staples.com

Wearing too many hats? Relax. Take a deep breath. And start ordering more than office supplies from Staples.com. Because now we can solve your other business needs. Like Payroll. Web Design. Printing. Marketing. Insurance. The list goes on.

Introducing Business Services from Staples.com

Since 1986, you've trusted Staples to bring you great deals on the best office products. All in one convenient location. Now you can expect the same thing with Business Services from Staples.com. We've used our experience, our resources and our connections to make your business run smoother.

We've done all the research and price shopping for you.

Whether you need help with printing, web site design, direct mail, staffing or payroll, count on Staples.com. Every service partner is researched. Screened. And scrutinized. We continually search for the best.

\$350 says you'll want to try our Business Services for yourself

There's only one thing better than getting your Business Services from Staples. Saving \$350 when you sign up for our most popular offerings. Go to www.staples.com/serviceoffers for this special deal. It's a decision you'll be absolutely comfortable with.

BUSINESS SERVICES



Portable

Work smarter. Not harder.

Over 65 high-quality services to choose from.

Staples Print Center

Buy 500 custom-printed business envelopes, get 500 free.

Register.com

*Register your domain name.
Get 6 months free with a 1-year registration.*

Concentric

*Special web hosting and customization.
First month free and no set-up fee.*

Staples InterPay

*Expedite payroll. Eliminate problems.
First two months free with sign up.*

MyProspects

*Qualified prospects for profitable direct mail.
Buy 1 name, get 1 name free - up to 500 names.*



SAVE UP TO
\$350

ON THE ABOVE BUSINESS SERVICES.*

Log on to www.staples.com/serviceoffers

*\$350 reflects total savings for all five services.

STAPLES.com

*For limited to #10 envelopes, white bond paper and black ink. Offers valid only at www.staples.com.

ial enterprises. "These are the healthiest deals—the ones that often produce the best growth surprises."

Lisa Hammond recently sold her Palo Alto (Calif.) promotional-marketing business to local e-commerce company MadeToOrder.com because she felt her company lacked the technological expertise to go it alone in the Internet economy. MadeToOrder CEO J. Weston Rose went to great lengths to keep Hammond and her 23-person staff happy—even if it meant accommodating her employees' needs for flexible work schedules in the frenetic culture of his Redwood City (Calif.) company. "My goal is zero attrition. I don't want to lose a soul," says Rose. "What we needed to flex to make this happen, we did."

Hammond, now vice-president for merchandising, negotiated both the terms of her own continued employment as well as the role of her em-



ALL TOGETHER NOW: Hammond negotiated terms for her staff of 23

ployees. "I feel like I'm back doing what I love to do, focusing on the creative spin of the business," she says. "As for the people who have been with me—some of them since the beginning seven years ago—I feel I'm giving them opportunities that I couldn't have given them on my own."

ROLLUPS

As Hammond's experience shows, your buyer could be an entrepreneur much like you, who is acquiring smaller outfits to grow. In the arts-and-crafts business, for example, Playa del Rey (Calif.) CraftClick.com, with 50 employees, has acquired 19 smaller craft-related Web sites since the beginning of the year. "We knew that to be successful in the arts-and-craft space, there would have to be a roll-up," says CEO Peter Yollin. "We had to develop economies of scale."

Once smaller Web sites join the CraftClick net-

Avoiding Culture Shock

What makes an acquisition deal go sour? It's not usually contract terms or price, says Elcha Buckman, president of Buckman Consulting Associates in Fort Lauderdale, Fla. Most often, the culprit is a clash between the buyer's and seller's cultures. "Culture is the other bottom line," says Buckman, who draws from her business experience and her background as a psychiatric nurse to help

evaluate the potential success of a small-company acquisition. Buckman spoke with reporter Ellen Neuborne about the importance of what she terms "cultural due diligence." Edited excerpts follow.

Q: What's the best cultural predictor of a successful merger between a small company and a larger one?

A: Mostly, you are looking for pieces

leave you alone," that probably is not realistic. That can't happen. You can't have two CEOs. You have to blend.

Q: Can an acquisition work even when the two companies have very different cultures?

A: Yes. When I evaluate a target and determine cultural differences, I don't say: "Don't do this deal." I say: "Here is what you are going to have to do to make the human element work." You can do it if you don't fall into management lies, such as "Nobody is going to lose their job" or

"Nothing is going to change." Communicate what will happen.

Q: Suppose the firm that wants to buy you is family-owned?

A: That is a big challenge. I had a situation once where a family-owned tool and die shop in Florida bought a smaller California business. Everyone thought the cultures should mix—similar business, similar climate. But the California operation was not a family business and they really didn't understand how different it would be. Family businesses are often softer, more touchy-feely, and this was not what they were used to. We did a lot of workshops with them to help them get used to this new culture.

"You can do it if you don't fall into management lies"

that match. It's nice when a lot of pieces match, such as vision, mission, and philosophy. But if the way change is managed at both companies matches, you've got a winner.

Q: What's the top misconception of entrepreneurs who plan to sell out and stay on?

A: That they can retain their independence. Remaining independent is impossible. Even if the acquirer says "we will



BIZZED INTRODUCES GOVERNMENT CONTRACTING
AND INTERNATIONAL GATEWAY.

TWO POWERFUL RESOURCES TO BUILD YOUR BUSINESS.

- GOOD** *Make cold calls to potential clients — here and abroad.*
- BETTER** *Attend a seminar about domestic and foreign business opportunities.*
- BIZZED** *Expand your horizons with access to U.S. government contract openings, worldwide business information and a galaxy of support systems to facilitate your national and international expansion.*



Powerful resources for your small business

Bizzed.com resources include ADP, BellSouth, Beyond.com, Bizfinity, Biztravel.com, Cardservice International, Citibank, Diners Club, iSyndicate, LanguageWorks, Netopia, Network Solutions, PrimeStreet, Qpass, Salomon Smith Barney, U.S. Small Business Administration, Travelers Insurance, Vista.com and World's Easiest Printing Center.

Brought to you by Citibank and Citigroup, Inc. ©2000 Citicorp. All rights reserved.

work, the original owners generally stay on to run their Web sites, free from worries about securing capital or dealing with technical issues. "I knew how to run this site," says Renee Chase, founder of Crafter.com, which was launched in 1995 in Midlothian, Tex., as one of the Web's first community sites for craftspeople and acquired by CraftClick earlier this year. "But I didn't have any technical resources." Her tech problems solved, Chase now gets to focus on her passion full-time. "It's a dream job. I telecommute. I love what I'm doing, and I even get a regular paycheck."

An entrepreneur's independence can make taking orders from others difficult

Independent-minded entrepreneurs often find it hard to suddenly take a backseat. Roderick Robertson sure did. Robertson intended to stay on when he sold his \$10 million pet-supply-distribution business in Boston, Great Eastern Premium Pet Co., to a group of private investors last year. But about two months into the new arrangement, Robertson felt superfluous. "All of a sudden, you're on the outside looking in," he says. "I went to a meeting once and there were four people in the room. And one turned to me and said: 'O.K., Rod, we'll call you if we need you.' I was shocked. I was always the one sitting at

REALITY CHECK

Still, going from "CEO to Joe Paycheck" isn't for everyone, warns Fred Zirkle, of Zirkle & Co., a mergers-and-acquisitions consulting firm in Spokane, Wash. Independent-



OUTTA THERE: Robertson bailed soon after selling his company, preferring "the flexibility to call my own shots"

the table," he says. By mutual agreement, Robertson departed. He now runs a small company that makes promotional CD-ROMs. "The flexibility to call my own shots far outstrips the security of a big ship," he says.

SHARED VISION

How do you know if selling but staying on is the right strategy? First, honestly gauge your commitment to sell and your stomach for ceding control. The emotions of the owner are often a bigger obstacle than price, says Brace Carpenter, of Carpenter Hawke & Co., a Boston firm that specializes in small and mid-size company mergers and acquisitions.

In addition, carefully review the nonfinancial aspects of the deal. Consider how your work cultures will mesh and whether you share a vision for your product and market. How will you manage personnel issues—not just for yourself but for your employees? Will there be changes in the compensation strategy? In benefits? In work processes?

Before you sign a deal, nail down all the personnel details, from executive changes to seating arrangements. And don't forget to clarify your own role and title, as well as incentives, stock options, and other compensation.

Ultimately, entrepreneurs who have sold their companies with the intent of staying on offer this advice: Keep sight of what you really want. If it's to get out, fine. But if the sale is intended to jump-start your business' growth, don't lose sight of your goal. "Any time you start a business, you put your heart and soul into it," recalls Crafters' Chase. "But being acquired gave me the potential to put my knowledge and efforts into something that could truly grow larger. I never would have been able to do that by myself." That, she says, is selling up, not out.

Ready to Roll?

Before you put your company on the block:

ORDER YOUR FINANCES Get an audit, if necessary. Depending on your industry, you may also need to prepare records covering more than just your finances, such as Web site traffic info.

PREPARE A BUSINESS PLAN OR PROSPECTUS If you never wrote a plan, it's high time you did. If you're updating an old document, make sure projections of revenues, sales, and expenditures reflect current business realities.

LEARN WHAT YOUR COMPANY IS WORTH Unrealistic valuations can kill a deal. Research similar transactions in your industry; work with accountants and business brokers. Speak to a specialist who knows your industry. You can expect to pay anywhere from \$2,000 to \$20,000 for a professional valuation.

LEAVE NOTHING HANGING Have any active lawsuits? Settle them. Environmental issues? Clean them up. Buyers don't want anything troublesome hanging over the company.

INVEST IN UP-TO-DATE TECHNOLOGY The cost of integrating your data with that of an acquirer can be a deal-breaker—especially if you're in a tech-dependent business. Find out what systems and platforms others in your industry are using and invest in those rather than proprietary systems.



For more on how to value your business and prepare it for sale, click Online Extras at frontier.businessweek.com

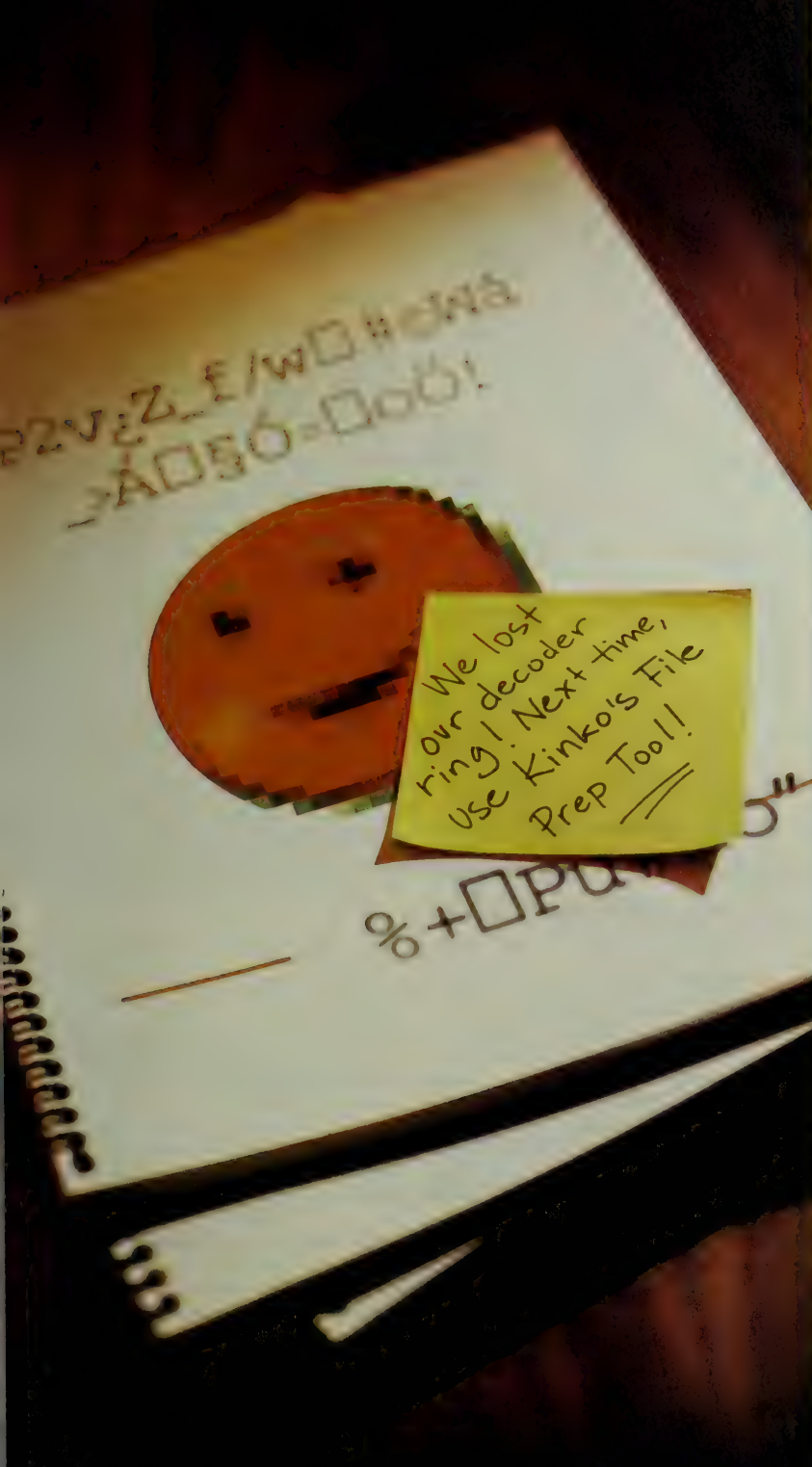


fig. 1 Create your document.



fig. 2 Convert to a print-ready file using Kinko's File Prep Tool™ software.

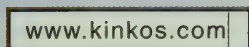


fig. 3 Log on and click:
Print to Kinko's™



fig. 4 Quality output that you
can pick up or have delivered.

Now there's a better way to print your document from your desktop. Just visit kinkos.com™ and submit it using Kinko's File Prep Tool™ software. Download your free copy of Kinko's File Prep Tool™ software from kinkos.com™ or get it at any Kinko's location today. And make sure nothing gets lost in the transmission.

ELECTRONIC FILE SUBMISSION • PRESENTATIONS • MANUALS & REPORTS • BUSINESS CARDS

STATIONERY • BINDING & FINISHING SERVICES • SHIPPING SERVICES

kinko's

America's Online Keyword: kinkos.com
Open 24 hours • 1-800-2-KINKO'S

Kinko's File Prep Tool available in Windows version only. Patent pending. Windows is a registered trademark of Microsoft Corporation. America Online is a registered service mark of America Online, Inc. Kinko's, kinkos.com, Print to Kinko's, Kinko's File Prep Tool and KFP are proprietary marks of Kinko's Ventures, Inc. and are used by permission. ©2000 Kinko's, Inc. All rights reserved. Products and services vary by location and are subject to availability. Kinko's requires written permission from the copyright holder to reproduce any copyrighted work.



Before You Go Ballistic...

When stress literally makes you hit the wall, it's time to rethink how you run your business

BY KEVIN KELLY

I AM NOT A VIOLENT MAN. I do not hit my wife or children, I am kind to animals, and I hate yelling. So when I found my fist plunging through the Sheetrock in our hallway one day last summer, I knew I was in trouble. I turned to my wife, with whom I had been discussing problems in our family-run plastics-manufacturing company, and confessed the obvious: The stress was getting to me. It was time for a change—past time, as my bruised hand bore witness. I had to figure a way to control my stress and learn a better way to handle the anxieties that come with operating a business.

Over the past several months I've made some moves that didn't always come easily. I hired an operations manager to oversee our factory, a responsibility that had swamped my time and, given my other tasks, was hard to do well. I've also made a point of getting home by 6:30 p.m. three nights a week so I can see our children and eat dinner with my wife. And I'm exorcising my demons by working out more and experimenting with yoga and meditation.

How did I let myself get so pent-up? Call me, in part, a victim of circumstance. The past year has been a roller coaster. First, our sales skyrocketed, and that put huge demands on my time. Then last April, we lost our second-largest customer, which brought me to the brink of depression. It may be a failure of my personality, but I took

the loss of this 21-year relationship very personally. Sales then took off again. The ups and downs wore me out, and the stress of managing operations, finance, and sales made it difficult to leave the job at the office, which isolated me from my wife and kids.

Clearly, some of the blame rests with me. Like many other entrepreneurs, I tend to involve myself in every detail of my company. With sales growing 20% this year, the flood of is-

Now, I get home by 6:30 three nights a week to see more of my wife and kids

sues I faced each morning just became overwhelming. My management style in the factory complicated matters further because I tended to manage by putting out fires, rather than preventing them. Twelve-hour days increasingly became the norm. As a man with few hobbies, I really had no outlets for the growing stress.

So it's not surprising my fist ended up planted in our wall. But with that outburst as a warning sign,

and some prodding from my wife, Erin, I began to make changes. The first move was relatively easy. Our company had been sharing an operations manager part-time with a friendly rival who really didn't need him any more. He wanted to come on board full-time, which I agreed to in August. To my relief, that off-loaded the nagging problems, and the accompanying stress, of overseeing the factory. I kept a hand in personnel issues, including decisions about raises and firings, but at least I didn't have to make them alone anymore.

Personal changes have come more slowly. I took a small step forward just by fulfilling the commitment to be home for dinner more, which has helped me reconnect with my family. Another step was taking our first vacation in three years last September, a 10-day trip to the mountains, where I actually felt myself uncoil. I joined a local gym to get some exercise during my lunch hour. And taking a cue from heart guru Dr. Dean Ornish, I've started taking yoga lessons to help me learn how not to blow gaskets when the inevitable daily pressures close in.

Clearly, I'm not home free yet. But I think I'm pointed in the right direction. And I can already see that delegating some of my responsibilities to others has helped the business: Our new operations manager has our factory humming like it hasn't done in years. If he keeps it up, I'll be humming, too—as in "Ommmmmm."

Kelly is an officer of Emerald Packaging Inc. in Union City, Calif. How do you cope with stress? E-mail us at frontier@businessweek.com





Turn A Good Business Trip Into A Great Weekend.

Business Options™

- ☒ Add Up to 2 Weekend Nights at 50% off the Business Options Rate*
- ☐ Full Breakfast**
- ☐ 500 Bonus Frequent Flyer Miles or 2,000 Bonus Priority Club Points***
- ☐ Upgrade to Junior Suite, Business Room or Club Inter-Continental

To customize your next business trip, ask for Business Options. Add up to two weekend nights for half price, or choose one of the other Options available at more than 100 locations in North America. A privilege that will undoubtedly make your next business trip more pleasurable. Either contact your travel agent, or call toll-free.


INTER-CONTINENTAL.
 HOTELS AND RESORTS

interconti.com
 800-327-0200



crowneplaza.com
 800-2-CROWNE

North America • Latin America • Europe • Asia Pacific • Middle East • Africa

Blackout dates apply. Advance reservations required. Limited number of rooms available in this promotion. Option must be selected at time of reservation; if option not available at check-in, substitute will be offered. *50% off weekend nights: Limited number of discount rooms available. Receive up to two weekend nights on same stay at 50% off the Business Options rate. To receive Friday or Saturday at 50% off, stay must include Thursday night at the regular Business Options rate. To receive Saturday and Sunday at 50% off, stay must include Monday night at the regular Business Options rate. Discount applied at check-out. 50% discount not applicable to Sunday check-in, or on stays of more than seven nights; not available in Japan, at Resorts and selected other locations. **Breakfast for up to two people per night, in designated restaurant. ***Must be Priority Club member to receive Priority Club points. At Crowne Plaza, must be Priority Club member to receive bonus miles on participating airlines, if bonus miles are not available on your designated airline, Priority Club points will be awarded. Allow 6-8 weeks for miles or points to be posted to your account. Points or miles awarded according to standard terms and conditions of Priority Club and airline frequent flyer programs. Call 1-800-272-9273 for free Priority Club membership. Void where prohibited by law. Not available to groups or with any other promotional offer. Other restrictions may apply. ©2000 Bass Hotels and Resorts, Inc., a subsidiary of Bass PLC. All rights reserved. Most hotels are independently owned and/or operated.



Dixie Clicks

***Jezebel*, a youth-oriented lifestyle magazine, is burning up Atlanta**

IN 1996, WHEN PUBLISHERS Joshua Goodhart and Adam Capes asked an Atlanta focus group its opinion of *Jezebel* magazine, the response was overwhelming: They loved it. They read every issue. Not bad, considering that *Jezebel* didn't even exist yet. "It sounded like something they already liked having in their lives," says Goodhart (left). He and Capes took the hint, and the duo's lifestyle magazine for hip young Atlantans is as popular as the focus group suggested it would be.

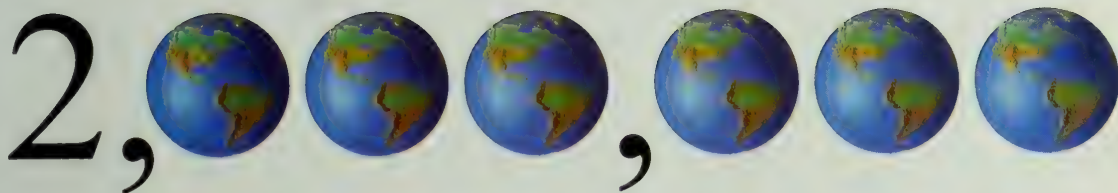
Capes, 28, and Goodhart, 27, caught the publishing bug early. The Cornell University roommates found that the campus newspaper ignored the local entertainment scene. So in 1993 they

started their own alternative paper, *The Globe*. The first issue made \$500. By graduation, *The Globe* was making upwards of \$100,000 a year. After college, the two midwesterners sold *The Globe* and moved to Atlanta, hoping it would boom after the Olympics. There the city's dominant glossy, *Atlanta*, catered to an older crowd. With their *Globe* earnings and "several hundred thousand dollars" from a pharmaceutical exec turned angel investor, they launched *Jezebel* in October, 1996. Biblical references aside, Capes and Goodhart thought the name sounded both provocative and Southern.

Splitting editorial and business duties, they started giving away 30,000

copies of a 64-page magazine in trendy clubs and restaurants. *Jezebel* now passes out 50,000 copies with 244 pages a month. Part-time Atlantan Elton John and Georgia native Kim Basinger have appeared on the cover. "*Jezebel* was the first magazine that gave single professionals some insight into Atlanta," says Scott Strumlauf, a local restaurateur and real estate developer.

Capes and Goodhart say *Jezebel*, with 20 employees, has made money since 1998 and will have revenues of about \$2 million in 2000. The duo insist they're still just "regular guys." But if *Jezebel* gets any hotter, the publishers may soon be gracing magazine covers themselves. —KIMBERLY WEISUL



business management software customers worldwide.

We're Sage®, the world's leading provider of business management software, with more than 1,200 new customers every business day. For medium-size businesses, there's MAS 90, recommended by more CPAs than any other mid-range business management software; Abra, the market leading HR/Payroll solution; and FAS, the standard for fixed asset management, outselling the competition 3 to 1. For larger businesses, there's Sage Enterprise Suite, which has won the Microsoft® Industry Solution award three years running. For more information, call us at 1-888-878-7822. Or visit us at www.sage.com.



Through knowledge comes control

MAS 90®

Abra®

FAS™

Peachtree®

Sage Enterprise Suite™

Yikes: I'm on my own.

Running a small business is exhilarating, overwhelming. Must keep clients happy. Upgrade software, do taxes, call my supplier for the fourth time. Make that the fifth. Oh, the glamour of being the boss.

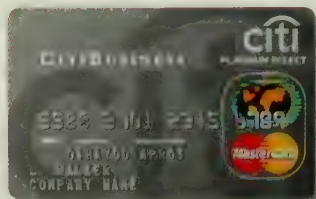
I love the pressure. I hate the pressure.



Introducing the CitiBusiness® Platinum Select® Card. • A generous line of credit
Quarterly and annual account summaries • CitiBusiness Card's "Ask the Experts" service
Set credit limits for each employee • Customized billing date • Unsurpassed acceptance
Take charge of your small business needs.

Wow: I'm on my own.

Get the CitiBusiness Card for Small Business.



1 800-965-3355

No Annual Fee for Charter Members. Call now.

citibankSM

CitiBusiness® and Platinum Select® are registered service marks of Citicorp. ©2000 Citicorp. A Charter Member is defined as a primary cardmember who has applied for the CitiBusiness® Platinum Select® Card between 5/17/2000 and 12/31/2000. The fee for additional cards is \$20 per year and includes up to the first four cards. Each card thereafter is just \$5 per year.

SUPER STRUCTURES

This year's best architecture projects bring elegance, economy, and spirit to the solution of business problems

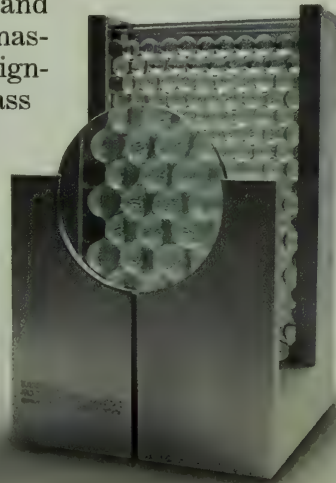
The power of architecture to integrate people, spaces, and even complex workflow is the dominant theme running through this year's BUSINESS WEEK/Architectural Record Awards, sponsored by the American Institute of Architects (AIA). Architects used materials such as glass to enhance the transparency of work and bring together various teams. They crafted office spaces to spark creative interaction among employees—and corporate clients. And they mastered the “wow factor” by designing a “cosmic cathedral” of glass and steel, a planetarium of astonishing beauty that allows people to see through walls to learn about the stars and the planets.

If this contest is any measure, the awareness of architecture's abilities to expand market share and generate revenue appears to be spreading. Indeed, architecture's special ability to gen-

erate buzz and attract mass audiences and elite participants is increasingly evident to private businesses and public institutions.

This is the fourth annual BUSINESS WEEK/Architectural Record Awards contest (BUSINESS WEEK and *Architectural Record* are owned by The McGraw-Hill Companies; *Architectural Record* has its own write-up in the October issue). It is unique among major awards programs in that the jury includes both businesspeople and architects. Applications are judged on the basis of architectural renderings and business plans. The goal is to solve difficult business problems with architectural solutions. Serving on this year's jury: William Agnello, vice-president at Sun Microsystems; Edward Ciffone, senior vice-president at Morgan Stanley Dean Witter; and Tom Peters, author of *In Search of Excellence* and guru of management, innovation, and, recently, design to Corporate America.

The extraordinary range of



projects shows architecture's reach. An entire container-shipping terminal in Los Angeles was redesigned to increase the efficiency of the trucks moving through its 175 acres. From a graceful canopy that shields lunching truckers from the rain to gates, guard booths, and landscaped patios, architects improved productivity as well as the rough working environment.

A terraced wall of green that climbs up a

15-story office and municipal building in Fukuoka, Japan, extends a public park—vertically. In India, combining modern architecture with traditional clay and other local materials permits the new Mahindra United World College to create a campus that hugs the rolling hills of the Sahayadri Mountains—and attract students and faculty from around the world.

French-based Valeo Thermal Systems, a

AWE-INSPIRING

The Rose Center for Earth & Space at the American Museum of Natural History lights up the Manhattan night



supplier of new and replacement automotive equipment, and their architects used glass to bring together designers, engineers, and production people in their new Auburn Hills (Mich.) facility. Glass walls enhance visual contact between different teams, and skylights flood the entire building with natural light. There is a certain elegance to glass, a key material used by many winners this year.

The AIA chooses the jury that judges the

BUSINESS WEEK/*Architectural Record* contest. This year there were 147 entries, with 131 coming from the private sector and 16 from the public. The largest category of entrants was for new construction of buildings, followed by interiors and renovation of older structures. There were big projects and small—37 projects submitted were more than \$25 million and 22 less than \$1 million. Entries came from 22 countries, including



TERMINAL WELLNESS

Manjin Shipping's new Los Angeles facility is designed to keep trucks moving efficiently



Japan, India, Australia, Canada, Britain, Barbados, Malaysia, Virgin Islands, the Netherlands, Germany, Austria, and the U.S.

Architecture here is transformative not just of small spaces—be they work areas or schoolrooms—but also of huge structures, such as planetariums and shipping terminals. It solves problems inside the passageways that connect subways to retail stores in Japan, or outside on Indian mountainsides. It can integrate complex components to create something entirely new and profitable. A more detailed look at the winners of this year's BUSINESS WEEK/*Architectural Record* Awards and why they won begins on page 122.

By Bruce Nussbaum in New York



TRADE SCHOOL SECRET

Quebec's Saint-Hyacinthe School doubled enrollment after its new building went up

BUSINESS WEEK / ARCHITECTURAL RECORD AWARDS 2000 JURY MEMBERS

WILLIAM AGNELLO, VP of Workplace Resources, Sun Microsystems

CAROL ROSS BARNEY, Founder and President, Ross Barney & Jankowski

EDWARD CIFFONE, Senior VP and Facilities Director, Morgan Stanley Dean Witter

HENRY COBB, Founding Partner, Pei Cobb Freed & Partner

JULIE EIZENBERG, President, Koning Eizenberg Architecture

ROBIN M. ELLERTHORPE, Senior Associate Director, Facilities Consulting, O'Donnell Wicklund Pigozzi & Peterson Architects

JAMES O. JONASSEN, Managing Partner, NBBJ

TOM PETERS, CHAIRMAN, Tom Peters Group

WILSON POLLOCK, Founder and President, ADD

JANE WEINZAPFEL, Principal, Leers Weinzapfel Associates

The end of

OUTSOURCE ANXIETY

HE KNEW HIS
SERVICES WERE
BULLETPROOF.

NOW THE SUNTONE
SEAL TOLD THE REST
OF THE WORLD.

TRYING TO PROVE RELIABILITY IN THE SERVICE PROVIDER LANDSCAPE CAN DRIVE YOU CRAZY — UNTIL NOW.

SUNTONE CERTIFICATION IS AN OBJECTIVE WAY TO ASSURE CUSTOMERS THAT YOU'RE COMMITTED TO PROVIDING THE UPTIME THEY NEED. DEVELOPED BY SUN, TOGETHER WITH MANY OF TODAY'S BEST-OF-INTERNET COMPANIES, THE SUNTONE PROGRAM'S RIGOROUS EVALUATION LEAVES NO STONE UNTURNED. EVERY CATEGORY CRITICAL TO AN SP'S PERFORMANCE IS EVALUATED — FROM SERVICES TO INFRASTRUCTURE TO SOFTWARE TO OPERATIONS. THOSE WHO EARN SUNTONE CERTIFICATION HAVE PROVEN THEY CAN PROVIDE SERVICES ENABLING DIALTONE-LIKE RELIABILITY (IT'S LIKE GETTING AN ELEVEN ON A TEN SCALE). CUSTOMERS WANT YOU TO STOP THE OUTSOURCE INSANITY. THE ONLY SANE THING TO DO IS VISIT WWW.SUN.COM/SUNTONE-NOW AND FIND OUT HOW TO GET CERTIFIED.



SUNTONE[®]
CERTIFIED

THE NETWORK IS THE COMPUTER.™ WWW.SUN.COM/SUNTONE-NOW © 2000 SUN MICROSYSTEMS, INC. ALL RIGHTS RESERVED. SUN, SUN MICROSYSTEMS, THE SUN LOGO, THE WAVE COFFEE CUP LOGO, THE SUNTONE LOGO, SUNTONE, THE NETWORK IS THE COMPUTER, AND WE'RE THE DOT IN .COM ARE TRADEMARKS OR REGISTERED TRADEMARKS OF SUN MICROSYSTEMS, INC. IN THE U.S. AND OTHER COUNTRIES.



We're the dot in .com™

SUBCONTINENTAL SERENITY



The goal was to create in 14 months a campus for a college-prep school that would attract students and faculty from within India and

around the world. The resolution: Combine modern architecture with local materials. There was also an attempt to pay strict attention to traditional Indian beliefs. Clay roof tiles, stone, and poured concrete create an earthy palette of colors that fits into the surrounding hills of the Sahayadri Mountains, distant lakes, and the river valley below. The buildings offer striking views of the landscape, and the en-

trance gate, or *mahadwara*, aligns with the north-south axis, an important factor in the belief system of this region of India. It binds cultural insight to educational experience. An art center makes bold use of walls of glass. Outside, broad steps provide access as well as places for students to meet and relax. The school's admissions goals have so far been exceeded.



The Mahindra United World College of India uses stone, clay, and other local materials to create an environment that fits into the surrounding hills

MAHINDRA UNITED WORLD COLLEGE OF INDIA India

CLIENT Mahindra United World College of India

ARCHITECT Christopher Benninger & Assoc.; Peter Wilson & Assoc.

BUILDING TYPE College-preparatory school

AWARDS CATEGORY Private sector, under \$5 million





FRUGAL, BUT FULL OF ENERGY AND LIGHT



What does a fast-growing young ad agency like Ground Zero do when it needs a larger, more flexible

and inexpensive space with a sharp design that shows clients that it is superinnovative? The answer is to pick an architecture firm that embodies a similar culture. Its solution was to punch skylights into the roof of an inexpensive, windowless tilt-up concrete warehouse, and knock down the walls. A dramatic ramp access to the building creates an immediate sense of excitement for clients. Open spaces, exposed beams, and metal ceiling ducts generate a sense of edginess, energy, and dynamism. Ten "war rooms" for intense collaboration line one wall, each clad in panels of translucent plastic and framed with metal studs. This is definitely a cool space for employees and clients.

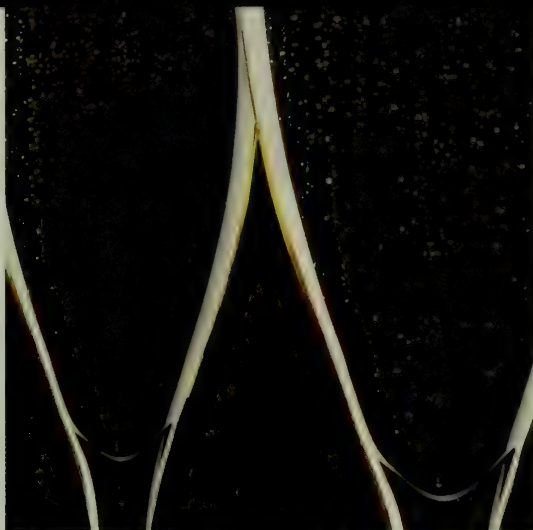


Open spaces, exposed beams, and metal ceiling ducts give the concrete warehouse a sense of edginess and dynamism, while 10 "war rooms" make collaboration a bright prospect

GROUND ZERO HEADQUARTERS Marina Del Ray, Calif.
CLIENT Ground Zero
ARCHITECT Shubin & Donaldson Architects
BUILDING TYPE Office for ad agency
AWARDS CATEGORY Private sector, under \$1 million

dreams made real.

Notice the way the bubbles catch the light? We did. Photonic switching from Agilent can deliver the wide-open speed of an all-optical network by bending light with bubbles. Bottlenecks are broken. Fiber is uncorked. Data flows like, well, you know. Cheers.



Agilent Technologies

Innovating the HP Way

Agilent Technologies is a new company composed of the former Hewlett-Packard test and measurement, chemical analysis, semiconductor components and medical products businesses. www.agilent.com



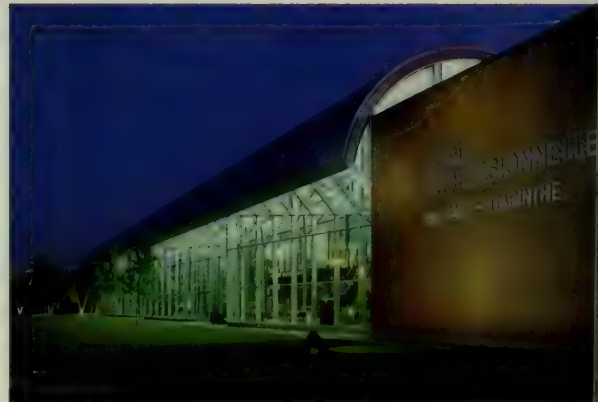
LEARNING EXPERIENCE



The building itself is a teaching tool for a construction-related trade school. The excellent use of fine

woods and masonry, attention to detail, and introduction of natural light celebrate pride of workmanship and the art of creating well-done, bright, livable spaces. An elegant metal and glass

canopy covers the "preau," the large gathering space for student dining, studying, and hanging out. By giving dignity to the form, the architects pay respect to the function of building with one's hands. It seems to have worked. The school's enrollment has more than doubled since the building's completion, and the number of programs teaching skills has tripled.



The Saint-Hyacinthe School of Trades & Technologies features an elegant metal canopy over the student gathering area (top)

SAINT-HYACINTHE SCHOOL Quebec, Canada

CLIENT Saint-Hyacinthe, Quebec, Canada

ARCHITECT ABCP Architecture-Urbanisme

BUILDING TYPE State-of-the-art trade school

AWARDS CATEGORY Public sector, under \$25 million



EVERY BUSINESS PLAN

HAS A FEW WRINKLES. OR SO THEY SAY.

Consulting Services

Financial Planning

Performance Management

Technology Services

International Services

Information Integrity

Assurance Services

Nothing in life is guaranteed. Even less is guaranteed in business.

But when you work with CPAs, you understand the implications of every step you make. You know the alternatives. You're ready for anything that comes up along the way. There may be wrinkles, but you'd never even know it in the end.



The CPA. Never underestimate the value.SM

Unrivaled



When business teams with technology...
VERITAS® gets you to the top

The Data Availability Company™

In a rocky and fiercely competitive global economy, your data is your most valuable asset.

Unrivaled solutions from VERITAS give you the vital edge necessary to scale new business heights.

VERITAS, The Data Availability Company, provides you with essential, industry-leading software solutions, UNIX to NT, data center to laptop, to continuously access and protect your business critical data.


VERITAS™
BUSINESS WITHOUT INTERRUPTION™

Visit us at www.veritas.com

© 1999 VERITAS Software Corporation. All rights reserved. VERITAS is a registered trademark of VERITAS Software Corporation in the U.S. and other countries. The VERITAS logo and Business Without Interruption and VERITAS are trademarks of VERITAS Software Corporation in the U.S. and other countries. Other product names mentioned herein may be trademarks or registered trademarks of their respective companies.

A 'COSMIC CATHEDRAL' IN THE BIG APPLE



An incredibly powerful architecture makes the Rose Center for Earth & Space an immediate global icon,

joining the likes of Frank O. Gehry's Guggenheim Museum Bilbao, Spain. Inside a glass cube 120 feet on each side sits a metal sphere 87 feet in diameter that houses a high-tech planetarium. Low on content in the glass makes it unusually clear, rendering the building a beacon in the New York City night. This is a brave structure that combines simple geometric forms with new materials to create a "cosmic cathedral" that inspires awe. Compared to the planetarium replaced, attendance was up 58% in the first eight weeks after opening, group reservations by 200%, and membership applications by 10%. Polshek Partnership Architects designed the structure. The exhibits and graphics meant to convey such concepts as scale and time in the universe were created by Ralph Appelbaum.

The new planetarium combines simple geometric forms with new materials. Unusually clear glass turns the cube housing into a beacon at night



ROSE CENTER FOR EARTH & SPACE New York City
CLIENT American Museum of Natural History
ARCHITECT Polshek Partnership Architects
BUILDING TYPE Planetarium/museum
AWARDS CATEGORY Public sector, over \$25 million



Integrating research, testing, and administration, the Valeo Technical Center makes extensive use of glass—keeping workers in constant visual contact

VALEO TECHNICAL CENTER Auburn Hills, Mich.

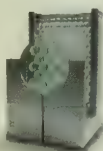
CLIENT Valeo Thermal Systems

ARCHITECT Davis Brody Bond

BUILDING TYPE Headquarters

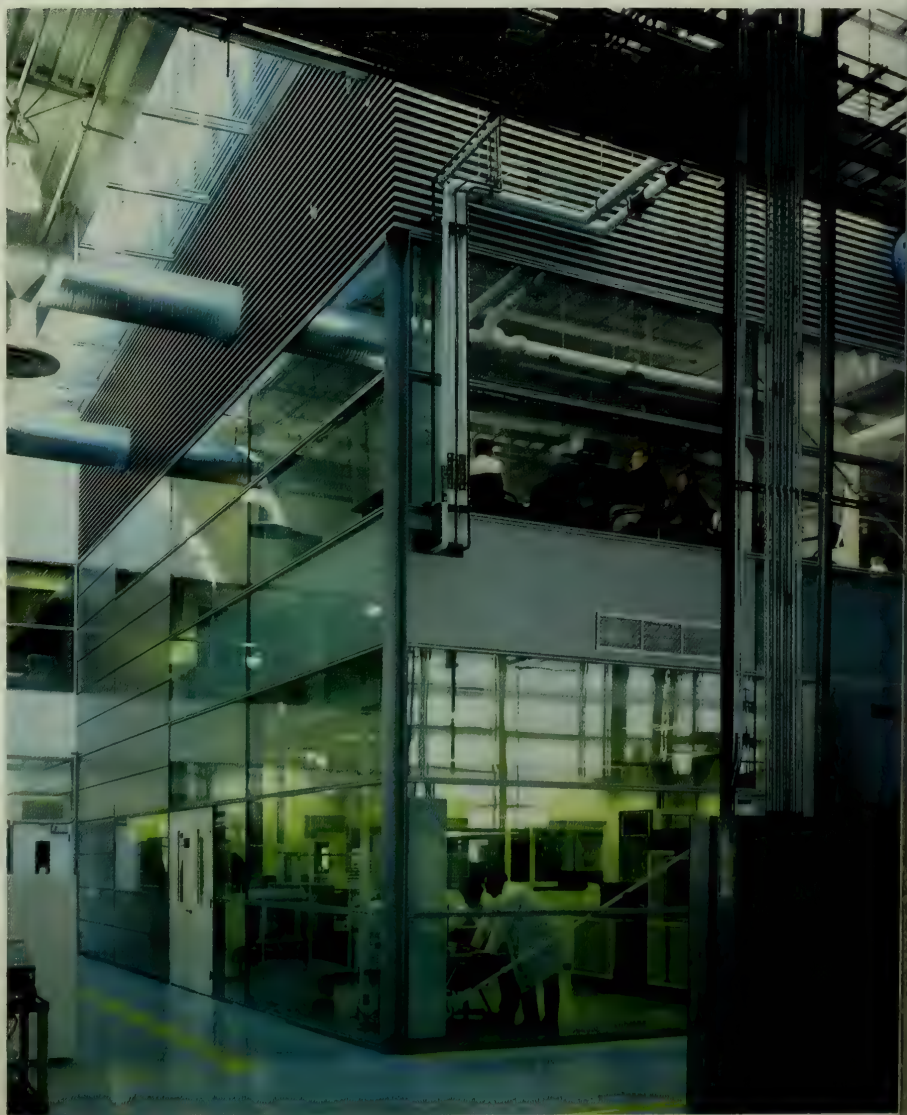
AWARDS CATEGORY Private sector, over \$25 million

PEOPLE WHO WORK IN GLASS HOUSES



This is a transparent solution to a French automotive-equipment manufacturer's U.S. needs. Glass is

used extensively inside the building to open up and connect offices and keep people in touch. The laboratory and testing areas are divided by soundproof glass, so that employees are in constant visual contact throughout the work process. The cafeteria opens onto a shaded outdoor space. Dropped-lighting armatures also incorporate power and data cables, allowing for quick reconfiguration of work spaces and work teams. Designers, engineers, testing staff, office administrators, and sales staff are brought together to interact in efficient, spare, and often elegant spaces. This is simply a glass box that exposes the entire process of creating and testing to view.



Around the world, the future of Visual Technology™ looks bright with ViewSonic®



Welcome to the Visual Revolution™

We have entered the new information economy. Where demand for niched content, e-commerce, business information and entertainment will be supplied through a variety of visual and communication products and services from ViewSonic.

ViewSonic is leading the visual technology revolution with OptiSync™ digital displays and networked internet appliances designed for B2B and B2C commerce. Look for our latest display technology and Internet appliances designed to deliver the ultimate visual communications experience across the world wide web.

ViewSonic, the #1 best selling monitor and display company in the USA* is working hard to lead the visual technology revolution in the information economy. Welcome to the Visual Revolution™

For more information visit:
www.ViewSonic.com

The Visual Technology™ Company





THAT'S SOME TRUCK STOP



The power of architecture to integrate complex work environments is captured in this project. Korea-

based Hanjin Shipping Co. is one of the world's fastest-growing ocean container shipping lines, with 3,400 employees in 47 countries. It needed a much larger, more productive terminal in the U.S. to handle containers and the trucks that move them. The owner, operator, and architect collaborated in

dissecting the operations of a port facility, rebuilding it piece by piece, and matching the flow of work and the way it gets done. Gate buildings, guard booths, and employee facilities were all designed to keep trucks moving efficiently. A canopy cuts down on exhaust fumes during inspection. "Who says a container terminal can't have beauty, grace, and wow?" says one juror. Hanjin's goal of doubling its volume was met within two years of the terminal's opening in 1997.



Beauty, grace, and wow: Hanjin Shipping's new terminal provides the company with much-needed space as well as a more efficient and pleasurable work environment.

HANJIN CONTAINER TERMINAL Los Angeles
CLIENT Port of Long Beach

ARCHITECT Robert Stewart Architect/Caldwell Architect

BUILDING TYPE Shipping terminal entry-gate complex

AWARDS CATEGORY Private sector, under \$25 million



1-800-CALL-HOME®

www.homewood-suites.com

6:35 AM, HOME



6:35 AM, HOMEWOOD

Being on the road doesn't have to mean changing your routine.

Because, at Homewood Suites® by Hilton, you'll find a lot of the

amenities and services you'd expect at home. Things like a spacious

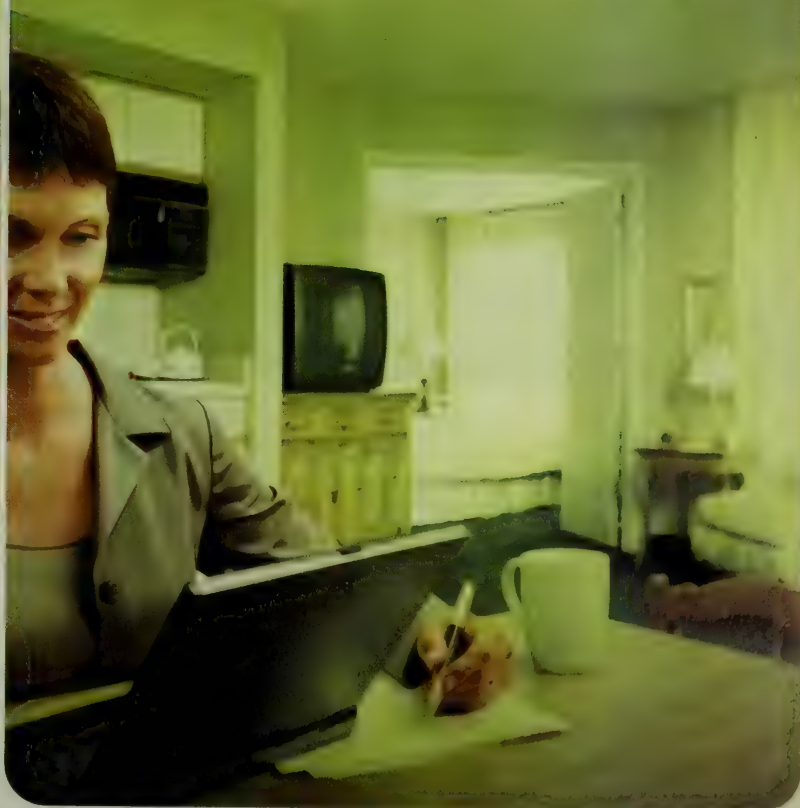
kitchenette with a fully equipped kitchen and a fully

equipped bathroom. To make

sure everything's just the way

you like it, we have

**MAKE
YOURSELF
AT HOME.™**



 **Hilton HHonors® Points & Miles™**

Homewood Suites® by Hilton is now part of Hilton HHonors®, the only hotel rewards program to offer both Points & Miles for the same stay. To join, visit www.hiltonhhonors.com.

© 2009 Hilton Hospitality, Inc.



ARTISTS ON THE FACTORY FLOOR



Sticks Inc. specializes in designing and manufacturing contemporary art objects made from fallen timber.

Hence, the term "sticks." Artists work in studios, and their creations are packaged and sent around the world. Demand grew so high that new space was needed. Work in the old building was on two floors and not very efficient. A collaboration between artists, architects, and owners of the enterprise redefined the work process, creating a linear flow on one floor. The artists' studios are now integrated with the manufacturing and shipping departments. The new building is situated in a grove of mature oak trees. Output is up 20% since it opened, while time for handling and transportation is down. Products are getting to market and customers a lot faster.

Des Moines-based Sticks, which sells art made from fallen timber to customers worldwide, boosted output by integrating its artists' studios with manufacturing and shipping



STICKS, INC. Des Moines, Iowa

CLIENT Sticks Inc.

ARCHITECT Herbert Lewis Kruse Blunck Architecture

BUILDING TYPE Commercial artists' building

AWARDS CATEGORY Private sector, under \$1 million

maximum

efficiency

Our benchmark: maximized cost efficiency in all of our businesses.

We have already taken decisive action to restructure our businesses for greater efficiency.

Going forward, we will continue to invest in state-of-the-art plants located in strategic growth markets around the world.

We will also seek to improve our manufacturing technologies to maintain our market leadership positions.

Our goal: a continuous increase of shareholder value.

Celanese AG, A global leader in the chemical industry. www.celanese.com



Only the non-upgradeable die young. 



Right now, Motorola's Smart Networks Platform is helping the world's leading networking companies create programmable, upgradeable products that won't become part of next year's landfill. Thanks to DigitalDNA™ chips, systems, software and ideas. Our sophisticated communications processors can enable products to live longer in market by adapting to future networking needs and standards. Imagine unleashing this technology on your next smart product. Find out more at www.digitaldna.com.

 **Digital DNA™**
from Motorola

THE HEART OF SMART.

©2000 Motorola, Inc. Motorola, DigitalDNA, The Heart of Smart, the DigitalDNA Logo and the Stylized M Logo are trademarks or registered trademarks of Motorola, Inc.



TURNING A TUNNEL INTO A TEMPTATION



By transforming what is essentially a pedestrian tunnel into an enjoyable experience, the Iwataya Department Store in Fukuoka, Japan was able to attract more customers from the subway to its basement shops. Fukuoka is the

"Venice of Japan," with heavy rainfall and canals criss-crossing the city. People use underground tunnels to go from building to building without getting wet. The retail store was losing business because people were shopping in stores within the subway station rather than walk outside a few blocks in the rain to its

building. The solution was to build an underground passageway consisting of three suspended "bridges," of shimmering steel, cable, and glass, that appear to span water. Indeed, sounds of water play in the background. Customers seem to like the surprise. The bridges guide people directly into Iwataya's basement shops, and their elegance meshes with the store's own modern style. After the underground passageway was completed, the number of shoppers increased 9.6% on weekdays, boosting profits.

Three suspended underground "bridges" made of shimmering steel, cable, and glass seduce customers into passing directly from the subway to the store's basement shops

IWATAYA PASSAGE Fukuoka, Japan

CLIENT Iwataya Dept. Store, NT&K Kyushu Dev. Co.

ARCHITECT Walker Group/CNI

BUILDING TYPE Underground passageway

AWARDS CATEGORY Private sector, under \$5 million



KIDS' MERCHANT, GROWN-UP NEEDS



This fast-growing designer and retailer of kids' clothes had several goals in mind. It wanted a new building

in a less expensive location with open spaces to bring its employees together, plus a retail store to act as a working laboratory for merchandising and design concepts. Retaining employees in the move was also important. The company got all of that and more. Using the kinds of materials and products already in its retail stores, architects built a light-filled, comfortable working environment. Top-of-the-line furniture, flat-screen technology, and other quality work tools were ordered and installed. Once they saw the building, nearly all the employees chose a longer commute to the new headquarters over quitting—yielding savings in intellectual capital, as well as money.

When the company relocated, it installed top-of-the-line furniture and work tools in a light-filled space. Most employees chose to stay, in spite of the longer commute

THE CHILDREN'S PLACE HEADQUARTERS Secaucus, N.J.
CLIENT The Children's Place
ARCHITECT Davis Brody Bond
BUILDING TYPE Corporate headquarters
AWARDS CATEGORY Private sector, over \$25 million



We have the

TECHNOLOGY

A leading **Java-based** personalization and e-commerce platform.

We have the

PARTNERSHIPS

A network of more than 150 of the **world's best** technology and solution partners.

We have the

E-BUSINESSES

Over 400 **worldwide customers** including Benetton, BlueLight.com, Eastman Kodak, and J.Crew.

We have the best

PLATFORM.

Do you?

The Internet is fundamentally changing the way businesses interact with their customers. ATG is a part of that, and has created a blueprint for maximizing the value of your e-business initiatives. Attend one of our *Blueprint for Customer Management* executive seminars to find out how your organization can take advantage of the ATG Dynamo e-Business Platform for building and managing online relationships with customers, suppliers, and partners. For more information, including seminar locations and online registration, visit www.atg.com/blueprint

atg[®]

TOWER IN A WILD KINGDOM



When the city of Fukuoka appropriated half of the five-acre Tenjin Central Park for a mixed government-commercial building, the residents were not happy about losing so much open space. Good architecture was viewed as one way to take some of the sting out of the loss. And Emilio Ambasz & Associates' 15-story building with lushly planted terraces spilling into the park is a creative solution to the problem. "The wall of wild hillscape is magical," says one juror. "It is an icon that helps the business

identity of the city." The terraces also act to insulate the building itself, lowering heating and cooling costs by 20%. Because the terraces also have stairs that double as fire exits, the owners gained a great deal of additional interior space to lease out. The million-square-foot building is known as ACROS Fukuoka. The acronym means "Asian Crossroads Over the Sea."



Terraces lushly spilling into the park make up for the loss of much of the public open space. One juror called the landscaped walls "magical"

FUKUOKA PREFECTURAL & INTL. HALL Fukuoka, Japan
CLIENT Daiichi Mutual Life, Mitsui Real Estate
ARCHITECT Emilio Ambasz, Nihon Sekkei, and Takenaka
BUILDING TYPE Office space
AWARDS CATEGORY Public sector, over \$25 million



Omron Technology at work.



Hole #4 Kemper Lakes Golf Course, Long Grove, Illinois

How can you tell when Omron products are hard at work? When you're not. A global technology leader, Omron designs and manufactures innovative solutions to make your life easier, more productive, and more comfortable. From industrial automation to electronic sensors. From healthcare devices to fare management systems. We make it all work for you.

Omron. The human side of technology. www.omron.com

OMRON

AUTOMATION | ELECTRONIC COMPONENTS
HEALTHCARE | AUTOMOTIVE ELECTRONICS | SOCIAL SYSTEMS

The path to e-business success is easy to follow.

BusinessWeek online



BusinessWeek
e.biz

*Get on the fast-track with BusinessWeek e.biz, our resource
for everything you need to know about e-business.*

ebiz.businessweek.com

E-business moves at lightning speed. To stay ahead of it, you'll need *e.biz* at businessweek.com. The channel that's unsurpassed at offering timely information, analysis, and tools you can use every day. *BusinessWeek e.biz's* in-depth coverage and archives let you look into the future and learn from the past. Our award winning editorial staff makes sure you know what's important on a daily basis. And best of all, it's all free

to *BusinessWeek* subscribers. One click and you're armed with the power only *BusinessWeek Online* can offer to help make your e-business ventures successful. And make you a leader worth following. Activate your free subscription today.



**2000 National Magazine Award Winner
General Excellence in New Media**

AOL Keyword: BusinessWeek
Internet Keyword: BusinessWeek ebiz

A Division of The McGraw-Hill Companies



Wakely Associates

Mt. Pleasant, MI • 517-773-9945 • www.gwa-wa.com

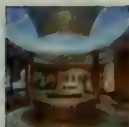
Wakely Associates is one of Michigan's oldest continuously operating A/E firms. Wakely Associates is an award winning, nationally recognized design firm delivering value through results. Featured is the Saginaw Valley State University Student Living Center. The success of this project was defined when 100% of available rooms were leased prior to the completion of construction. The 320 bed, 106,000 square foot facility offers data jacks at a rate of one for each bed, full kitchens in each unit, laundry and community rooms on each floor.



Saginaw Valley State University Student Living Center

HDR Architecture

55 offices worldwide • 800-366-7757 • www.hdrinc.com



Healthcare

#1 Healthcare Design Firm in U.S.

- Ambulatory Care
- Women's Health
- Oncology
- Replacement/Renovation



Justice

Award-winning Facility Designer

- Courthouses
- Crime Labs
- Juvenile Facilities
- Jails/Prisons



Science & Technology

Leading Edge Thinking

- Advanced Technology
- Biosciences
- Corporate Workplace
- Information Technology

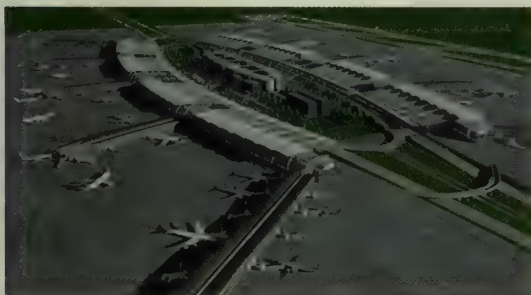


Call for Employment Opportunities

Architecture • Engineering • Planning • Interiors

URS Corporation

Columbus, OH • 614-464-4500 • www.urscorp.com



Ready for Takeoff • 2000 American Architecture Award

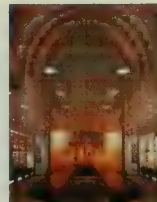
China's economy is poised for takeoff into the global marketplace. After a world class design competition, the Chinese government selected URS to design and engineer its new International Terminal at Guangzhou Baiyun Airport. More than 16,000 professionals in 160 principal offices worldwide make URS the natural choice for clients ranging from local businesses to national governments in helping their professional planning, architectural design and engineering needs take wing. URS's design for Guangzhou will help the Airport's smooth flight into the 21st Century. Whatever the project, URS Corporation has the professional talent and resources to meet the goals and expectations of clients nationwide and around the world



SmithGroup

www.smithgroup.com

SmithGroup professionals excel at providing planning, design, and management solutions for the natural and built environment, emphasizing ideas and collaboration in support of diverse business interests.



SmithGroup

- health
- learning
- reasearch
- manufacturing
- cities & communities
- office workplace

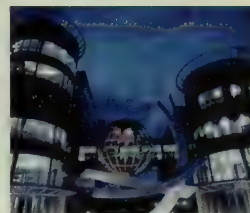
Ann Arbor • Chicago • Detroit
Kula Lumpur • Los Angeles • Madison
Manila • Miami • Phoenix • Reston
San Francisco • Washington DC



DLR Group

www.dlrgroup.com

- There's strength in our numbers
- 19 offices nation wide
- 500 national employees
- Ranked in the top 10 of A/E firms:
 - Largest justice firm (World Architecture)
 - 3rd largest educational firm (ENR Sourcebook)
 - 6th largest sports firm (ENR Sourcebook)
 - 7th largest architectural/engineering firm (Building Design and Construction)



But our real strength is our people. **DLR Group: We design confidence**

RTKL Associates Inc.

www.rtkl.com



We
design places
for every aspect
of life.

WORKING • HEALTH • LIVING • TRAVELING
GOVERNING • SHOPPING AND ENTERTAINMENT

William Nicholas Bodouva + Associates

New York, NY 10001 • 212-563-5655 • www.bodouva.com



WNB+A, a leading architectural firm specializing in transportation facilities, has for 30+ years been providing comprehensive planning and design services to distinguished airline, airport and rail transportation clients. Their success is a result of completing major complex terminal projects on schedule, on budget, and to the client's satisfaction. Major projects include: Terminal One at JFK, the International Pier at BWI, the Times Square Redevelopment, and the New Airport at BNIA. Significant projects presently in design include: United Airlines and JetBlue Terminals at JFK, and the West Midtown Intermodal Ferry Terminal.

PROFILES OF LEADING ARCHITECTURAL, ENGINEERING AND CONSTRUCTION MANAGEMENT FIRMS

Hellmuth, Obata & Kassabaum, Inc.

800-788-5518 • hok.com

Designing and delivering creative ideas for corporate work environments.

**Creativity
Expertise
Service**



Boeing Leadership Center, St. Louis, Missouri

Architecture, Engineering, Interiors, Planning, Graphics, Consulting, Program Management

RBB ARCHITECTS INC

Los Angeles, CA • 310-473-3555 • www.rbbinc.com



Established in 1952, RBB ARCHITECTS INC has been planning and design of complex institutional facilities for nearly 50 years.

RBB designs an average of over \$150 million in construction annually. RBB's resources and reputation have afforded the firm the privilege of being ranked among the top 50 Architectural design firms in the USA. RBB has received 8 AIA Design Awards in the last two years alone. Over 90% of their work is for repeat clientele and stands as testimony to the high level of client satisfaction they achieve.



Saint Francis Medical Center, Lynwood, CA

Margulies & Associates

Boston, MA • 617-482-3232 • www.margulies.com

Clients:

- Intercontinental
- Forrester Research
- Akamai Technologies
- BlueCross BlueShield
- Allaire Corporation
- StorageNetworks
- Open Market, Inc.



Intercontinental Corporate Headquarters



Innovative Corporate Architecture

Walker Parking Consultants

Chicago, IL • 800-860-1579 • www.walkerparking.com

For more than 30 years Walker Parking Consultants has been driven to find creative parking solutions. In the process, it has set the pace for an entire industry by offering a full range of services from initial feasibility studies to final design to complete restoration; by designing functional, durable, attractive structures that meet its clients' needs in a wide range of locations; and by delivering the quality that makes everyone involved with the project look and feel better: the owners and developers, the architects and contractors, and most important of all, the drivers and pedestrians.



Carter & Burgess

800-624-7959 • www.c-b.com



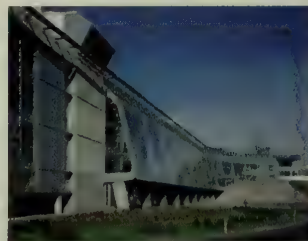
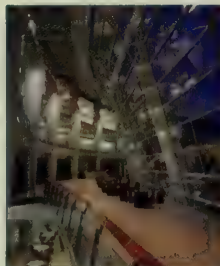
Carter & Burgess brings creativity and innovative solutions to the design of commercial, retail and institutional facilities. With full architectural, engineering, environmental graphics and construction management capabilities, we work with the client through every phase of the project from concept to completion. Our design professionals and project managers are team players who emphasize constant communication, attention to detail and quality assurance. The results are award-winning facilities, satisfied clients and lasting relationships.

Carter Burgess

Atlanta, Austin, Baltimore, Boston, Chicago, Dallas, Denver, Detroit, Fort Worth, Greenville, Hartford, Honolulu, Houston, Las Vegas, Little Rock, Los Angeles, Oakland, Orlando, Phoenix, San Antonio, San Francisco, Seattle

NBBJ

www.nbbj.com



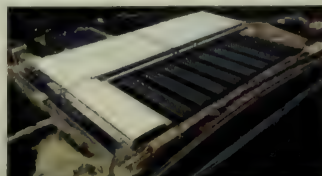
Reebok World Headquarters

Harris Architects, Inc.

Chicago, IL • 847-303-1155 • www.harrisarchitects.com

Harris Architects is a multifaceted architectural firm specializing in industrial facilities with 28 years of experience in 20 states. The firm delivers an undeniable commitment to service by meeting and exceeding the clients' needs.

- Target Corporation - 5 Projects ranging from 1.3 - 1.7 Million S.F.
- Daimler Chrysler Corporation - 6 Projects ranging from 300,000 - 475,000 S.F.
- Juno Lighting, Inc. Corporate Headquarters
- The Home Depot - 750,000 S.F.
- The Bosch Group - 650,000 S.F.



"Servicing the Client"

Target Corporation • 1.7 Million S.F. Distribution Center • Tyler, TX

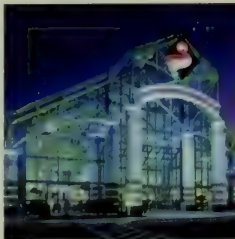
PROFILES OF LEADING ARCHITECTURAL, ENGINEERING AND CONSTRUCTION MANAGEMENT FIRMS

Law/Kingdon, Inc.

Wichita, KS • Dallas, TX • 316-268-0230 • www.law-kingdon.com

LK Law/Kingdon is a full service international design firm offering architecture, interior design, landscape architecture, mechanical and electrical engineering. In thirty years, they have completed hundreds of projects in 40 states within their speciality of retail, healthcare and hospitality for numerous repeat clients.

*Architects - Engineers - Planners
Landscape Architects*



Anderson Brulé Architects

San Jose, CA • 408-298-1885 • www.aba-arch.com

Strategies

for...businesses
for...life
creating built
environments
for working
and living



WE MAKE YOUR VISION A REALITY

E. A. Bonelli + Associates, Inc.

San Francisco & Visalia, CA • 415-864-6450 • www.eabonelli.com



Dairy Processing



Distribution Centers



Food Processing

Providing Architecture & Engineering for the Food Industry since 1960.

- Feasibility Study through Design and Construction
- Clean Room Environments to large Distribution Center
- Proud reputation for Quality Service & Cost Effective Design.

Gorman Richardson Architects Inc

Hopkinton, MA • 508-497-2590 • www.gra.net



Leading architectural firm of senior project managers providing successful, "flashtrack" design solutions and construction strategies for advanced technology firms and institutions.

Specializing in large corporate, R&D, manufacturing and educational buildings.



EMC Northeastern corporate offices and manufacturing facility

**Where design and
technology converge**

L. Robert Kimball & Associates, Inc.

Ebensburg, PA • 814-472-7700 • www.lrkimball.com



L. Robert Kimball & Associates is an architectural and engineering design firm serving the governmental, correctional, educational and corporate marketplace since 1953. With a staff of nearly 500 professionals, Kimball delivers services in-house through a network of 12 offices located in the eastern U.S. The firm is continually ranked as one of the top design firms by such publications as World Architecture and Building Design and Construction. The company's commitment to quality ensures that every staff member plays an important role in the quality of service that clients receive.

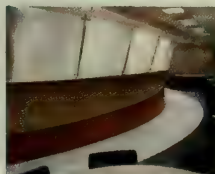


Clayton G. Graham Public Safety Building, Atlantic City, NJ

Legat Architects

847-605-0234 • www.legat.com

Responsive Design • Exceptional Service • Commitment to Quality
All types of domestic & international projects from 6 Chicago area studios.



Motorola, Inc. - Schaumburg, Illinois



Baxter Healthcare, Inc. - Johannesburg, South Africa

McKissack & McKissack

Washington, DC • 202-347-1446 • www.mckissackdc.com



McKissack & McKissack is a full-service architectural/engineering/program management firm supporting private and public sector clients on such prominent engagements as: Renovation of the Main Treasury Building; the New Washington DC Convention Center; and Freddie Mac's New Government Relations Office. Program Management is one of the firm's key strengths and they are currently managing over \$2 Billion worth of construction.



Kaufman Meeks + Partners

Newport Beach • Houston • Barcelona
281-558-8787 • www.kaufmanmeeks.com



Diagonal Mar

Barcelona, Spain

Hines

Founded in 1974, Kaufman Meeks + Partners is a full service international architectural firm offering complete design and land planning services.

Commercial

Housing

Mixed-Use

Hotels&Resorts

Manhattan Studio/Group 3

New York, NY • 212-627-9400 • www.manhattan-studio.com



Manhattan Studio/Group 3 is dedicated to exceptional service and quality design. Its experience encompasses

commercial and residential architecture and interior design for Fortune 500 corporations and clients world-wide. The firm offers a combination of design excellence, management skill and cost effectiveness that cannot be matched.



Setter Leach & Lindstrom

Minneapolis, MN • 512-338-8741 • www.setterleach.com



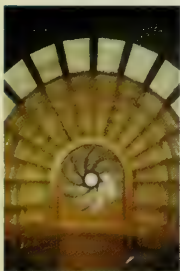
As Minneapolis' premier full service design firm, Setter Leach & Lindstrom provides complete

architecture, engineering, and interior design services. Specializing in technology, service, healthcare, manufacturing, distribution, and large public assembly projects, their hallmark is a balance of design excellence and technical expertise.



The Office Of Michael Rosenfeld, Inc., Architects

Acton, MA • 978-264 0160 • omr-architects.com



OMR is a full service award winning architectural firm. We specialize in educational, corporate, religious and residential projects. We listen carefully and work closely with our clients. Our fully tailored design solutions seamlessly integrate function and aesthetics to provide our clients with environments that express their philosophy and reflect their unique identity. We design for our clients' enduring and integrated sense of well-being and are proud of our long-standing collaboration with them both as institutions and as individuals.



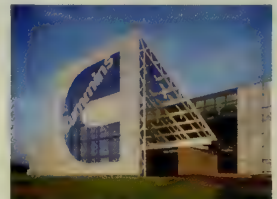
SSOE, Inc.

419-255-3830 • Success by Design • www.ssoe.com



Founded in 1948, SSOE, a privately held firm, is a nationally acclaimed leader in architectural / engineering services. SSOE serves the following key

markets: automotive, chemical, commercial, education, food, health care, manufacturing, personal care, pharmaceutical, and retail. With a highly dedicated and experienced staff of more than 600 professionals, the firm has offices in Ohio, Michigan, Illinois, Tennessee, and Washington.



Cummins Engine

HarleyEllis

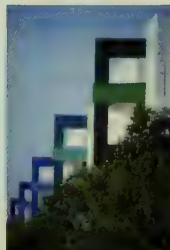
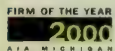
www.harleyellis.com

HARLEYELLIS

Planning • Management • Design • Build Services

Southfield • Asheville • Cincinnati • Denver • Los Angeles • Orlando • Seattle

ISO 9001 | Q1



Tucker, Sadler & Associates

San Diego, CA • 619-236-1662 • www.tuckersadler.com



ARCHITECTURE & PLANNING

42 years of design excellence in governmental, commercial, mixed-use, residential, institutional, high-rise, industrial, hospitality, retail, educational, healthcare, research, and assisted living projects.

Current projects include:

- San Diego Convention Center
- San Diego New Main Library
- San Diego Zoo Master Plan
- San Diego Museum of Art



S.D. Library



S.D. Convention Ctr



U.S. Olympic Training

Taylor Scott Architects

Tulsa, OK • 918-587-8600 • www.taylorsscott.com



Taylor Scott Architects has developed extensive expertise through its ongoing relationships with clients which include the nation's largest retailers. Surpassing its clients' goals of success and its people's vision of excellence, Taylor Scott Architects continues to deliver comprehensive services including concept design, prototype development, and program rollout in over 40 states.



The Thornton • Tomasetti Group Inc.

New York, NY • 212-741-1300 • www.TheTTGroup.com

- Structural engineering design
- Multidisciplinary building investigations and restoration engineering and design
- Complete building design



Thornton • Tomasetti Engineers
LZA Technology
LZA Associates



Petronas twin towers Malaysia

PROFILES OF LEADING ARCHITECTURAL, ENGINEERING AND CONSTRUCTION MANAGEMENT FIRMS

Skanska USA Building, Inc.

Parsippany, NJ • 973-394-9100 • www.skanskausabuild.com

Skanska USA Building serves the building construction industry throughout the U.S. through its network of local companies nationwide.

Skanska USA Building's vast corporate resources and network of affiliated companies provides clients with the best of two worlds: the resources of a leading national builder, with the hands-on service of a local company.

Skanska USA Building has the depth and range of technical, operational and financial resources that can be put to work in a single location or deployed all over the map.

National resources, local client service.
That's Skanska USA Building, Inc.



McCluer

Chicago, IL • 312-373-7700 • www.mccluer.com

Design

consulting
architecture
interiors
engineering

Advanced
Manufacturing/Distribution
Aviation/Aerospace
Commercial/ Institutional
Food/Beverage
IT/Communications
Newspaper/Broadcast

Build

construction
program management
design-build



MCCLIER

Skidmore, Owings & Merrill LLP

www.som.com

Today, as always, creating your future workplace.

Architecture
Interior Design
Structural Engineering
Mechanical/Electrical
Urban Planning
Strategic Planning
Project Management
Graphics

SOM

Chicago
New York
San Francisco
Washington DC
Los Angeles
London
Hong Kong
Sao Paulo

C.M. Architecture, P.A.

Minneapolis, MN • Fort Worth, TX • 888-262-9109 • www.cmarch.com

**Design
that Works**



**FOR ADDITIONAL INFORMATION
AND DIRECT HYPERLINKS TO**

**AMERICA'S LEADING ARCHITECTURAL,
ENGINEERING AND CONSTRUCTION
MANAGEMENT FIRMS, LOG ONTO**

www.businessweek.com/BizLink

Anderson Brule Architects	101
C.M. Architecture, P.A.	102
Carter & Bergess	103
DLR Group	104
E.A. Bonelli + Associates, Inc.	105
Gorman Richardson Architects Inc	106
HarleyEllis	107
Harris Architects	108
HDR Architecture	109
Hellmuth, Obata & Kassabaum	110
Kaufman Meeks + Partners	111
L. Robert Kimball & Associates, Inc.	112
Law/Kingdon, Inc.	113
Legat Architects	114
Manhattan Studio/Group 3	115
Margulies & Associates	116
McCluer	117
McKissack & McKissack	118
NBBJ	119
RBB Architects Inc.	120
RTKL Associates Inc.	121
Setter Leach & Lindstrom	122
Skanska USA Building, Inc.	123
Skidmore, Owings & Merrill LLP	124
SmithGroup	125
SSOE, Inc.	126
Taylor Scott Architects	127
The Office of Michael Rosenfeld, Inc. Architects ..	128
The Thornton Tomasetti Group Inc.	129
Tucker, Sadler & Associates	130
URS Corporation	131
Wakely Associates	132
Walker Parking Consultants	133
William Nicholas Bodouva + Associates	134



"I'll
never
lose a
customer
again."

He's either dreaming or working with CA's CRM solution.

Customer Intelligence

Human Touch

Customer Service

Sales and Marketing

There have never been so many ways to lose a customer. Thanks to the Internet, your customers' expectations have never been higher. Their sources of information have never been greater. And their access to your competitors has never been faster. What's more, research tells us that companies can boost profits by almost 100% just by retaining 5% more of their customers.* The first step to retaining those customers is gaining a better understanding of them.

Computer Associates' CRM solution offers you a comprehensive suite of applications to understand and retain those demanding customers. From our predictive Customer Intelligence that mines the information in your database for decision-making analyses and insights to our predictive Sales and Marketing that provides you with a consolidated view of all customer activity across your business through personalized portals: CA's CRM solution is unique in the industry.

Furthermore, our 3-D visualization technologies bring information and analyses to life and give customers, staff, and suppliers the opportunity to perceive it in all its many dimensions rather than simply view it. Whether you begin with a single application or choose the entire solution, it's powered by Jasmine® ii, CA's eBusiness platform. So it seamlessly integrates with your existing systems and applications to leverage your investment, regardless of underlying technologies.

To find out more about how Computer Associates can help you get closer to your customer and empower your staff, visit www.ca.com/solutions/crm.htm or call 1-800-225-5224. Don't wait too long, your competitors are reading this too.

**COMPUTER
ASSOCIATES**
Software superior by design.

YES

STERLING PERFORMANCES



Hugh L. McColl Jr.
BANK OF AMERICA



Philip M. Condit
BOEING



Philip H. Knight
NIKE



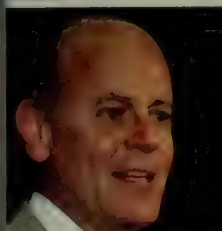
Sumner M. Redstone
VIACOM



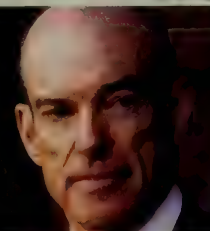
Carl H. Lindner
AMERICAN FINANCIAL GROUP

NO

SPOTTY RECORDS



Steven F. Goldstone
NABISCO



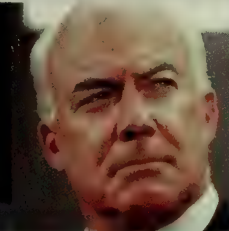
William Todd Esrey
SPRINT



William Clay Ford Jr.
FORD MOTOR



Henry M. Paulson Jr.
GOLDMAN SACHS



C. Michael Armstrong
AT&T

THE ELECTORATE

DO CEOs VOTE? NOT ALWAYS—AND NOT OFTEN

Of 100 top execs examined, most were inconsistent visitors to the ballot booth

**ELECTION
2000**

As CEO of Halliburton, Dick Cheney helped bankroll a lot of political campaigns. He apparently figured that was enough, since when Election Day rolled around, Cheney often didn't bother going to the polls. The onetime defense secretary under President George Bush—now George W. Bush's running mate—voted in federal elections but skipped 14 out of 16 local elections in the five years he lived in Texas.

As it turns out, Cheney has plenty of company. **BUSINESS WEEK** examined the voting record of 100 top executives. (For the complete list, go to the Nov. 6 issue online at www.businessweek.com.) We

found that the majority voted in most federal elections, but even as Congress shifts more decision-making power to state governments, precious few bothered to vote regularly in state or municipal elections.

A disturbing number of top executives, however, had worse-than-spotty records. No registration could be found for a small group of execs such as AT&T's Mike Armstrong, eBay's Meg Whitman, and Yahoo!'s Tim Koogle. Charles Ergen of Echostar Communications registered on Oct. 10, and James Goodwin of UAL updated his registration on Oct. 18—both after inquiries were made. And some corporate chieftains, such as Oracle's Larry Ellison and Nabisco Group's Steven

Goldstone, are registered but don't vote.

On the other hand, a significant number of high-level executives are sterling citizens, voting in every federal, state, and local election. Among them are Glen Barton of Caterpillar, Warren Buffett of Berkshire Hathaway, Business Roundtable co-Chairman Joseph Gorman of TRW, and Herb Kelleher of Southwest Airlines.

ECLECTIC LIST. To compile the list of 100 executives, **BUSINESS WEEK** paid Washington (D.C.)-based Aristotle International Inc., a political research firm, for use of its nationwide database of voter-registration information. We then verified the information with election officials—and executives themselves whenever

possible. Because local laws vary, we were able to obtain access to information dating back to the 1980s for some executives, while much shorter histories were available for others.

Our list includes executives from a cross-section of industrial and New Economy businesses, though we especially focused on sectors that are facing legislative and regulatory challenges in Washington. That's why executives from the top financial-services, pharmaceutical, and high-tech companies are heavily represented. We added execs who hold leadership positions with trade or lobbying groups, such as W.R. Timken Jr., chairman and CEO of Canton (Ohio)-based Timken Co. and president of the National Association of Manufacturers. Finally, we included a few political high-rollers, such as Republican Dick Devos, president of Amway, and Thomas J. Pritzker, chairman and CEO of Hyatt and a top Democratic fund-raiser.

An eclectic list, to be sure, and not one to be used to make sweeping generalizations. But we did turn up some interesting tidbits. Approximately two-thirds of the execs voted in the '98 congressional elections, giving them almost twice as good a turnout that year as the public at large. Only 25% ever cast ballots in state or municipal elections; even fewer do so regularly. That's on a par with the number of eligible voters, on average, who participate at the state and local level.

NUDGED. The view from Washington's lobbyists is that there's room for improvement on the home front. Groups such as the U.S. Chamber of Commerce, NAM, and the National Beer Wholesalers Assn. this year launched a program to encourage executives to get to the polls or send in absentee ballots if they're going to be on the road.

Corporate lobbyists say that business leaders as a group could make a difference in key races if they turned out in higher numbers. Case in point: the 1998 Senate race in Nevada, where incumbent Senator Harry Reid defeated Republican challenger and business



Geoffrey C. Bible of Philip Morris: Hasn't voted since the last Presidential election but continues to write checks to congressional candidates.

The Executive Ballot Box

VOTING-CHALLENGED*

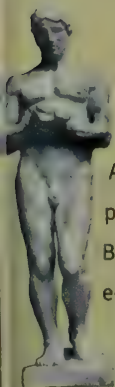
NAME/TITLE	COMPANY	REGISTRATION	DO THEY VOTE?
C. Michael Armstrong CEO	AT&T	Unknown	Declines to say if he is registered
Peter I. Bijur Chairman & CEO	TEXACO	Connecticut	A typical Presidential-year voter
Stephen G. Butler Chairman & CEO	KPMG	Connecticut	Voted in '96, but otherwise stayed home
Stephen M. Case Chairman & CEO	AMERICA ONLINE	Virginia	Hasn't voted since at least '96
Vance D. Coffman Chairman & CEO	LOCKHEED MARTIN	Maryland since '96	Ho-hum record. Voted in '96 only
James E. Copeland Jr. CEO	DELOITTE & TOUCHE	Connecticut	Casts a ballot for President every four years
John T. Dillon Chairman & CEO	INTERNATIONAL PAPER	New York since '88	Has big gaps; missed votes in '98, '96, and '90
Lawrence J. Ellison Chairman & CEO	ORACLE	California	Hasn't voted since at least '92
Roger A. Enrico Chairman & CEO	PEPSICO	Texas	Makes it to the polls once every four years
Charles W. Ergen Chairman	ECHOSTAR COMMUNICATIONS	Colorado	Registered to vote on Oct. 10
Steven F. Goldstone Chairman	NABISCO GROUP HOLDINGS	Connecticut since '96	Says he doesn't vote in protest of the system
James E. Goodwin Chairman & CEO	UAL	Illinois	No votes since '95; updated registration after inquiries
William A. Haseltine Chairman & CEO	HUMAN GENOME SCIENCES	Washington, D.C., since '95	Voted once since then, in '96
Steven P. Jobs Chairman & CEO	APPLE COMPUTER	California since '96	Voted in '96, but has stayed home since
David H. Komansky Chairman & CEO	MERRILL LYNCH	Connecticut	Hasn't cast a ballot in at least five years
Timothy Koogle Chairman & CEO	YAHOO!	Unknown	No voting record found; says he votes
C. Steven McMillan CEO	SARA LEE	Florida since '92	Voted in '92, but apparently lost interest after that
John F. Smith Jr. Chairman	GENERAL MOTORS	Michigan since '88	Votes every four years for President
John F. "Jack" Welch Chairman & CEO	GENERAL ELECTRIC	Connecticut	Votes only in Presidential election years
Meg Whitman CEO	EBAY	Unknown	No voting record found

STERLING CITIZENS**

Steven A. Ballmer CEO	MICROSOFT	Washington State since '90	Makes every federal election and even a few state ones
Warren E. Buffett Chairman & CEO	BERKSHIRE HATHAWAY	Nebraska	A die-hard Democratic voter; even school board elections
August A. Busch III Chairman & CEO	ANHEUSER-BUSCH	Missouri since '76	Never misses a chance to cast a ballot
Philip M. Condit Chairman & CEO	BOEING	Washington State	Hits his precinct every year, even for primaries
Richard Devos Jr. President	AMWAY	Michigan since '75	Even votes for school board; an exemplary record
L. John Doerr Partner, TechNet founder	KLEINER PERKINS CAUFIELD & BYERS	California	Votes every year, nationally and locally
Charles F. Dolan Chairman	CABLEVISION SYSTEMS	New York	Has voted nearly every year since '88
William H. Gates III Chairman	MICROSOFT	Washington State	Votes even in primaries and local elections



Why settle for mere parts when you can have a fully integrated eCRM solution?



In customer relationship management, parts are not parts. Only parts that fit together seamlessly elevate customer service to a work of art.

As new communication channels emerge, every part of your CRM must work together perfectly.

Because no matter how a customer contacts you – e-mail, voice, fax – you must respond promptly or face losing a customer.

Quintus' eCRM solution provides a single integrated view of customers across all channels - e-mail management, web-enabled contact centers, Voice over IP, CTI and more. Customers receive the service they've come to expect, in the time frame they've come to demand, in any way they choose to make contact. Period.

More than 500 companies including Mercata.com, United Airlines, Ashford.com and Ticketmaster already use Quintus.

Shouldn't you? Contact us at www.quintus.com,

1-877-eContact, or sales@quintus.com.



QUINTUS

Turn the e-generation into loyal customers.

Louis V. Gerstner Jr. Chairman & CEO	IBM	Connecticut	Missed only two votes in eight years
Raymond V. Gilmartin Chairman & CEO	MERCK	New Jersey	Has voted every year for at least a decade
Joseph T. Gorman Chairman & CEO, and Co-Chairman of the Business Roundtable	TRW	Ohio	Never misses a chance to go to the polls; has cast primary ballots for GOPers and Democrats
Charles A. Heimbold Jr. Chairman & CEO	BRISTOL-MYERS SQUIBB	Connecticut	Has voted in every state and federal election since '92
Herbert D. Kelleher Chairman & CEO	SOUTHWEST AIRLINES	Texas since '88	Even came out for a primary runoff in '90
Philip H. Knight Chairman & CEO	NIKE	Oregon since '83	Diligent—even makes local primaries
Carl H. Lindner Chairman & CEO	AMERICAN FINANCIAL GROUP	Ohio since '85	Votes almost as often as he writes donation checks
Hugh L. McColl Jr. Chairman & CEO	BANK OF AMERICA	North Carolina	A fine record; rarely misses a vote at any level
Sumner M. Redstone Chairman & CEO	VIACOM	Massachusetts	Another die-hard voter; turns out every year
James J. Schiro CEO	PRICEWATERHOUSE-COOPERS	New Jersey	Misses a local election only occasionally
Ivan E. Seidenberg Co-CEO	VERIZON COMMUNICATIONS	New York	Stops at the polls each year, primaries included
Kelly N. Stanley CEO; Chairman of the U.S. Chamber of Commerce	ONTARIO CORP.	Indiana	Votes, and dutifully turns out for Republican primaries
William R. Timken Jr. Chairman & CEO Chairman, National Assn. of Manufacturers	TIMKEN	Ohio	Votes annually and in every GOP primary; thinks others should follow his example
Jonathan M. Tisch President & CEO	LOEWS	New York since '93	Votes in federal and, occasionally, state elections
Robert E. "Ted" Turner Vice Chairman	TIME WARNER	Georgia	Almost never misses a vote or a Democratic primary

SPOTTY, BUT RESPECTABLE, RECORDS

Glen A. Barton Chairman & CEO	CATERPILLAR	Illinois since '90	Never misses a primary, let alone an election
Jeffrey P. Bezos Chairman & CEO	AMAZON.COM	Washington State since '96	Voted that year and in '98
Geoffrey C. Bible Chairman & CEO	PHILIP MORRIS	Connecticut since '94	Stayed home in '98 after voting in '96 and '94
Gordon M. Binder Chairman	AMGEN	California since '93	Donates annually, but missed '98 election
John Henry Bryan Chairman	SARA LEE	Illinois	Another exec who sticks to federal elections only
Robert N. Burt Chairman & CEO Chair of the Business Roundtable	FMC	Illinois	Comes out for federal elections and Republican primaries
John T. Chambers CEO	CISCO SYSTEMS	California since '92	Limits his efforts to federal elections
Peter H. Coors CEO	COORS (ADOLPH)	Colorado	Usually goes to the polls; but missed votes in '92 and '90
Jon S. Corzine Former Co-Chair, now U.S. Senate candidate	GOLDMAN SACHS	New Jersey	Missed the '98 election and local votes in '95
Edward E. Crutchfield Chairman	FIRST UNION	North Carolina	Oops! Missed the '96 Presidential election
Michael S. Dell Chairman & CEO	DELL COMPUTER	Texas	Another exec who sat out the '98 elections
Michael D. Eisner Chairman & CEO	DISNEY (WALT)	California	Voted in the last three federal elections
William T. Esrey Chairman & CEO	SPRINT	Kansas	Sticks mostly to federal election years

favorite John Ensign by only 428 votes.

Despite good turnout by the nation's highest-ranking executives, the Business-Industry Political Action Committee, a Washington group that supports pro-business candidates, estimates that there are 12 million mid- and upper-level managers who don't vote. "Some 10,000 votes spread over 13 races in '98 could have changed the party in power in the House," says Greg Casey, president of BIPAC. "Effective political involvement is more than money."



Bill Gates
of Microsoft: Registered to vote when he was 21. He rarely misses an election.

Surprisingly, some execs with a lot on the line in Washington even skip federal elections. America Online Chairman Steve Case is one example. Case is looking for federal trustbusters to sign off on AOL's planned megadeal with Time Warner. He wants a permanent ban on Internet taxes and is pushing to increase the number of skilled immigrants allowed to work in the U.S. Case registered to vote in Fairfax County Va., but hasn't cast a ballot there since at least 1996, the earliest year for which local records are available. America Online President and coo Robert Pittman who also is registered to vote in Virginia, missed the '98 election, too.

"PRIVATE MATTER." It's anybody's guess whether Case and Pittman will vote on Nov. 7. They and nearly every other executive queried about gaps in their voting records declined comment. Through their spokespeople, most said that voting was their personal business. A typical response was this statement from Philip Morris spokeswoman Peggy Roberts: "We consider it a personal and private matter." Philip Morris Chairman and CEO Geoffrey Bible has voted, but he stayed home in 1998 and doesn't turn out for local elections, according to officials in Fairfield County, Conn.

Voting might be a



Warren Buffett of Berkshire: The rare exec who votes almost more often than he makes campaign contributions.

Business in the Internet Age is a loving, nurturing, non-competitive environment.



Yeah, right. What battlefield are you on?

Is your business combat-ready with eLearning to succeed in the age of the Internet?

Let's face it, business is a battlefield. And the war of business requires having the right information at the right time to stay ahead of the competition and deliver impact to the bottom-line. Docent Inc.'s Knowledge Exchange Platform is rapidly becoming the business-critical application that thrusts companies forward through the effective application of knowledge.



Over 100 companies have achieved their business goals by using Docent's award-winning applications for eLearning to launch new products quickly and efficiently, bring new sales people up to speed, and increase customer satisfaction. Choose your business arsenal wisely and choose Docent! Call us today at 1-888-DOCENT5, 1-650-934-9500 or email us today at info@docent.com.

www.docent.com

© Copyright 2000 Docent, Inc. All rights reserved.
Docent and the Docent logo are trademarks of Docent, Inc.

Government

personal and private matter to some executives, but "you forfeit the right to complain if you haven't been involved in the election process itself," asserts NAM lobbyist Mike Baroody. "The best way to lead is by example."

TAKE THAT! Others say not voting is a statement in itself. Steven Goldstone, chairman and CEO of Nabisco Group Holdings, doesn't vote on principle. Nabisco spokesman Jason Wright says Goldstone was "disgusted" with both parties when he tried to help reach a settlement on tobacco lawsuits. "He voted not to vote," Wright says. "He has not been enamored of the political process of late." That strikes others as hypocritical. "It's inconsistent, particularly if those people are otherwise active in the process and raising money," says Kelly Stanley, chairman of the U.S. Chamber and CEO of Ontario Corp. in Muncie, Ind.

Novell CEO Eric Schmidt, a registered Democrat, missed the '98 elections (he can't remember why), but he urges his employees to get to the polls and wants other Silicon Valley execs to be more involved in public policy. At the same time, he understands why some of his peers don't vote. On Nov. 7, while others are casting their ballots, San Jose-based

Novell will be holding a big meeting for its sales staff in San Francisco. Schmidt has planned ahead, though, and has obtained his absentee ballot.

By Lorraine Woelert, with Courtney Calvin in Washington, Jim Kerstetter in Silicon Valley, Nanette Byrnes in New York, Amy Barrett in Philadelphia, Ann Therese Palmer in Chicago, and bureau reports



John F. Smith of General Motors: Votes only in Presidential elections. That hasn't stopped him from donating to Michigan Senator Spencer Abraham, a Republican facing a tough reelection.



Scott McNealy of Sun: Votes absentee when he's not in town on Election Day.

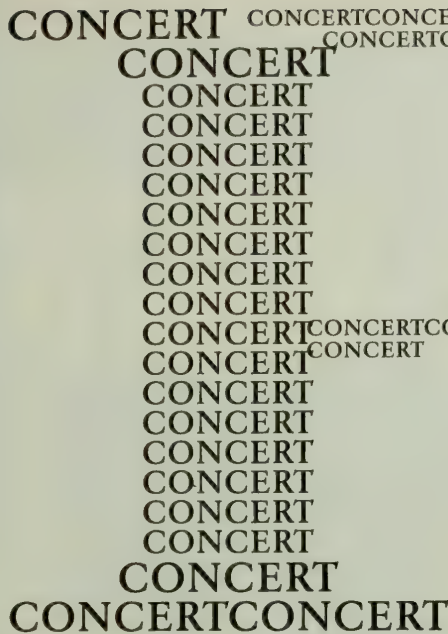
Carly S. Fiorina CEO	HEWLETT-PACKARD	New Jersey since '97	Hasn't voted since before '97
William C. Ford Jr. Chairman	FORD MOTOR	Michigan	Missed '98 federal and local elections
Thomas F. Frist Jr. Chairman & CEO	HCA-THE HEALTHCARE CO.	Tennessee	Was absent in '90, but hasn't missed one since
Christopher B. Galvin Chairman & CEO	MOTOROLA	Illinois	Hits the polls in federal election years
Maurice R. "Hank" Greenberg Chairman & CEO	AMERICAN INTERNATIONAL GROUP	New York	Traveling on Election Day doesn't slow him down. Voted absentee in '96, '98
Leo J. Hindery Jr. CEO	GLOBAL CROSSING	California	Has voted every other year since '92
James P. Kelly Chairman & CEO	UNITED PARCEL SERVICE	Georgia since '92	Votes every two years and in every GOP primary
Philip A. Laskawy Chairman & CEO	ERNST & YOUNG	New York	Mostly votes in federal elections
Kenneth L. Lay Chairman & CEO	ENRON	Texas	Voted in '94 and '96; skips local elections
Alfred Lerner Chairman & CEO	MBNA	Ohio	A respectable record; misses the occasional local election
Gerald M. Levin Chairman & CEO	TIME WARNER	New York since '93	Votes, but sticks to federal elections
John C. Malone Chairman	LIBERTY MEDIA GROUP	Colorado since '92	Stayed home in '94, but otherwise went to the polls
Scott G. McNealy Chairman & CEO	SUN MICROSYSTEMS	California	Has voted in every federal election since at least '92
Henry M. Paulson Jr. Chairman & CEO	GOLDMAN SACHS GROUP	Illinois since '98	Hasn't voted since then; on Cook County's "inactive" list
Robert W. Pittman President and COO	AMERICA ONLINE	Virginia since '97	Hasn't seen a voting booth since he registered in '97
Thomas J. Pritzker Chairman & CEO	HYATT	Illinois	Has voted every two years since at least '90
Leonard Riggio Chairman & CEO	BARNES & NOBLE	New York	Cast a ballot in '98; where was he in '94 and '96?
Eric E. Schmidt Chairman & CEO	NOVELL	California since '92	Missed '98 but made this year's Presidential primary
Bernard L. Schwartz Chairman & CEO	LORAL	New York since '80	Votes in every federal election
John W. Sidgmore Chairman & CEO	WORLDCOM	Maryland since '92	Voted in '92 and '98, but stayed away in '94 and '96
Frederick W. Smith Chairman & CEO	FEDEX	Tennessee	Voted in '94 and '99, but otherwise stayed home
John W. Snow Chairman & CEO	CSX	Virginia	Voted in '96 and '97; didn't make it in '98 or '99
Steven Spielberg Partner	DREAMWORKS SKG	California since '92	Another exec who sticks to federal elections
Sidney Taurel Chairman & CEO	LILLY (ELI)	Indiana since '96	Registered upon becoming a U.S. citizen; voted in '98
Douglas A. Warner III Chairman & CEO	J.P. MORGAN	New York since '92	Missed the '98 election, like many of his peers
Sanford I. Weill Chairman & CEO	CITIGROUP	New York	Votes routinely in federal elections, sits out local
David S. Wetherell Chairman & CEO	CMGI	Massachusetts since '98	Hasn't been to his polling place since he registered
Gary Winnick Chairman	GLOBAL CROSSING	California	Can be counted on to vote every two years
Stephen M. Wolf Chairman	US AIRWAYS	Virginia since '96	No votes recorded in '96 or '97; voted in '98

*People for whom voting records couldn't be found, who registered after inquiries, or who haven't voted since at least '96

**Voters who even pay attention to state and local elections

DATA BUSINESS WEEK

For the complete list of 100 CEOs, go to the Nov. 6 issue online at www.businessweek.com



concert



The McGraw-Hill Companies

Keeping the world up to speed.®



**AT ANY MOMENT WE
COULD BE PROVIDING THE
LATEST FINANCIAL RATINGS.**

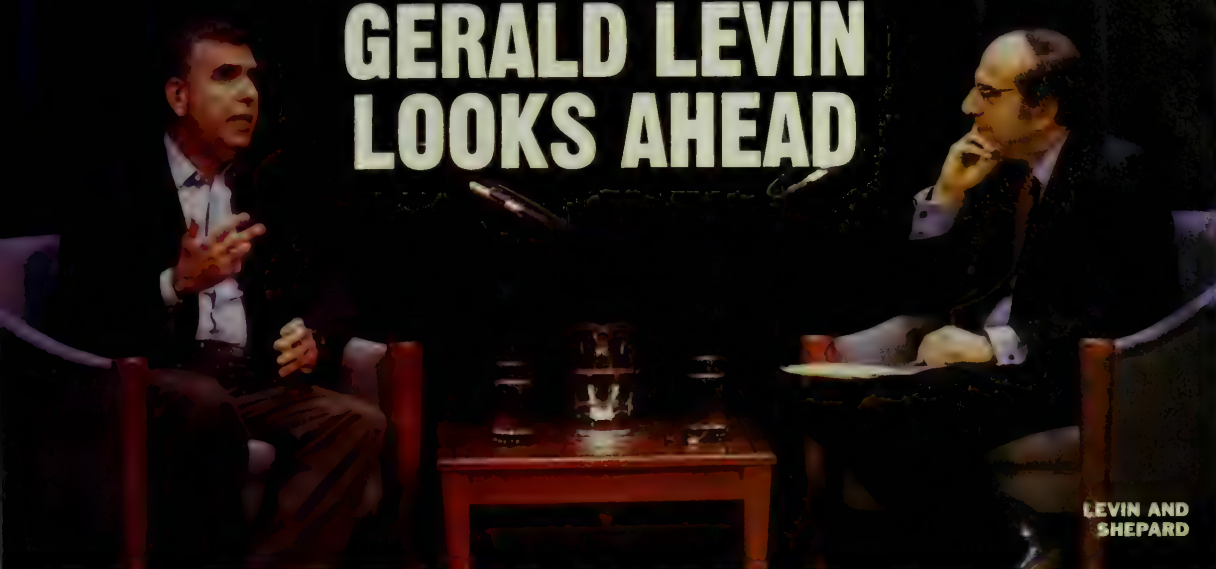
**OR A LESSON ON
THE LIFE CYCLE
OF A SALAMANDER.**



Around the world, teachers of all levels depend on us to help shape curricula. But it hardly stops there. From online learning to business news to the latest credit ratings and financial analyses, The McGraw-Hill Companies gives people the knowledge to be their best at any age.

www.mcgraw-hill.com

GERALD LEVIN LOOKS AHEAD



The CEO of Time Warner defends the AOL merger and surveys the changing tech terrain

Nearly 10 months ago, the world was first introduced to the Deal of the Century—America Online Inc.'s acquisition of Time Warner Inc. This New and Old Media marriage promised to create a peerless company, using AOL's powerful Internet brand to leverage Time Warner's deep lineup of entertainment, news, and cable properties. Despite a tough regulatory review in Brussels and Washington and the spring dot-com shakeout that left unloved technology stocks, nobody remains more bullish on the potential of AOL Time Warner than Time Warner CEO Gerald M. Levin. He insists the deal is on track to close by the end of the year. On Oct. 19, in a public forum that was part of BUSINESS WEEK's "Captains of Industry" series, Levin sat down with BUSINESS WEEK Editor-In-Chief Stephen B. Shepard at the 92nd Street in Manhattan to talk about the status of the deal, why he believes it still makes sense, his competitors—and even left money.

Q: You have said that the Internet is such a transforming technology that a traditional media company such as Time Warner wouldn't be able to fully realize [a New Media] vision, and it was necessary to go outside. Putting AOL together with Time Warner has to be fundamentally revolutionary within your own company.

A: But also revolutionary for AOL, because now you have CNN, you have Warner Bros., Time magazine, and HBO. Normally, in most mergers, there is what the Street calls risk of execution. Over and over again, two people stand up, they high-five, [they say] "this is the greatest thing. We're going to have all these synergies." And you know it just can't be that great, and then a year later one of the two is gone and things haven't quite worked out. In this case, I have to say, and this is not an arrogant statement, the concept of putting these two companies together is profound. The Internet is not going away, whatever the dot-com crash, the tech crash. This is not only here to stay, but it's causing such rapid change—most of it positive, by the

way—that we are trying to overlay old doctrines, regulatory or old management ideas, onto this system. So, yes, it's a revolutionary change.

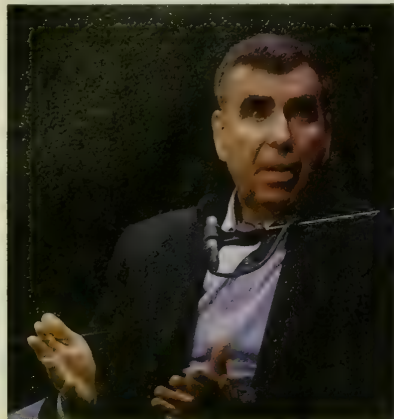
Q: When the deal was announced, AOL's stock was at about \$73...and that represented a 71% premium to Time Warner shareholders. Now AOL's stock has declined 38% as of today, to 45. The value of the deal to Time Warner shareholders is only a 5% premium over Time Warner's pre-deal price. Why is this still a good deal for Time Warner shareholders?

A: First of all, the deal was never done in the traditional sense that there was a control premium, because control was not surrendered...there is a 50-50 board. I'm the one who came up with the exchange ratio [each Time Warner shareholder will get 1.5 shares in the new company for each share of Time Warner]. No bankers. This was very hard to arrive at. It is not an acquisition premium for control. It's simply a way of trying to balance the two stocks to represent the value that's intrinsic in Time Warner and recognize that AOL is on a trajectory, so that over a period of time it is going to be the equivalent in revenue and operating cash to all of Time Warner.

We needed that 1.5 shares of AOL for each

“Operating cash is going to grow at a 25% to 30% rate off an \$11 billion base” — GERALD LEVIN, Time Warner CEO

share of Time Warner in order to do that. So it was not an acquisition premium. If you look at the [earnings] numbers [released Oct. 18], you can see how this is going to happen. AOL's revenues grew 34%. Advertising [and] e-commerce, 80%. Time Warner's advertising grew 17%. I'm proud of it. So this is a merger of equals. We could have had a one-to-one exchange. But the reason it's 1.5 is because there's a



"This is a merger of equals. We could have had a one-to-one exchange"

gap in time, and it was also designed to take into account the fact that, yes, the Time Warner assets are historic and understood. The AOL assets don't have the same 70- or 80-year history.

Q: If AOL stock was at 45 and the deal was being done in AOL's stock, would you have done the deal?

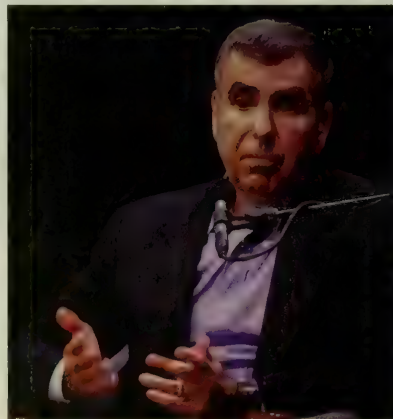
A: It depends on where Time Warner's stock would have been at the time. When you put the two numbers together, and I'm now thinking of Time Warner shareholders, you have a company next year that's large. It's going to have north of \$40 billion in revenues, growing at a 12% to 15% rate. But its operating cash, what we euphemistically call EBITDA, is going to grow at a 25% to 30% rate off of an \$11 billion base.

That kind of financial engine should command a premium multiple. We have also [told] the Street that over a period of time, the company will have \$50 billion in capacity. Time Warner couldn't deliver those kinds of numbers.

Q: Often a collar is put on a deal, meaning a mechanism that protects the

acquired company or the merged company from the share price going below what it was at the time of the deal. You didn't seek a collar for this deal?

A: No, because a collar is traditionally used where there is indeed an acquisition, where there is a premium, and the acquired company is trying to get a zone of protection, and outside that zone is uncomfortable with the deal. A, this was not an acquisition; B, there was no need for a collar, which only forces a lot of arbitrage activity; and C, with a collar, the implication is that you are really not sure—your commitment to the valuations is somewhat insecure, and you need this kind of protection. I wanted to make a statement that I believe in it. It will be good for Time



"No collar... means a total commitment to the deal come hell or high water"

Warner shareholders, it makes sense for AOL. In other words, no collar deal, not an acquisition, means a total commitment to the deal come hell or high water.

Q: Let's talk about regulatory issues. One is open access to Time Warner cable for other Internet service providers, not just AOL. You've stated you're in favor of open access.

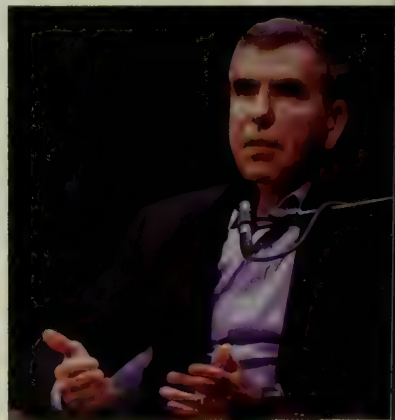
A: Yes, I don't use the phrase open access. I'm very much in favor of what we call multiple [Internet service providers]. It's obviously good for the consumer, but it also means that all these services come in and meet. So what I've said—this has been lost in the brush—as a business matter, I've wanted to do multiple ISPs. Not because there is a regulatory issue—we've made

that quite clear. I've offered my e-mail address to any ISP that wants to come in and negotiate. Not surprisingly, there are lots of companies that are taking this occasion to try and better the commercial terms they might otherwise have by running to Washington.

Q: You can declare yourself in favor of access, but then in the negotiation [with an ISP], the price [of access to Time Warner's cable lines] might become so onerous that no one wants to do it.

A: Cable is competing with what's called DSLs. Cable is in a competitive environment. The only way it can succeed is to offer as much consumer choice as possible. So it's more than just "trust me." I'm saying it's essential to the business of cable to have as many ISPs as possible to compete against the other services.

Q: If you don't favor your own content, then what's the point of the merger? You may as well not have merged and just partnered with



"There's a whole infrastructure at AOL that will facilitate the Internet activity of Time Warner"

anybody you wanted to for content

A: There's a whole infrastructure at AOL that will facilitate the Internet activity of Time Warner. Also, the ability to cross-promote is significant which all companies do. I have been asked, why not just enter into the kind of arrangements you are currently doing, just make joint ventures. Companies are human, too. It makes no big difference if you're part of the same family or not as to the cooperation, the ability to make things hap-

What on earth
does it mean for
an energy company
to go beyond?

It means solving the
paradox of a world that
wants mobility and a
clean environment.

It means investing in
alternative fuels,
processes and ideas.

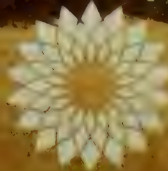
It means delivering
total energy solutions,
including electricity.

It means planning a
journey that will take
the world's expectations
of energy beyond what
anyone could have imagined.

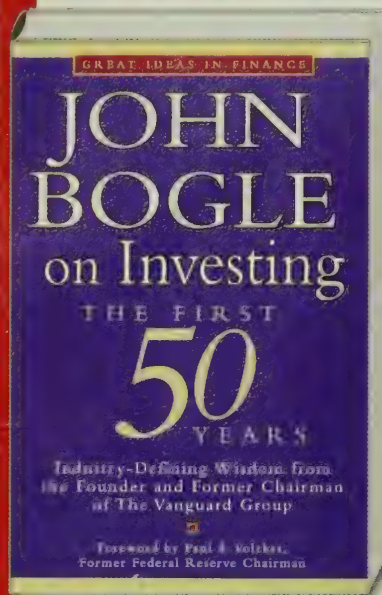
beyond petroleum

bp.com

bp



PROFITABLE INSIGHTS FOR EVERY INVESTOR



Inimitable visionary and legendary founder of the Vanguard Group, Jack Bogle talks about the most important financial issues driving the economy and facing investors today in *John Bogle on Investing*.

From the genius of simplicity in investing strategy to the universality of indexing in the financial markets, Bogle covers nothing less than the rock-solid foundation of success in independent investing for the 21st century—as only Bogle can.



Available Everywhere Books and eBooks Are Sold
Visit us at
www.ebooks.mcgraw-hill.com

A Division of The McGraw-Hill Companies

Media

pen, and most partnerships usually come apart.

Q: It's probably also true that most mergers don't work, either.

A: And most mergers fail, that's correct. And 50% of marriages fail, too.

Q: You said this question of access depends on trust and fair negotiations. Yet when you had a contract dispute with Disney, ABC was knocked off your cable network. Why did you do it, and how do we know that something similar won't happen again?

A: Well, this was a product of a part of the law that I think is misplaced. It's called "re-transmission consent," and that is for a cable company to carry a broadcast signal it can choose something called must-carry, or if they don't, you have to negotiate. Unless the broadcaster gives you permission, you are not authorized to carry the signal. So our cable company was engaged in a negotiation and had reached an agreement at the end of last year. With the announcement of the AOL-Time Warner deal, some of our friends at Disney, and [CEO] Michael [Eisner] in particular, became concerned and paranoid, and all of a sudden, the terms changed.

We kept getting extensions for the right to carry the ABC signals. We finally reached a point where we were running out of the last extension, and it wasn't helping our consumers because in one particular market, Houston, if a signal is going to come off, the FCC rules say you have to send 30 days' notice. So in Houston they said you're not going to be authorized, and they started to put ads in the paper saying come and get your satellite antenna, so we had to put out a notice. It was really jerking around the consumer.

I'll take full responsibility. It was a mistake. I felt we didn't have an agreement and, therefore, we were not authorized to carry the signal. So at midnight we took it off because under the law you are in violation of copyright.

Q: So what was the mistake?

A: The mistake was, I should not have been so technical about it. I should have violated the copyright and kept the signal on.

Q: Suppose it were Disney merging with AOL. Would you be any less paranoid than Michael Eisner is? Would you behave any differently in running to Washington?

A: Absolutely. Obviously I would say this—but I think it's a mistake to lobby for certain things, particularly in this area where it's hard to figure out how the government should regulate the Internet. How should the government regulate

interactive television? You're going to end up with something that is going to come back to bite you, so you better try and solve your problem through commercial negotiation with [the other] party or have your own strategy. Which is ultimately what Disney will do. Having said this, Michael and I have known each other for more than 30 years and have a very nice relationship—except when it comes to business.

Q: Before the merger, of course, AOL was lobbying to get greater access to cable systems.

A: That is correct. There are a couple of things AOL has done that I haven't believed in. For example, I've cut out a soft money at Time Warner. We can get into that discussion. But AOL does [give soft money contributions]. So there are certain things I will do differently.

Q: Would the merged company not use soft money?

A: I don't believe in soft money. I think it's horrendous. As a matter of fact, what I did this year was to take—I'm embarrassed to say—the almost \$2 million we may have given in the past almost on an annual basis and give it to CNN, our five local cable news services, and *Time* magazine and said: "Do extra coverage of the issues," which they have done.

Q: As CEO of the merged company, are you saying that the merged company would not use soft money in political campaigns?

A: That's correct.

BusinessWeek online

To see the entire interview on video, go to the Nov. 6 issue online at www.businessweek.com/mediacenter/

Philip Morris Introduces PaperSelectTM

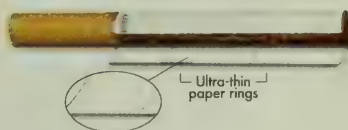
Now Featured on Merit Cigarettes.



Cigarettes made with PaperSelect may be less likely to ignite certain fabrics.*

PaperSelect features ultra-thin paper rings that work like speed bumps, causing the

cigarette to burn slower when the lit end crosses over them.



It may even put itself out when resting in an ashtray. You still get the same rewarding taste,



only now with our patented cigarette paper.

Look for Merit cigarettes now made with PaperSelect.

Cigarettes made with this paper were evaluated under a laboratory test method designed by the National Institute of Standards and Technology to measure the likelihood that cigarettes will ignite the three test fabrics specified in this test method. Under this testing method, these cigarettes produced fewer ignitions of the three test fabrics as compared to the same cigarettes made without the special paper. It is important to note that the test fabrics are not necessarily representative of the kinds of fabrics one might find in a particular home or elsewhere. These cigarettes are not "fire safe." Do not handle or dispose of cigarettes made with this special paper with any less care than other cigarettes. Anything that burns, including cigarettes or cigarette ashes, can cause a fire if handled carelessly.

SURGEON GENERAL'S WARNING: Smoking Causes Lung Cancer, Heart Disease, Emphysema, And May Complicate Pregnancy.

© Philip Morris Inc. 2000

For more information about PM USA and its products, visit www.philipmorrisusa.com or call 1-877-PMUSAWEB.

Ultima: 1 mg "tar," 0.1 mg nicotine—Ultra Lights: 5 mg "tar," 0.5 mg nicotine—Lights: 8 mg "tar," 0.6 mg nicotine av. per cigarette by FTC method.

MOVIES

IS THERE A HIT IN SONY'S STARS?

It's betting big on Christmas to break its losing streak

For *Hollow Man*, this summer's horror film, the turning point comes when the character, played by Kevin Bacon, struggles to return from his invisible state. The same can be said for Sony Pictures Entertainment, the studio that made the film. Since 1997, when it led all Hollywood studios with films like *Men in Black* and *Jerry Maguire*, Sony has been mostly an invisible studio. Hits like *The Patriot* were far outweighed by such duds as *What Planet Are You From?*, a Garry Shandling bomb made for \$45 million that grossed only \$6.3 million. So far this year, Sony ranks seventh among Hollywood's eight largest studios, the second straight year it has finished far down on that list.

HUGE BET. But like Kevin Bacon's character, Sony seems determined to fight its way back into the spotlight and may spruce up the company enough to allow execs to test the waters for a long-contemplated merger. By mid-December, the studio will release four films with heavy buzz, including the special-effects-laden mountain-climbing drama *Vertical Limit*, which Hollywood insiders are predicting will hit the jackpot. It will cost Sony nearly \$400 million to make and market the four flicks, a huge bet for a studio whose films this year have averaged \$30 million apiece at the box office, trailing most majors and even

smaller players like Miramax Film Corp. and New Line Cinema. "This can turn out to be a strong year for us," says Mel Harris, president of Sony Pictures, which oversees Columbia Pictures. "We've back-loaded the year pretty well."

Sony won't have to wait too long to find out. The first of the four films, a movie remake of the 1970s TV show

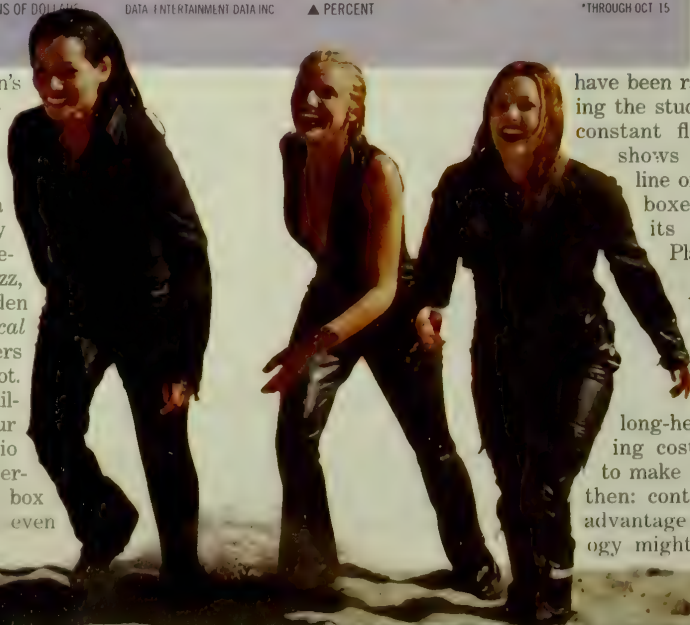
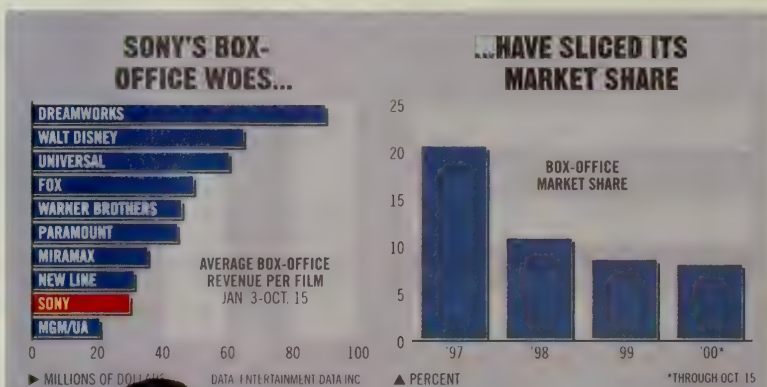
Charlie's Angels, hits theaters on Nov. 3. Starring Cameron Diaz, Drew Barrymore, and Lucy Liu, the film's production was plagued by fighting egos on the set that put it over budget and behind schedule. But Sony is giving it a hearty send-off, with marketing plans that include near wall-to-wall advertising and specials on MTV and HBO. Two weeks later,

Sony hits the theaters again, this time with *The 6th Day*, a futuristic action film starring Arnold Schwarzenegger.

A couple of hits this fall would do wonders for the studio's income statement. In the fiscal year that ended in March, both revenues and operating earnings at Sony's film unit fell by 10%, the second straight annual decline. And hits

have been rare for Sony since buying the studio in 1989 to ensure a constant flow of films and TV shows to feed its successful line of video players, set-top boxes, and more recently its soon-to-be released PlayStation2 game player.

No wonder, then, that Sony is backing off of head-to-head battles to win box-office share. Recently it has reversed its long-held policy of not sharing costs with other studios to make its movies. The theory: control the film and take advantage of whatever technology might be developed to es-



BIG GUNS: Stellar casts in *Charlie's Angels* and *The 6th Day* (top) may beef up the box office

**If This City Is Unfamiliar,
Chances Are You Need
NTT Communications.**

Recognize this city? It's in Asia. Here's another hint: A lot of global companies do business here. If you're feeling left out, try getting connected with NTT Communications. As Japan's leading telecommunications company, NTT Communications can provide your business with everything it needs to stay ahead of the competition. Including our one-stop network solutions service: **Arcstar**. Currently serving 25 major cities around the world and available in 53 countries, Arcstar can develop the network solution that's right for you. And with special focus on IP (Internet Protocol), Arcstar offers top-quality, high-speed and secure access to the Internet. So when it comes to connecting to Tokyo, or anywhere else in the world, connect with NTT Communications. **Your trusted partner in Network Solutions.**

Global Connections From East to West.



www.ntt.com/world

Tokyo / Osaka / Seoul / Beijing / Shanghai / Taipei / Hong Kong / Hanoi / Bangkok / Manila / Kuala Lumpur / Singapore / Jakarta / Sydney / London / Brussels / Paris / Geneva / Dusseldorf / Frankfurt / Milan / New York / Washington D.C. / Virginia / San Francisco / Los Angeles / Rio de Janeiro / São Paulo

Communications Group in the Americas: NTT America New York Head Office +1-212-661-0810 / Washington D.C. Office +1-202-312-1444 / Virginia Office +1-288-3103 / New England Office +1-978-392-4764 / Chicago Office +1-773-693-0080 / Mountain View Office +1-650-940-1414 / Seattle Office +1-206-762-5362 / Angeles Office +1-310-516-2111 / NTT do Brasil Telecomunicacoes Ltda., Sao Paulo Head Office +55-11-253-0108 / Rio de Janeiro Office +55-21-553-7297

plot it. No more. Earlier this year, it bought half the rights to Universal's hit *Erin Brockovich* and also has a half-interest in Dreamworks SKG's '70s rock film *Almost Famous*, a critical hit but lackluster at the box office. It also has a half-interest in Schwarzenegger's *The 6th Day*.

Sony's new attitude toward sharing the costs is only part of a financial overhaul that began last year. Since then, Sony has eliminated its fledgling family film unit, merged its TriStar film label into Columbia, and ended several pricey deals with producers. And in a recent standoff with director Michael Mann, it refused to make the Will Smith boxing film, *Ali*, until the director slashed costs and agreed to help cover any overruns of its \$106 million budget. It's also sharing production costs with Germany's Initial Entertainment Group.

"TOO MANY PICTURES." The most dramatic change at Sony, however, was its sweeping six-year deal with former Walt Disney Studios Chairman Joe Roth. Under that agreement, Sony pays half the costs of as many as eight films a year, effectively turning over to Roth one-third of the movies it releases. And those could be expensive, given Roth's track record of working with top-flight stars like Julia Roberts and Bruce Willis.

Why would Sony give up control? According to Sony Pictures Chairman John Calley, his studio gets more time to focus on the 15 or so films that aren't being made by outsiders. Sony Corp. Chairman and CEO Nobuyuki Idei says simply: "We make too many pictures."

The financial revamping may accomplish what has been a goal for Sony's Japanese owners for years, namely finding a way to reduce their Hollywood holdings. Idei says he still hasn't given up the notion of merging the studio with a major company with distribution that could help it sell its content. By then, the 70-year-old Calley is likely to have left the company. One possible successor is Roth, whose noncompete clause with Disney expires next year, when Calley's own contract is up.

Until then, Sony will try to bring its film unit back from Hollywood's lower rungs. It's hoping for a hit with *Finding Forrester*, a drama starring Sean Connery as a cranky reclusive author who mentors a South Bronx African-American. Then there are sequels to hits like *Men in Black* and *Stuart Little* that are somewhere in the studio pipeline. But like Sony's market share so far, they're still invisible.

By Ronald Grover in Los Angeles, with Irene Kunii in Tokyo

CHRISTMAS: THE SEQUEL

Mel Gibson discovers his feminine side. A green-faced Jim Carrey does Dr. Seuss. Nicholas Cage does his best Jimmy Stewart imitation. It's beginning to look a lot like Christmas in Hollywood. And even before the Federal Trade Commission in September trashed Hollywood for its violent ways, studios were preparing a two-month holiday-season fest of sweetness, schmaltz, and family values.

Starting absurdly early this year on Nov. 3, Hollywood's holiday season will have more than the usual dose of family feel-good films. And it couldn't have come at a better time for Tinseltown, which is suffering through a dreadful fall with the box office off 15% as viewers tuned in to the Olympics and baseball and ignored generally lackluster films in the theaters. "We've all kind of limped into the fall," says Walt Disney Studios President Richard W. Cook. "The good news is that we're releasing mass-appeal films now."

Disney is doing its part, with *102 Dalmations* and its animated *The Emperor's New Groove*, both of which are expected to do brisk business. But Disney will have plenty of

competition for the kiddie audience. Universal Studios, on a hot streak of late, unleashes Jim Carrey as the lead character in *Dr. Seuss' How the Grinch Stole Christmas*. And Paramount Pictures offers up a sequel to its 1998 blockbuster with *Rugrats in Paris—The Movie*. They'll both start battle on Nov. 17.

Even action stars are putting down their guns and ditching speeding cars this year.

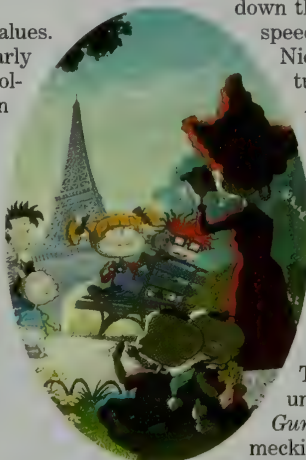
Nicholas Cage sees his future unfold in *Family Man*, inspired by *It's a Wonderful Life*. Mel Gibson reads women's minds in Paramount's comedy, *What Women Want*.

The early betting among Hollywood insiders has Gibson and Carrey holding the hot hands. Less certain is Tom Hanks, who is reunited with *Forrest*

Gump director Robert Zemeckis as an island survivor in 20th Century Fox's *Cast Away*. Then there is Adam Sandler as the devil's

bumbling youngest son in New Line Cinema's *Little Nicky*. Sandler can usually count on luring lots of 20-somethings. This time, Sandler fans may get trampled by the hordes of kids and parents heading for the ticket booth.

By Ronald Grover in Los Angeles



IN PARIS: Paramount is betting on the *Rugrats* again

HOLLYWOOD'S HOLIDAY HOPEFULS

FILM	STUDIO/ RELEASE DATE	COMMENTS
CHARLIE'S ANGELS	Sony Nov. 3	Revival of TV show, complete with martial arts and bikinis
102 DALMATIANS	Walt Disney Nov. 22	The puppies beat Glenn Close, again
DR. SEUSS' HOW THE GRINCH STOLE CHRISTMAS	Universal Nov. 17	Jim Carrey gets nasty
RUGRATS IN PARIS: THE MOVIE	Paramount Nov. 17	Nickelodeon kids return to the screen
CAST AWAY	Fox Dec. 22	Forrest Gump duo Tom Hanks and director Robert Zemeckis hang out on a desert island

DATA: EXHIBITOR RELATIONS CO., BUSINESS WEEK

EDITED BY ELLEN LICKING



AERODYNAMICS MAKES FOR SAFER TRUCKS

ENGINEERS OFTEN USE WIND tunnels to test aircraft designs. But Bob Englar is testing trucks. Based on months of experiments, the inventor and principal researcher at Georgia Tech Research Institute believes he can achieve a 5% reduction in aerodynamic drag on tractor-trailers by venting compressed air through small slots on the sides and back of the trailer. That reduction translates to roughly a 12% drop in fuel consumption. If this technology were applied to the whole U.S. fleet of trucks, it could save as much as 1.2 billion gallons of fuel a year, according to the American Trucking Assn., which enthusiastically support Englar's research.

Drag reduction is just one benefit, says Englar, whose work was done under contract with Oak Ridge National Laboratories. Controlled air gusts could also reduce rolling resistance—the friction of weighted tires on the road. By blowing air from vents at the top of the back panel on a fortified 40,000-pound truck, the engineer believes he can produce 12,000 to 15,000 pounds of effective lift. "It's as though the tractor-trailer were a wing," says Englar. There is also a safety payoff: By venting air from the bottom slots on the trailer, traction is better, and so is braking," he says. *Neil Gross*

'THIS IS MISSION CONTROL. START THE CAR'

TODAY, IF A CAR'S IGNITION SWITCH STOPS RESPONDING, IT probably means a costly repair to the wiring. For a military vehicle, it could mean dangerous delays on the battlefield. But fixing the malfunction could be as simple as rerouting the faulty command, thanks to new technology being developed at the Product Development & Manufacturing Center (PDMC) at Oakland University in Rochester, Mich.

PDMC is working with the National Automotive Center of the U.S. Army Tank Command and a consortium of carmakers to develop the technology, which uses radio frequencies instead of wires to send commands to vehicle equipment. If a control panel is damaged, critical functions can be transferred to another set of controls by an onboard computer. The consortium is currently testing the technology, which operates through a laptop attached to the vehicle's dashboard, in both a Jeep Grand Cherokee and a Hummer military vehicle. Future versions of the device will be integrated into the car's internal systems—and may even be operated and monitored remotely, says Patrick E. Dessert, PDMC director. The radio frequency system would replace much of the car's wiring. Dessert estimates that this could translate into \$300 in savings per vehicle in warranty costs. *Jeff Green*

THIS BRAIN PROTEIN MAY LOOSEN PARKINSON'S GRIP

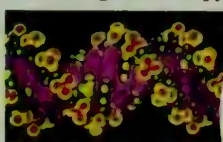
NEW RESEARCH PUBLISHED in the Oct. 27 *Science* offers hope to the 1 million Americans suffering from Parkinson's disease. A team of international scientists led by Dr. Jeffrey H. Kordower of Rush Presbyterian-St. Luke's Medical Center in Chicago has used gene therapy to

and function that occurs in Parkinson's is caused by the progressive degeneration of certain brain cells called dopamine neurons. Previous studies with a specific brain protein called GDNF suggested that this molecule can prevent dopamine neuron loss. But delivering GDNF to the critical brain cells is difficult. To overcome this barrier, Kordower and his colleagues first used a sample of HIV

that was gutted of its infectious genes to ferry the GDNF gene inside the neurons.

The group then directly injected this viral carrier, or vector, into the brains of the monkeys that had Parkinson's disease.

One month after treatment, the monkeys that had been treated with GDNF had much better control over their movements than untreated monkeys. In addition, brain scans of GDNF-treated monkeys showed that the genetic medicine had stanchied neuron degeneration. □



GDNF MOLECULE: It works in monkeys



prevent the degeneration of brain cells in monkeys with Parkinson's. Ronald D.G. McKay, a neurobiologist at the National Institutes of Health, calls the study "a step forward," but cautions that "there is still a lot of work to be done."

The loss of muscle control

INNOVATIONS

■ Suffering from information overload? You should be, say Hal Varian and Peter Lyman, two professors at the University of California at Berkeley. These researchers recently totaled up the amount of content generated in 1999 that has been stored in print, film, optical, and magnetic media. The result is a staggering 1.5 exabytes, or 1 billion gigabytes, of information. That means there are 250 megabytes for every man, woman, and child on earth. According to the researchers, printed documents of all kinds make up only 0.003% of the total, while 93% is stored in a digital format. The researchers' report, *How Much Information?*, has now been published on the Web: (www.sims.berkeley.edu/how-much-info/index.html).



POLLUTER: Cleanup ahead?

■ Barry Goodell and a team of scientists at the University of Maine have patented a multipurpose chemical process that can be used to clean up industrial wastewater or to bleach wood pulp and recycled paper—all without generating toxic byproducts. The technology makes use of highly reactive molecules known as free radicals, which excel at breaking down the heavy-duty dyes used in paper and textile mills. Goodell is now looking for industrial partners to test his process.



Earth broadcasts



Translation software



Gore/Bush commerce



Earth invasion plan

©2000 Quantum Corporation. All rights reserved. Quantum and the Quantum logo are trademarks of Quantum Corporation, registered in the U.S. and other countries.

For more information,
call 1-800-624-5545
or visit www.quantum.com

If it's important to you, save it with us.

Quantum

TELECOM TURMOIL

Some big players are sagging, but this is no dot-com crash

Only a few months ago, the opportunities for telecom players seemed boundless. From long-distance giant WorldCom Inc. to upstart Level 3 Communications, companies were building sprawling communications networks across the country to carry the booming Internet traffic. Communications equipment makers Lucent Technologies Inc. and Cisco Systems Inc. were struggling to keep up with demand for their gear. And investors were all too happy to finance this construction of the Digital Future, pouring \$33 billion worth of telecom IPOs just since the beginning of 1998.

Now, formerly high-flying telecom players are struggling to regain cruising altitude. The Big Three long-distance companies have seen their stocks plummet more than 50% this year. AT&T shares got hammered 13% on Oct. 25 when CEO C. Michael Armstrong announced plans to break the company up amid deteriorating financial results. Even Verizon Wireless, the largest provider of mobile-phone services in the U.S., had to postpone its initial public offering because of stock market turmoil.

It may be tempting to conclude that the prospects for telecom players were overhyped as those of flavor-of-the-month Internet startups. Certainly, profits across the telecom industry are dropping as too much capital investment chases too little revenue. Blake Beth, an analyst for Lehman Brothers Inc., estimates that the return on assets in telecom will drop to 8.5% this year from 12.5% last year.

Look carefully, though, and you'll see that there are bright spots in telecom. Younger, more nimble players that aren't bogged down with legacy technology have been able to capitalize on fast-growing services like Internet and wireless—and have been turning in stellar financial performances. Qwest Communications International Inc., the long-distance

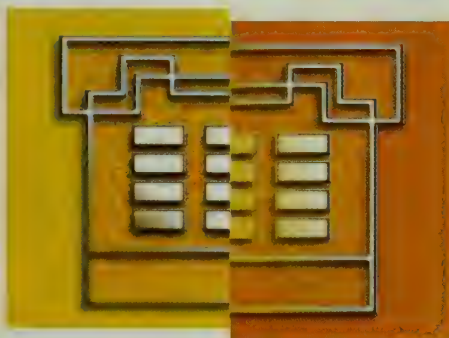
upstart that acquired Baby Bell US West Inc., reported sparkling third-quarter results on Oct. 24. "Let's not throw the baby out with the bath water," says Joseph P. Nacchio, Qwest's CEO. "From our point of view, we think this industry is strong."

The key is keeping up with lickety-split changes in technology. The latest communications gear is evolving at a rate that's dizzying even compared with the computer industry. The capacity of optical equipment, for example, is doubling every

nine months—twice as fast as semiconductors. Such change creates opportunities for nimble startups and hazards for today's leaders. Consider how badly Lucent Technologies has stumbled. It missed the latest evolution of optical gear and blew Wall Street's financial expectations four quarters in a row. The missteps ultimately cost CEO Richard A. McGinn his job.

Even once-invincible Cisco is threatened. The networking giant's strategy, executed brilliantly for years, has been to buy upstarts just as their technology was going to be adopted broadly. But the latest twists and turns of the communications-gear market have left Cisco playing catch-up. It's losing share in the \$2 billion high-end router market to upstart Juniper Networks Inc., and hasn't made much progress in the optical arena.

The lesson? The troubles of yesterday's stars shouldn't mask the prospects for tomorrow's up-and-comers. For every Cisco, there's a scrappy Juniper. For every AT&T, there's a speedy Qwest. Older telecom players may well recover from their current problems, but if they don't, new companies will take their place.



CISCO: CHOPPY SEAS

New rivals, a brain drain, and a stock drop will make for a tough year **Page 168**



LUCENT: A CLEAN BREAK?

The ailing company has ousted its chief executive. That's step one **Page 176**



AT&T: DISMANTLING

As CEO Armstrong starts chopping, which pieces will succeed? **Page 173**



BusinessWeek online

For interviews with interim CEO Henry Schacht and AT&T CEO Mike Armstrong, go to www.businessweek.com

CISCO: NAVIGATING CHOPPY WATER

New rivals, a brain drain, and the stock drop could make for a tough year ahead

Cisco Systems Inc. and CEO John T. Chambers have been firing on all cylinders. For the fiscal year ended in July, the networking giant boosted revenues 55%, to \$18.9 billion, and increased net income 56%, to \$3.9 billion. Even more impressive, the company has racked up 10 consecutive quarters of accelerating sales growth, reaching a 61% sales hike in the latest quarter. With that kind of sky's-the-limit performance, Cisco's market cap has surged to \$356 billion, making it the second-most-valuable company in the world behind General Electric Co.

Yet, weird as it may sound, there are growing signs of trouble at the once-invincible tech giant. Cisco has suffered lapses in key technologies, and it's getting crunched by upstart Juniper Networks in the critical high-end router market—gear that directs traffic around the Internet. Employees are starting to jump ship, and investors are beginning to lose their once-unshakeable faith in Cisco's future. The stock has slid 38%, to 51, since its peak of 82 in March. "You have to ask yourself how much more upside is possible," says Art Bonnel, manager of U.S. Global Investors Bonnel Growth Fund, who sold his 40,000 Cisco shares this year.

CURRENCY DROP. A prolonged stock slide is a serious threat to Cisco. For starters, it may make it too expensive for Cisco to buy networking companies—an approach the Silicon Valley tech outfit has used for seven years to move into new markets. So far, Cisco has used its high-flying shares to acquire cutting-edge technologies in some 60 companies. Consider, for example, what would happen if it were to try to buy hot optical players Corvis Corp. or ONI Systems Inc. Cisco would have to issue one-third more shares today than it would have in March. That would dilute earnings and damage existing shares even more. "If the stock pulls back any more or stays down a long time, they may have to think twice about some of the bigger deals," says analyst Martin

Pyykkonen of CIBC World Markets.

A languishing stock also makes it harder for Cisco to hang on to top executives. It used to be almost impossible to talk the brass into leaving Cisco, since the company's stock options kept making them rich. Cisco's stock has soared thirtyfold since Chambers became CEO six years ago, and thousands of employees have become millionaires. But the percentage of Cisco employees who leave voluntarily has crept up from 4.7% in 1999 to 5.6% in 2000. More than 50 former Cisco employees have defected to rival Redback Networks Inc. alone. And the departures have included some high-profile execs, including Executive Vice-President Don Listwin, who took the CEO job at Software.com in August. "A

year or two ago, we never even got a return call from Cisco employees," says Andy Price, a headhunter at recruiting firm Schweichler & Associates.

Clearly, Cisco is going through one of the most difficult periods of its 14-year life. Interviews with current and former employees, analysts, venture capitalists, and corporate recruiters suggest that the next year could be Cisco's most challenging yet. For years, the company ran circles around rivals such as Lucent Technologies in the communications-equipment market. Now, the rapid changes in Internet technology have Cisco facing some of the same difficulties as its older brethren. How does it keep up with more nimble upstarts such as Juniper? How can it move quickly with 35,000 employees—almost double the number of a year

ago? And how will Cisco keep up with the demands of new phone-company customers when Chambers and other top execs have to spend much of their time serving a large, lucrative customer base in the corporate market?

Chambers, Cisco's irrepressible CEO, says fears about the company's prospects are overblown. While he worries that a prolonged stock drop could dampen employee morale in the short term, he's not losing any sleep over it. He says the company has too many things going for it: strong technology and products, a tight relationship with corporate customers, and businesses that are growing in every region of the globe that Cisco competes in. "If we can maintain 30% to 50% [revenue and earnings] growth, the stock will take care of itself," he says.

As for those who have left the company, Chambers argues that many simply wanted a slower pace of life after years at the hard-charging company. He's confident that most of his top lieutenants are staying put. Chambers, for example, recently persuaded

TELECOM



TURMOIL

HEADACHE? CEO Chambers insists Cisco has too much going for it to worry. "We have never been better positioned," he says—and many outsiders agree

Senior Vice-President Mario Mazzola to stay by putting him in charge of a new unit developing network-storage gear.

And acquisitions? Chambers says the gear market in tech stocks has hit upstart equipment makers even harder than Cisco, so the company will be able to buy companies when it needs to. Foundry Networks' stock, for example, has tanked 66% from its high, and Cycamore Networks' stock is down 67%. "If we execute well, we will control our own destiny," he says.

Most important, Chambers thinks Cisco is inextricably linked with the booming popularity of the Internet. He believes businesses no longer view spending on networking gear as an expense but as a strategic investment. Chambers argues that Cisco has credibility with customers because it uses the Internet to improve its own business. And the com-

pany's three-year-old Internet Business Solutions Group, he says, is stoking demand by showing customers how to improve productivity using Cisco gear. Cisco is "at the center of the next industrial revolution," he says. "We have

CISCO'S SLIDE

After soaring over the past five years, Cisco's stock has dropped 38% since March, making it more difficult for the company to make acquisitions and retain employees.



DATA: BLOOMBERG FINANCIAL MARKETS

never been better positioned."

There are good reasons not to bet against Chambers. When Lucent and Nortel began buying data-networking companies several years ago, many pundits predicted the phone giants would pulverize Cisco. But Chambers aggressively pursued young phone companies, persuading them to build networks around the Web rather than using traditional phone gear. At the same time, corporate sales started to climb again after slowing to near single-digit growth in 1997. "Cisco has shown time and time again that they can weather these kinds of storms," says analyst Chris Stix of Morgan Stanley Dean Witter.

Many outsiders agree. With its 80% share of the market for corporate networking gear and a growing business selling to phone companies, Cisco looks as if it's on track to meet Wall Street's expectations near-term. And though Cisco's turnover rate has crept up, it's still only half the average at other tech companies. No one is expecting "gloom and doom for Cisco," says C. Richard Kramlich, founding partner of venture firm New Enterprise Associates, which has sold six companies to Cisco.

Yet the company's very success has created some of its biggest challenges. Cisco has eaten its way to the top of the networking food chain by making scads of acquisitions. While that has given it entrée into new markets, it also has created a hodgepodge of corporate cultures. "Cisco



looks like the bar scene from *Star Wars*," says recruiter Price. "A lot of people don't want to be part of that."

Part of the reason is a growing concern that Cisco may be getting too big to move fast. A former software developer for Cisco's corporate switching unit says some employees feel "boxed in" by an increasing amount of drudgery. For example, it now takes twice as long—about four hours—to change one line of code in the software that runs Cisco's routers and switches because the program is so large and cumbersome. "It was getting tough to be productive," says the employee, who left Cisco in August for startup TiMetra Networks.

Worse, corporate recruiters say senior execs are exiting Cisco as never before. Price says his firm has lured away three vice-presidents in the past two months. One of them is Kevin Smith, who headed optical-manufacturing operations and left to take a similar role at Redback. Smith won't talk about why he left, but he helped the upstart manufacture two new Net-equipment products that contributed nearly half of Redback's third-quarter sales of \$81 million. "He made our quarter," says Chief Financial Officer Craig Gentner.

A weak stock price also could make it difficult for Cisco to catch up in key markets. For example, Cisco has been trying to move more aggressively into the market for optical gear, but the

TELECOM



TURMOIL

companies with the latest technology are expensive. Corvis, which makes optical routers for the long-distance market, has a market cap of \$20 billion—three times more than Cisco has ever paid for a company. Cisco considered buying ONI, another maker of optical gear, but the company decided to go public instead and is worth \$9 billion. Because of such sky-high valuations, optical companies have "got stars in their eyes," says Mike Volpi, Cisco's chief strategy officer, who oversees acquisitions.

To reach the stars, Cisco might have to find another way—say, throwing in a bundle of cash to close an acquisition. On Oct. 20, Cisco used a combination of stock and cash when it bought the broadband-software unit of CAIS Internet Inc., for \$170 million. Cisco's Volpi insists that the company will do whatever it takes and will not change its acquisition strategy. "We



plan to be equally aggressive," even if that means diluting earnings with a large optical purchase, says Volpi. "If we decide to do some optical deals, those will be expensive, but our customers expect us to be in those businesses." For now, Cisco

WHERE THE TROUBLE IS

The networking giant is showing some unusual signs of weakness, especially in the router market, the gear that directs traffic on the Internet.

LOSING ITS LOCK ON ROUTERS

Cisco controls over 80% of the \$3 billion market for routers used in corporate networks. But it's losing ground in high-end routers, largely used by phone companies. Its share of that \$2 billion market fell to 75% last quarter from 80% in the previous one.

FAR BEHIND IN OPTICS

Cisco has a measly 3% share of the fast-growing, \$25 billion optical market. It is filling out its product line through acquisitions and should top revenues of \$1 billion in optics this fiscal year, up from zilch two years ago.

WEAKER STOCK

Cisco's stock is down 38% from its peak in March, making it harder to retain employees and to make acquisitions. And Cisco has to pony up more shares of stock to make acquisitions than in the past, which dilutes the equity stakes of existing shareholders.

GROWING BUREAUCRACY

Cisco has been superbly managed, with operating margins that averaged 24.9% over the past five years, compared with 4.9% for Nortel and 5.3% for Lucent. But Cisco's workforce has doubled in the past year, to 35,000 employees, making it tough to act fast in a changing technology landscape.

ANTE UP

Optical-gear makers have "stars in their eyes," says Volpi, who oversees acquisitions for Cisco

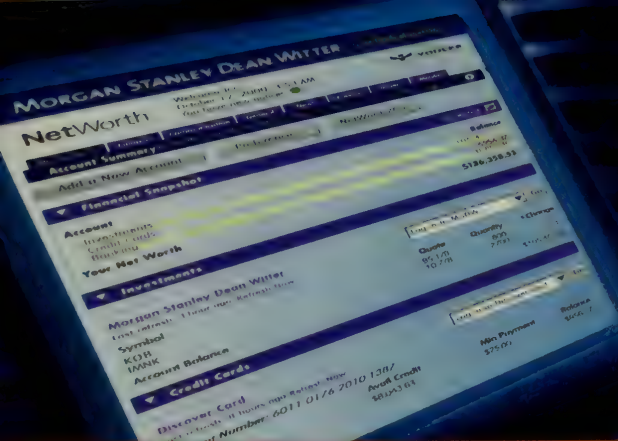
hopes to gain ground in the optical market by rolling out gear it nabbed as part of its acquisitions of Cerent and Queynton Systems last year. Cerent, which Cisco bought for \$7 billion, is generating \$1 billion in sales per year.

"PAINFUL" It could also be tough for Cisco to catch up to Juniper, the biggest threat on the horizon. Juniper is gaining share in the market for big Internet routers, one of Cisco's most lucrative businesses. The upstart boosted its share of the \$2 billion market to 20% in the past quarter from 17%, while Cisco's share dropped to 75% from 80%. Although Cisco has reorganized its team that builds big Internet routers and upped its product-development budget, it won't match Juniper's product speeds until at least March or April. "It has been painful to watch a company with that many resources repeatedly stub their toe" on router development, says Mike O'Dell, chief scientist at WorldCom Inc.'s UUNET service. Cisco was once the primary supplier of UUNET's routers, but now Juniper is its No. 1 source.

Cisco's ability to acquire new technology is crucial. Every year, the company gets 30% to 50% of its sale from products it didn't have 18 months before. Given how fast the networking industry changes and the breadth of gear customers need, Cisco can't make all it needs by itself. Cisco can't buy startups on the cheap; it may have to spend more than the 14% it now spends on R&D. That could crimp the bottom line.

The current difficulties have some institutional investors worried. Bonnell had long counted Cisco among his 10 holdings before he bailed out this year. The University of California Endowment & Employee Retirement Fund also has been paring its Cisco holdings throughout 2000, says Jim Cottle, the fund's technology analyst. Although it still owns more than \$10 million in Cisco shares, that's less than half of what it held at the beginning of the year. To fly high again, Cottle needs to convince people such as Cottle that Cisco is not only a great company but also a great investment.

By John Shinal
San Mateo, Cal



It's 3:53 a.m. Do you know what your net worth is?

Presenting NetWorth. A free online service for Morgan Stanley Dean Witter clients.

NetWorth automatically collects and calculates your banking and investment accounts and puts them on one single page, in one convenient online location. Checking and savings accounts. Mutual funds. 401(k). Credit cards. Mortgage and car loans. Not just your net assets. Your net worth. All on one page, updated continuously. So you always know where you stand. 24/7. It's completely free. Available exclusively to our clients. And all from the company that measures success one investor at a time. Log on to msdw.com/networth or call 1-877-MSDW-COM. NetWorth. One more reason to move your money. And get well connected.

Well Connected

**MORGAN STANLEY
DEAN WITTER**

msdw.com/networth

Yodlee is a trademark of Yodlee.com, Inc.

Morgan Stanley Dean Witter and Well Connected are service marks of Morgan Stanley Dean Witter & Co. Services are offered through Dean Witter Reynolds Inc., Morgan Stanley & Co. Incorporated and Morgan Stanley Dean Witter Online Inc., members SIPC. © 2000 Dean Witter Reynolds Inc.



You can always tell when people see things from your point of view. At Wausau, we go out of our way to learn the ins and outs of your business. It enhances service and strengthens relationships. Wausau understands. And it shows. Wausau Insurance Companies • 2000 Westwood Drive, Wausau, WI 54401 • www.wausau.com • A+A.M. Best Rating

What can we do to help you

AT&T: BREAKING UP IS STILL HARD TO DO

As Armstrong takes a chisel to the company, which pieces can succeed on their own?

It was little more than two years ago when AT&T CEO C. Michael Armstrong unveiled a daring strategy to remake the struggling long-distance company. In a June, 1998, press conference, Armstrong stood grinning as he said he would spend \$48 billion to acquire Tele-Communications Inc. The plan: to use cable-TV networks to deliver broadband Internet access and local phone service. To aid his cause, Armstrong then cut a deal to spend \$58 billion to buy cable provider MediaOne Group. We will bring to people's homes the first fully integrated package of communications, electronic commerce, and video entertainment services," he said at the time of the TCI deal. "And [we] will do this with the quality and reliability that people have come to expect from AT&T." Or maybe not. In a more somber meeting at a New York hotel on Oct. 1, Armstrong announced a breakup of AT&T that will put an end to his soup-to-nuts strategy of offering communications services from a single company. AT&T will be split into four pieces: wireless, cable TV, consumer, and business services. The units all will have separate management teams and shareholders, though the consumer operation will have a tracking stock of the business unit. The four divisions will continue to cooperate on some marketing efforts, but be free to compete against one another. **ELTDOWN.** Armstrong says this is the best way to ensure that each unit focuses on building its own business, while Wall Street can evaluate better the performance of each. "The creation of these four companies is the foundation for a path to value creation," he says. "The journey hasn't been simple, but I believe it will be successful."

Will it? The restructuring is no magic bullet. And it's unlikely that execs who have been missing their financial targets as part of AT&T will suddenly become capable of hitting them now that they're on their own. Moreover,

the four-way split promises to be a tremendous distraction for the next two years for even the most ardent of these managers. Salomon Smith Barney analyst Jack B. Grubman downgraded AT&T's stock to neutral the day of Armstrong's announcement, his second downgrade of the year. "The business is melting down," says Grubman.

Armstrong is under tremendous pressure to fix AT&T's flagging stock price. The company's shares

have tumbled 62% from their peak last year, to \$24, and are trading at 20% less than when Armstrong was hired three years ago. Shareholders have

dumped the stock largely because new businesses, such as broadband Net access and local telephone service over cable networks, are not growing fast enough to offset the rapid fall-off in consumer long-distance revenues. AT&T's revenues are expected to rise about 6% this year, to \$66.9 billion, while net income increases 7%, to \$5.9 billion.

Armstrong bets that slicing and dicing AT&T will boost its shares. By isolating the shrinking consumer long-distance business, he figures the other three units will be valued more highly.

"AT&T is valued at the lowest-common denominator," he says. Armstrong

TELECOM



TURMOIL



CRACKED

AT&T shares have tumbled 62% from their peak last year, to \$24, and are 20% less than when Armstrong was hired three years ago

Information Technology

strong also argues that the restructuring isn't just about pleasing Wall Street: It makes good strategic sense, too. Having separate stocks could help the businesses raise capital, while giving stock options to execs so their compensation is more closely tied to their performance. More important, leaders at each business will be on the hot seat. "It's easy to not be personally accountable [at AT&T now]," says Armstrong.

The tough-talking CEO bristles at the notion that the restructuring is a complete reversal in strategy. "I find that not only wrong, but offensive," he says. Armstrong argues that, three years ago, AT&T had nothing more than a long-distance business. Now it has a network for local telephone facilities in much of the country, more capabilities for delivering data and Net services to corporations, and a broadband Net-access business for consumers. "AT&T now has a future," he says. "If we hadn't done this, AT&T would have been in systemic decline."

The American telecom flagship is hardly the only phone company that's struggling these days. Telecom players have been steadily increasing their capital expenditures in recent years in hopes that fast-growing new services such as data and wireless will produce booming revenues. But revenues have been rising more slowly than expected, in part because prices are collapsing in the once-lucrative long-distance business. WorldCom Inc. is also planning to get out of consumer long distance. "The ground rules in telecom have changed," says Mark Herskovitz, a senior portfolio manager at mutual-fund giant Dreyfus Corp. "Everybody is trying to figure out what they should do."

CRIMPED. Certainly, AT&T has caused many of its own problems. The business-services division suffered earlier this year when a reshuffling of the sales force resulted in poor customer service and the loss of several big accounts. That crimped sales growth to about 5% this year, while the industrywide sector grew about 10%. The rollout of local telephone service through cable channels has proved more costly and complicated than Armstrong anticipated. AT&T will likely hit its target of at least 500,000 cable-phone subscribers by yearend—but only because the company agreed to give away the service for five months in

some markets. "I don't consider that marketing genius," says Brian Adamik of Yankee Group Research Inc. "You can sell anything for free."

Given such missteps, what are the prospects for the various pieces of the company? AT&T Wireless may have the brightest future. This year, its revenues are expected to grow at a 30% clip, to \$10 billion. It is the country's third-largest wireless company, with 11.4 million customers, after Verizon Wireless and the wireless joint venture created by SBC Communications and BellSouth Corp. Still, AT&T Wireless has a big advan-

TELECOM



TURMOIL

HOLD THE PHONE

Here's a look at how Mike Armstrong plans another breakup of AT&T.

BUSINESS SERVICES

Revenues: \$29 billion

The unit, which will retain the coveted AT&T network, will sell local, long-distance, data, and Internet services to businesses. It has lost customers of late, but it has the potential to be the most valuable piece of AT&T. Its revenues are expected to grow 5% to 10% a year.

CONSUMER SERVICES

Revenues: \$19 billion

This is the millstone around Armstrong's neck. The prime reason he's breaking up AT&T is that shrinking revenues in consumer long distance are restricting overall revenue growth. Consumer revenues this year are dropping by 11%, down from \$22 billion last year.

WIRELESS SERVICES

Revenues: \$10 billion

The wireless business, growing 30% a year, could be a star. It sold stock this year, raising \$10 billion that will help it buy the licenses and the technology for mobile Web services.

BROADBAND SERVICES

Revenues: \$9 billion

This includes cable-TV operations acquired over the past two years. It also has two promising businesses: broadband Net connections and local phone service over cable. Revenues should grow about 15% annually for the next few years.

DATA: SALOMON SMITH BARNEY

tage: It has already raised \$10 billion by selling stock earlier this year. Both of the other companies hope for initial public offerings, but the stock market has become so telecom-averse that it's not clear whether they'll be able to. Verizon Wireless has just announced it will postpone its planned IPO. With its bulging coffers, AT&T Wireless may be able to move faster than its rivals in acquiring the licenses and technology to offer wireless Web services.

DUMPED. AT&T's cable-TV properties have decent prospects. Cable TV remains a lucrative monopoly in most parts of the country. The unit also will sell broadband Net connections and local phone

service over the cable network. Many experts think an independent cable operation will simply dump the local phone effort because it's so expensive. But the broadband Net business could contribute \$1.2 billion in revenues in 2003, or about 10% of total revenues, according to Salomon Smith Barney.

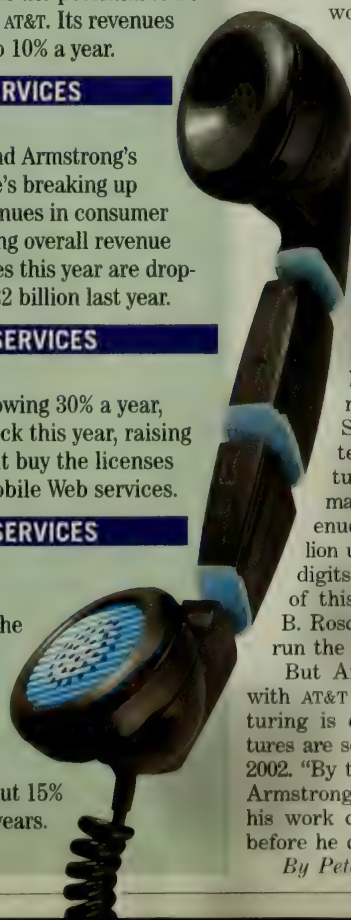
The consumer business is facing serious trouble. Revenues will keep deteriorating over the next few years, and the unit probably won't survive on its own.

Look for it to be acquired shortly after it spins off as a tracking stock, scheduled for next year. Verizon has considered buying it, but regulatory approval may be tough to come by.

The operation that sells to businesses has its work cut out for it. After bungling the sales force reorganization earlier this year, the business has a lot to prove. Still, it has data and Internet services that could turbocharge growth management executives. Revenue growth for the \$29 billion unit could climb to double digits. Armstrong will be CEO of this company and Richard B. Roscitt, an AT&T veteran, will run the day-to-day operations.

But Armstrong may not stay with AT&T long after this restructuring is completed. The divestitures are scheduled to be finished in 2002. "By that time, I'll be 64," says Armstrong a bit wistfully. He has his work cut out for him, though before he can retire in peace.

By Peter Elstrom in New York



Wicked Fast



www.rambus.com/wickedfast



RAMBUS

Rambus is a registered trademark of Rambus Inc. All other trademarks are the property of their respective owners.

TURNAROUNDS

LUCENT: CLEAN BREAK, CLEAN SLATE?

The ailing company has tossed out its CEO. That's step one

Henry Schacht has already scored one victory as the newly named, and returning, CEO of Lucent Technologies. On Oct 24, the day after the troubled company announced the ouster of Richard McGinn and the appointment of Schacht, the new CEO broadcast a speech from the Murray Hills (N.J.) headquarters to about 56,000 of Lucent's 120,000

BACK AT THE HELM:
Temporary CEO
Schacht

employees. Schacht, who had headed the company from 1995 to 1997, was understandably concerned about his reception at Lucent. After all, the company had just announced that the fourth quarter in a row would not meet projections, and the stock had lost 70% of its value in a year. What he got, from

about 600 employees in the auditorium and an additional 1,000 in the cafeteria, was a standing ovation. "I couldn't get through the cafeteria when I went to lunch, and that was really heartwarming," Schacht told BUSINESS WEEK in an interview. "You can just feel the energy in the whole place. We're on our way."

If that's true, Lucent's customers, employees, and shareholders can only breathe a sigh of relief. The company that could seemingly do no wrong in the first three years after it was spun off from AT&T in 1996 seriously lost its way in 2000. It has admitted that the

current first quarter, normally a strong period for the firm, will be down. The stock is now trading at about \$21 a share, a level not seen since 1998. And Moody's Investors Service has placed the ratings of Lucent debt under review for a possible downgrade. Worst of all, it has been completely bested by

archival Nortel Networks Corp. in the key market for optical-fiber telephone switches.

The contrast with Nortel is what stings Lucent execs the most. It was only a few years ago that Nortel was the industry dog. But then, a bet the

company made in 1995 started to pay off. Nortel had decided back then to build network gear that would zap data at speeds of 10 billion bits per second through a single strand of optical fiber. Nortel's phone-company customers weren't asking for anything nearly that fast, but they liked what they saw. Today, Nortel has 45% of the exploding optical transmission switch market. That compares with just 15% for Lucent, which decided in 1996 to develop a slower switch precisely because its customers weren't asking for anything faster.

Nortel hasn't escaped the market's vagaries. Its shares got pummeled after

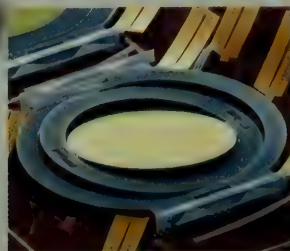
TELECOM



TURMOIL

CAN THIS BUSINESS BE SAVED?

Lucent's problem areas



OPTICAL NETWORKING

PROBLEM Lucent blew it with its 1997 decision to design new switches for capacity rather than speed. Nortel went the other way and now has 43% of the \$6 billion world market. Lucent's 15%.

SOLUTION Lucent could lure back customers with its off-the-art LambdaRouter optical switch. Its micro-mirror is tilted to steer light—but the market may not be there.

announced slower-than-expected sales growth in the third quarter on Oct. 4. But "slow," in this case, still meant an impressive 2%. And for optical networking alone, growth last quarter was almost 90%.

Lucent now rues the decision to settle for less transmission speed. And the 67-year-old Schacht, sometime CEO of Cummins Engine, is quick to acknowledge that he is as much at fault as McGinn.

Of course. I was CEO through 1997." Now he's determined to rectify that very big mistake. Schacht says he is planning one-on-one meetings with Lucent's customers and is reviewing all the processes now in place with an eye to streamlining Lucent's cumbersome structure. But Schacht's position is only temporary. While moving to fix what is broken, he will also be part of a search for a permanent CEO.

STANDARDS. Whoever takes over, he or she will inherit a work in progress. Under McGinn, Lucent embarked on an organizational overhaul in September. To head up key divisions, it has appointed some aggressive new outsiders who are not mired in the company's bureaucratic mind-set. One of those, Chief Financial Officer Deborah C. Hopkins, age 45, arrived from the same position at Boeing Corp. in April. She is putting in place a company-wide standard for evaluating a product's profitability, replacing the piecemeal, business-by-business method used before. The company is also chopping away at management layers, more closely tying compensation to performance and trying to better integrate its vaunted Bell Labs with product-development teams.

All of this activity stems from Lucent's realization that it has to do a lot more than catch up in optical gear. Get-



OUSTED

McGinn had begun an overhaul in September

ting back into that key market sector is certainly critical. But the world's largest telecom-equipment maker actually has a more cosmic task: It must remake itself into a company that can be quick to respond to market needs, quick to deliver new technology, and far less bu-

reaucratic. And it has to do all of this while suffering from a 20% turnover rate that is siphoning off top talent.

Granted, such an overhaul has been prescribed for just about every lumbering Old Economy behemoth. But Lucent has unique problems. For all but the last four years of its 122-year history, it served as the captive equipment division of its largest customer: AT&T, the world's biggest phone company. In that role, the division that became Lucent was more likely to tell its customers what technology they needed than listen to their requirements. Its salespeople had to do little more than write up orders. And it never had to worry about satisfying Wall Street. "Lucent had no track record of operating as a publicly traded company, and when you think about it, that transition is enormous," says an industry executive who has worked for the pre-independent Lucent and its competitors. "Suddenly, your accountability to the markets is an issue, and so your planning horizons have to change. It's a totally different way of thinking and operating and Lucent just did not have that legacy."

Lucent must also deal with a market that has changed radically in the past three years. It can no longer survive on the gold-plated, end-to-end voice

networks that are its stock in trade. Voice switching is simply not where it's at today, and Lucent has been achingly slow in mastering the industry's transition to data networks. Before it was able to ramp up sales of new products, sales of its older voice switches fell off the table. "It's not easy to grow revenue when the technology is shifting away from your big product lines," says Kevin Kennedy, head of competitor Cisco Systems Inc.'s phone-network business and a former Lucent employee.

100-DAY PLAN. Few are willing to write the company off. "They are chock-full of very, very smart people," says Timothy Smith of market researcher Dataquest Inc. "They have a huge installed base and a lot of excellent products." And they are in an extremely robust industry. In fact, it is a measure of how deep Lucent's problems are that the firm could keep reporting dismal earnings when the overall market is so strong.

Lucent is determined to pull itself apace with that market. And it may have a secret weapon: In September, Lucent named Jeong Kim to head its optical networks business. Kim, 40, is the founder of Yurie Systems Inc., a startup circuit switchmaker bought by Lucent in 1998, making him a billionaire. Clearly different from the Lucent lifers around him, Kim says he decided to stay on at Lucent because "I can always be successful as an entrepreneur. But I love this opportunity to turn a large organization around."

Kim has reorganized the group into 17 small divisions based on product lines, with managers closely matched to customers and compensation tied to performance. "We are much more focused on the products than Lucent overall," he says. His goal: to improve time to delivery by 30%. "I have a 100-day plan," he says.

Kim's entrepreneurial spirit is sorely needed at Lucent, and he is convinced he already has had a positive effect on

morale. He recently visited a Lucent plant in North Andover, Mass., and found general managers there very involved in suggesting ways the operation could be improved. "They were really taking ownership of their operation. And morale was running really high. I was very encouraged."

High morale helps, and Schacht plans to nurture it. He sees Lucent's problem now as one of "execution, not development of the products." But in reality, the problem is both. Lucent has been too slow to embrace the data market and still doesn't have a competitive product in certain key markets, such as Internet routers. On

RECURIT SWITCHING

PROBLEM Lucent may be slow in this market, but it is slowing for optical voice switches. Lucent's habit of going to its own salesmen has resulted in a loss of bad debt and merging phone companies.

SOLUTION Lucent wants to emphasize voice services and rein in lines of credit.

DATA NETWORKING

PROBLEM The company is way behind in high-speed Internet routers, the fastest-growing segment of this market. Cisco and Juniper are nabbing all the action.

SOLUTION New routers from recent acquisitions may help it get into the game. And it's still the leader in selling data equipment to communications carriers—albeit older technology.

CORPORATE CULTURE

PROBLEM Despite all the talk of its liberation in the spin-off from AT&T, the bureaucratic legacy survives. The result: a crippling brain drain and a loss of confidence among customers and investors.

SOLUTION Lucent is streamlining internal operations. And there's still the vaunted Bell Labs, whose innovations must be put to better use.

top of that, Lucent has a massive credibility problem. After a full year of product delays and overly optimistic earnings projections, it must regain the confidence of both customers and investors. The company has only just started shipping optical switches that are competitive with Nortel's successful product line, and it has yet to offer a competitive product for high-end Internet transmission gear. Lucent has also spent \$32 billion in stock and cash on some 38 acquisitions, with few marketing successes to show for the buying spree.

EXODUS. For two years, Lucent's failures in the data and optical equipment markets were masked by strong growth in its core voice-network business. But now that business is dropping dramatically. In fact, Lucent lost \$2 billion in revenues in the past three months from just two big phone companies that slowed purchases of traditional voice equipment. Lucent also ran into trouble with a controversial effort to goose sales by providing lines of credit to phone carriers to buy its equipment—\$1.3 billion in credit already loaned out, and an additional \$7.7 billion available. Many of these carriers are on shaky financial ground, however, and Lucent has had to move money into its reserves to cover the bad debts.

CFO Hopkins is already working to rein in such handouts. She wants credit to be treated like a bridge loan, with a clear time limit, and a tougher assessment of the borrower's business plan and creditworthiness. "We want to make sure we are lending to very strategic partners," Hopkins says. "We can't do everything for everybody anymore."

Lucent must also start regaining the trust of its employees if it wants to stem the flood of talent that started rushing out the door as soon executives' pre-IPO options vested on Oct. 1, 1999. And it hasn't done any better at hanging on to the employees that came on board with its many acquisitions. Adopt-

ed employees who have headed for the doors regularly complain that they found themselves stifled by Lucent's many-layered management. "There are a lot of top-level people trying to get out of Lucent right now," one Silicon Valley headhunter says.

TELECOM



TURMOIL

A typical case is Ascend Communications Inc., a maker of specialized data-transmission gear that Lucent purchased in June, 1999. At the closing, Lucent passed out small kites to employees with the words "We're Ascending" emblazoned on them—but Ascend staffers weren't buying. The contrast between the two companies' corporate cultures quickly became evident to Ascend executives, who were used to a Silicon Valley pace of product development and marketing. "It was



NEW BLOOD

Aggressive outsiders such as CFO Hopkins (above) and Kim, head of optical switch systems, could give Lucent a boost

clear that they were a lot more into processes than we were," says one former Ascend executive who left a vice-president position less than a year after joining Lucent. Today, few of the key Ascend people remain, making it more difficult to design the next generation of gear.

Lucent's executives are sounding all the right turnaround noises. William T. O'Shea, vice-president for corporate strategy and business development, is in charge of a massive effort that kicked off this past summer to streamline Lucent's businesses. The goal: to encourage

entrepreneurship. "We are putting new people in charge and organizing groups to focus their energy in small teams," he says, rather than structuring the company in large, often uncommunicative, divisions. And the company is including Bell Lab researchers in these teams to make sure that their inventions are properly promoted. "We are bringing a much broader collection of people to the table internally to make strategic decisions," he says.

O'Shea's first order of business is to recover from the bad bet in optics that Lucent made in 1997. Optical switches and related gear are the fastest-growing segment of the industry because they

are capable of carrying voice, data, and video at lightning-fast speeds. Nortel has the lion's share of this market because it was first to introduce high-speed gear, called OC-192. Lucent has just started shipping its OC-192 product, and so far has signed up 15 customers. "We've produced a very competitive OC-192 product, although it's a year late," says O'Shea. The company also is well on its way to developing

the next generation of switches called OC-768. "Now we have to start building our credibility with the customers," he says.

WRONG ROAD. But the company still has a long way to go before it inspires confidence again. "I give a 50-50 chance," says Mary Lutkowitz, the head of optical network working research for Communication Industry Researchers Inc. in Charlottesville, Va. "They went down the wrong technology road, and even if you correct everything overnight, you can't turn out these products the next day."

Perhaps Lucent's toughest turnaround challenge is overcoming the skepticism that now surrounds everything it does. A perfect example is its assessment by many outsiders of its cutting-edge LambdaRouter. This is an optical switch that uses mirrors and fiber optics to direct beams of light over long distances without having to convert them to electronic pulses.

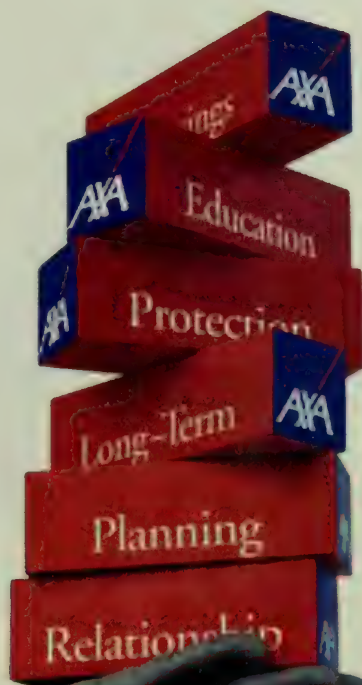
"How are you ever
going to pay for college tuition
and retirement? The answer is simple...
a financial plan."

Mark Mitchell
AXA Advisors

"Am I keeping up?" People in their 40's often panic about money. They ask, 'Will I have enough?' A financial plan may answer those questions and helps you move ahead." AXA Advisors is about a one-on-one relationship with a professional. A financial plan combined with an AXA Asset Account helps you gain understanding and control. "You may be a little behind. It's okay, I can help you catch up." Reach one of us at 1(888) AXA-INFO (292-4636) or visit www.axa-advisors.com.



AXA ADVISORS
Building Futures



costly and slowing process. It's an elegant technology, and Lucent is very bullish on the product, which is being tested by Global Crossing in its network. "This is going to be a key product space for us in the future," says O'Shea. But Robertson Stephens analyst Paul Silverstein is typical of the

outside view: He scornfully dismisses the device as "a science project. The market demand is not there."

Of course, that is what Lucent itself said a few years ago about OC-192—proving how difficult it can be to call the future of this market. So Lucent could still pull itself back to a

leadership position in the next go-round of the technology battles. Maybe next time, it will do a better job holding on to its title.

By Catherine Arnst in New York with Roger O. Crockett in Chicago and Andy Reinhardt and John Shinal in San Mateo, Calif.

'WE TRIED TO RUN FASTER THAN WE WERE CAPABLE OF'

Henry B. Schacht, 67, was named CEO of Lucent Technologies Inc. on Sunday, Oct. 22—during an emotional weekend board meeting at which Richard A. McGinn, his former protégé, was ousted. Just 36 hours after taking office, Schacht talked to BUSINESS WEEK Senior Writer Catherine Arnst about his plans to turn the company around. Here are some edited excerpts:

Q: You were in charge of the company for three years after it was spun off from AT&T. Do you take any responsibility for its problems?

A: Sure. I was not only CEO through the end of 1997 but I've also been a board member continuously throughout that process. Of course I do.

Q: How do you address concerns that your appointment may mean more of the same?

A: I spent the first 26 hours talking to our people—because that's the key. I've talked with most of our major customers on the phone, and I think they have a lot of respect and confidence in the company. My own view is to look forward—not back. I think the issue is basically around performance.

Q: Why has execution been such a problem?

A: I think we tried to run faster than we were capable of. We knew we had fragility in control systems. We knew we were rebuilding. We just got ahead of our capacity to execute. This is going to be a transition year, but there is no reason that it should be anything more than that.

Q: What lesson did you learn from your mistake in optical switches?

A: We were listening very carefully to our customers. But for reasons I'm not fully conversant with yet, we

did not ask the question: "Instead of what you're asking for, what would happen if we could give you this kind of capacity?" And shame on us—I mean Us, big Us—for not realizing there was a phase change available, that we knew about but concluded the market wasn't ready for. That is a classic innovator's dilemma, and we just plain missed it. Business history books are full of people who weren't able to solve that dilemma, and we've just written a new chapter.

Q: Some industry analysts see that mistake as an example of the old "Bell Head" arrogance—i.e., "We know what's best for our customers."

A: No, no, no. I can understand how

smack-on. We're back to execution. We've got to get the people together that can think about potential solutions, decide on those, and get it behind you. We're going to be operating on what I call a strategy of roughly right, meaning "Let's not wait until we're 100% sure. You are a seasoned group of people who know this market well. Trust yourself. Don't get doubtful now."

Q: Which problem area will you address immediately?

A: Optical. Jeong Kim [head of the optical division] and I met for a couple of hours yesterday afternoon. I like what I see. He's a terrific person. We've got to make sure we've



“Our strategy of Internet infrastructure, optical, and wireless is smack-on”

—CEO HENRY SCHACHT, Lucent Technologies

people would think that, and I respect their judgment,

but I don't think that's true. Our technology people absolutely were committed to the 10G (optical switch). They knew we could do it, we were ahead of the game, we had it ready. The labs guys had it right, and we didn't listen to them.

Q: What do you expect to do in the next few weeks?

A: I told everybody in as firm a voice as I can muster that companies only have one CEO. I quite consciously did not want to use the term interim [CEO] because we have got to get people energized in a way that they aren't on idle, waiting for a new person. Our strategy of Internet infrastructure, optical, and wireless is

got enough support for Jeong Kim. We're spending a lot of time there.

Q: What's the second priority?

A: The enthusiasm. When I've struggled through things like this at previous companies, people lose confidence, and they start slowing down right when they ought to be reaccelerating.

Q: What do you want in a new CEO?

A: The person has to be a strategist and a tactician, has to have operating experience, and can't get bogged down in the details. You've got to have a person who has a real affinity for operations. We shouldn't be in a hurry to get it right. When you go outside you always have to be super careful, because it's the devil you don't know.



in the surge
economy

the faster you
send them away,
the quicker
they come back.

intel.

in the old economy, the more time you spent with your customers the more loyal they became. in the surge economy, long-term customers demand short-term transactions. which is why intel® internet and communications products are your best ally for keeping customers coming back online instead of waiting in one. intel® netstructure™ products and services help speed traffic through your e-business. click-to-talk enabled technology connects online buyers to customer service personnel around the clock. so accelerate your entire e-business with internet and communications technology from intel. because in the surge economy, good things come to those who rush. (solutions for the surge economy → intel.com/go/ebiz)

IF WE PACKED ANY MORE AIRLINES INTO OUR REWARDS PROGRAM, YOU'D HAVE TO CHECK IT AT THE GATE.



With our rewards program you don't get just one airline to use your miles on. You get 24 different airlines—not to mention their partners. And since there's no mileage cap or expiration date, you have the power to use your miles as you wish, when you wish. Also, to help you any time you need it, we make sure a real person answers the phone, 24 hours a day. Should your business trip run longer than expected, don't worry, we give you the convenience of an extra billing period to pay when you need it, interest-free. And, of course, the Diners Club Card is welcomed by airlines, hotels, car rental companies and millions of other places you go. Give us a call at 1 800 2 DINERS. You'll be surprised by the amount of benefits one card company can offer.



CITIBANK®

BREAKING THE PLASTIC MI

A TOUGH TASKMASTER FOR LEARNING CO.

Can turnaround artist Alec Gores succeed where Mattel failed?

In 1993, Los Angeles investor Alec Gores acquired the customer-service arm of a struggling maker of word-processing machines. One of the assets he got was the firm's 800 number, 800 CALL NBI. The last three letters, the company's initials, also happened to spell NBI on a telephone keypad. A year later, a representative of AT&T called Gores and offered him \$550,000 for the number. AT&T didn't want archival MCI to be able to use it. Gores took the money, twice what he had paid for the entire business. Says Gores: "There are hidden assets in every company."

Gores is hoping for a similarly easy outcome to his most recent acquisition, the troubled Learning Co. In mid-October, Gores acquired the maker of entertainment and educational CD-ROMs such as *Where in the World is Carmen Sandiego?* from Mattel Inc. The toymaker gave the business away to Gores in exchange for a split of the profits—would there be any. Learning Co. is losing more than half a million dollars a day, says Mattel's new chairman, Robert A. Eckert. To finance the deal, Gores has pumped more than \$20 million of his own money into Learning Co., vowing: "It will be profitable in six months." That's when Gores hopes to sell the pieces of the company.

DAUNTING TASK. Gores has his work cut out for him between now and the spring. In May of last year, Mattel paid \$3.5 billion in stock for the software maker, hoping it would launch the maker of Barbie into the high-tech toy markets. But Learning Co. turned out to be one of the worst acquisitions in corporate history. Revenues appear to have been inflated by aggressive sales policies, say sources close to the deal. Soon after the acquisition, sales slumped and losses piled up. Instead of a hoped-for \$50 million profit in the first quarter after the acquisition, Mattel announced a \$50 million-plus loss. The deal cost Jill

E. Barad her job as Mattel's chairman. In June, Mattel sold the company's Cyber Patrol unit, which makes software that prevents kids from accessing inappropriate Web sites, for \$100 million to JSB Software Technologies. But Mattel couldn't find a buyer for the rest of the

RULES FOR SAVING A COMPANY

Alec Gores, who has bought 36 troubled companies, is putting his wisdom to work on Learning Co., a maker of educational software. Here's his recipe for success:

BUY COMPANIES FROM BIG CORPORATIONS.

Entrepreneurs operate cheaply, while big corporations leave room for a lot of cost-cutting.

FOCUS ON EXISTING CUSTOMERS.

Computer Aided Design, a maker of clothing-design software, lost money on its new software for the auto and retailing markets. Gores reemphasized its original business and sold the business for a 400% profit.

DEVELOP NICHE MARKETS.

Farallon Communications was unprofitable as a maker of PC networking cards. So Gores targeted wireless networking devices for printers. He sold the company for a seven-figure profit.

LISTEN TO EMPLOYEES.

Previous owners of Artemis Management Systems were hesitant to move the company's software onto the Web. Employees said it was a good idea, and Gores listened. He sold the company for \$60 million, six times what he paid.

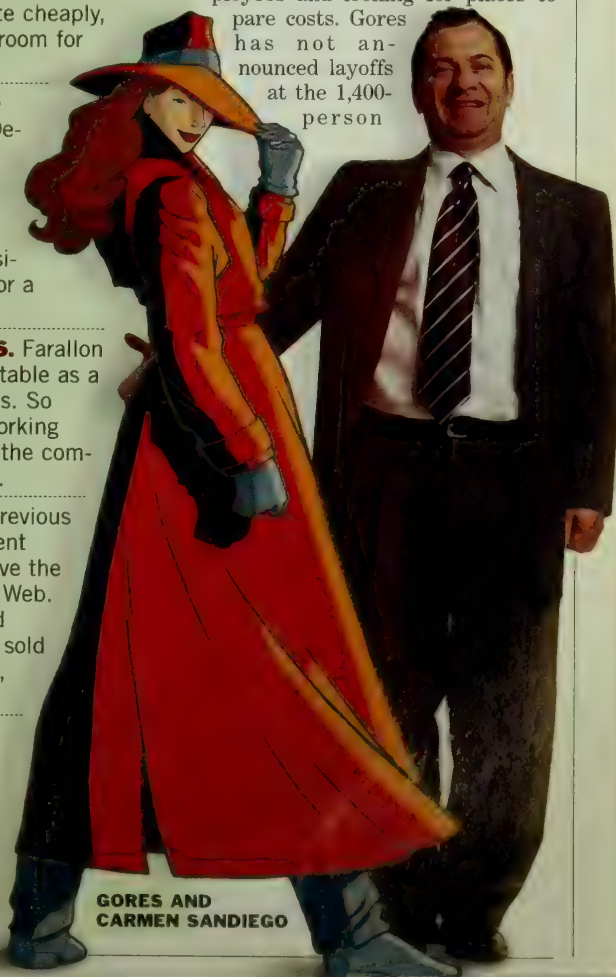
DON'T SHOOT FOR THE MOON.

Texas Instruments sank \$100 million into new software to control an entire chip plant. Gores bought the business and killed the project. The business, Adventa, is now profitable.

company, so it dumped it on Gores. "It was just too much of a daunting task to turn Learning Co. into a sellable asset," says Robert A. Kotick, chairman of rival entertainment software maker Activision Inc., who passed on the acquisition while Mattel was trying to sell it.

If anyone can bring this sorry software maker back to life, it's Gores. His privately held Gores Technology Group has acquired 36 companies worth \$1 billion over two decades and has turned many of them around. His secret? Gores and former associates say it's his ability to cut costs and quickly focus on profitable ventures. "He's got a tremendous ability to reduce expenses and identify hidden assets," says Foothill Capital Corp. Senior Vice-President James Marasco, who has worked with Gores on three previous deals and lent him \$100 million to fund this turnaround.

NET CHARGES. Gores will turn to his playbook to salvage the CD-ROM maker. He and his 40-person staff are interviewing Learning Co.'s employees and looking for places to pare costs. Gores has not announced layoffs at the 1,400-person



GORES AND CARMEN SANDIEGO

company, but some are likely. Presently, Learning Co. has seven divisions, each with its own accounting, marketing, and information-technology department. Those units are likely to be consolidated around each of Learning Co.'s three major businesses: education, entertainment, and productivity-enhancing software. Next, Gores will try to increase revenues, which he estimates will be less than \$500 million this year, down from \$847 million the previous year. And Gores hopes to shift more of Learning Co.'s software sales to the Internet. He'll charge consumers when they download a game.

The good news: Mattel has fixed some of the problems. To boost sales, Learning Co.'s prior management had been shipping products to retailers with a 100% return policy. The company also

Layoffs, and some consolidation of Learning Co.'s seven divisions, are likely

offered consumers rebates that sometimes ended up covering the full cost of the product. Mattel halted both policies.

Gores discovered his calling as a turn-around artist when a company of his was ruined by a poorly executed acquisition. Born in Israel, he moved to Michigan with his family when he was 13. After graduating from Western Michigan University with a degree in computer science, Gores worked briefly for General Motors Corp. before starting a distributor business for CADO Inc., a maker of computer workstations. After seven years, Gores sold the business to local telephone company Contel Corp. for \$10 million. Contel cut commissions to salespeople, divided up work groups, and let slide a profitable sideline software business. Gores tried to buy the company back, but got outbid. Soon after, he decided to specialize in buying up shaky technology companies.

Ironically, Gores found out later that his younger brother, Thomas, had bid for Learning Co. Tom Gores runs Platinum Equity Holdings, another privately held Los Angeles tech buyout firm. Tom thought the losses were too steep to finance without help from Mattel. If Alec is successful, he could add a new rule to his playbook: If you like a deal, go so far as to outbid your brother.

*By Christopher Palmeri
in Los Angeles*

Social Issues

EDUCATION

TIM DRAPER'S VOUCHER CRUSADE

His bid to change California schools is sputtering



RELENTLESS PROMOTER

The venture capitalist has spent millions to push a program offering \$4,000 a year to every child

Timothy C. Draper is trying to bring a little cybersizzle to the business of government. The 42-year-old founder of a leading Silicon Valley venture-capital firm has spent \$25 million, more than half of it his own money, to promote a school-voucher proposal in California. Draper's Proposition 38 would require the state to pay \$4,000

a year for any child to attend private school. To get out the word, Draper is giving away iMac computers and a trip to Hawaii to those who refer the new supporters to his prop38yes.com Web site. Draper himself has been known to drop and do 38 push-ups at special engagements to promote the proposition. But it will take more than p

Reaching the right customer
can be difficult.

Fortunately she told us how.



INTERACTING GLOBALLY.™

24/7 Media can customize an interactive marketing campaign that speaks to consumers anytime, anywhere and across all platforms. With targeting capabilities including the world's largest permission-based email database, real-time ad serving, reporting technology, loyalty programs and a worldwide network of websites, 24/7 Media will help you build a lasting relationship with consumers wherever they may be. Call us at 800 236 5790 or visit our website at www.247media.com



REALIZED FROM

Even pro-voucher private schools are wary of Prop. 38's price tag



ups and free computers to get his proposal passed on Nov. 7. Polls show Prop. 38 lagging by as much as 36% to 52%, with even some voucher supporters opposed.

If Draper's proposal fails, he won't be the first Silicon Valley leader to stumble in the unfamiliar world of politics. Several high-tech execs have sponsored ballot initiatives, only to find that business acumen doesn't necessarily help solve social problems (table). "These guys are used to seeing everything they touch turn to gold," says Terry Moe, a professor of political science at Stanford University. "They think, 'Why shouldn't it be that way in politics?'"

Draper's basic idea was simple enough: give parents a choice of where to send their kids to school. What fairer way, he thought, than to give every child an equal amount of public funds? Draper figured he would tap into the widespread interest in vouchers. Although Michigan is the only other state with a voucher proposal on the ballot, Presidential contender George W. Bush is a proponent, and the concept has proved popular in national polls.

But Draper may have gone too far. Existing voucher programs—in Cleveland, Milwaukee, and the state of Florida—are all narrowly targeted on troubled schools or low-income kids. This has helped them skirt political backlash and difficult financial questions that would surface in larger programs. Draper ran smack into both problems with his plan to make funds available to all of California's 6 million school kids.

Indeed, his sweeping approach has raised questions about cost. California spends \$8,000 a year to educate a child. If a student

leaves public school with \$4,000, the school keeps the other \$4,000. The problem: the \$2.6 billion it would cost to pay for the 650,000 children now in private school. Draper wants to phase them in over four years to ease the fiscal strain.

Still, taxpayers would take a hit. Because no one knows how many kids would use the program, cost estimates vary widely. Draper says it would run \$500 million in the first two years but save \$2 billion a year after that. "As a venture capitalist, that's an investment I'd be happy to make," he says. But the nonpartisan California Budget Project puts the tab at \$3.9 billion by 2004. **"ONLY FAIR."** Such estimates have scared off conservatives and even private schools that would benefit from Prop. 38. Both the California Business Roundtable, a group of local CEOs, and the Howard Jarvis Taxpayers Assn., an antitax group, have recommended no votes. So has the largely black Christian Methodist Episcopal Church, which educates 500 kids in California. "I might have supported a pilot program, but we should take a look before we take it to the whole

state," says Bishop E. Lynn Brown.

Draper says he wanted vouchers for everyone because "it's only fair that all parents have a choice." Giving money just to poor kids would create a stigma, he argues. Also, Draper's own polling showed that support for the proposal grew as it became broader.

But Draper didn't do his homework. He failed to consult with pro-voucher groups, "so a lot of people sat this out," says Jeannie Allen, head of the Center for Educational Reform, a Washington (D.C.) group that supports vouchers. Part of the problem may be the anything-is-possible attitude Draper learned as a Valley dealmaker. In 1985, Draper and partner John Fisher launched what would become Draper Fisher Jurvetson in Redwood City, Calif., an early investor in Internet companies. Two of its deals, Hotmail and f-o-u-r-1-1.com, were sold to Microsoft Corp. and Yahoo! Inc., respectively, yielding hundreds of millions of dollars for Draper and his investors.

Draper says he got involved in education after seeing the sorry state of the public schools his four children attended in the affluent Silicon Valley town of Atherton. They all now go to private schools.

Some of Draper's fellow Valley executives still back him, even if they think he bungled his foray into politics. "He may have overreached, but he has his money where his mouth is," says Gary E. Rieser, executive managing director of Softbank Venture Capital Mountain View, Calif. Draper may learn a costly lesson. The innovative approach that can make a success in high tech doesn't always translate in the consensus-building business of politics.

By Christopher Palmeri in Los Angeles, with L. Himmelstein in Mateo, Calif.

Mixing business with politics

High-tech execs often back initiatives

PROPOSITION	ELECTION DATE	SPONSOR	RESULT
#38 \$4,000 vouchers for all school-age children	Nov. 2000	Venture capitalist Tim Draper	Vote due Nov. 7
#39 Lower the voter percentage needed for school bond approval	Nov. 2000	Cisco CEO John Chambers, venture capitalist John Doerr	Vote due Nov. 7
#25 New limits and Web-based disclosure for campaign contributions	Mar. 2000	Wall Street Analytics co-founder Ron Unz	Lost by 65%
#26 Lower voter percentage needed for school-bond approval	Mar. 2000	Ron Unz	Lost by 51%
#23 Allow voters to select "none of the above" on ballots	Mar. 2000	Seagate CEO Al Shugart	Lost by 64%
#227 Replace bilingual education with English immersion	June 1998	Ron Unz	Passed by 60%
#201, 202 Tort reform	Mar. 1996	Intuit co-founder Tom Proulx	Lost by 65%

DATA: THE INDUSTRY STANDARD, CALIFORNIA SECRETARY OF STATE



WE DREAM THE FUTURE,
AND THEN WE BRING IT TO YOU.

HUGHES, we have always worked to build the future. In fact, we've been pushing the limits of possibility for decades. With the first geosynchronous communications satellite in space. Lasers that could cut through steel. Digital television offering hundreds of channels.

Today, HUGHES continues to create the dream. With broadband wireless Internet. Satellite business networks that allow data to travel at speeds once considered unimaginable. And interactive television that gives you control over your viewing and connects you to the world of information on the Web.

We dreamed up every business we're in, and became the largest in the world in most everything we do.

Maybe we shouldn't call it a dream.
Maybe we should just call it HUGHES.

satellite
television
wireless
internet
broadband
networks
e-commerce
convergence

HUGHES

Breaking the thought barrier.™

DIRECTV | DIRECTV Latin America | PanAmSat | Hughes Network Systems

WWW.HUGHES.COM



You can do ANYTHING

Remarkable things happen when you have a Black Rocket.™ People embrace your eBusiness vision quickly and enthusiastically. And recognition comes from the most unexpected places. But that's how life is when you've got a Black Rocket. The world's first Network Services Platform for eBusiness.

What is Black Rocket? A revolutionary new service from Genuity™ that gives you the power to launch high-

**GENUITY is the leading
Network Services Provider for
businesses changing the world.™**

end Web sites and eBusiness applications than ever. Which saves time, money and headaches. Black Rocket comes with critical network services like secure managed hosting with Genuity's state-of-the-art fiber optic network into a single, secure and scalable platform. Black Rocket also comes with peace of mind, offering



With a BLACK ROCKET.

Genuity's first platform Service Level Agreement. Genuity delivers Black Rocket in 10 business days or you can jump-start your eBusiness initiatives. And our Web site or eBusiness application is completed, Black Rocket provides a secure, managed and resilient eBusiness environment so you can get ahead — and stay — of the competition. There's nothing like Black Rocket. That's why eBusiness leaders like IBM, Cisco and Cap

Gemini Ernst & Young are already joining together with Genuity to offer eCommerce, eMarkets and other eBusiness solutions built, deployed and managed on Black Rocket.

See for yourself. For more information, check out our white paper at www.genuity.com/blackrocket or call 1-800-GENUITY.

GENUITY

Trademarks are the property of their respective owners.



MARKETS

EQUITIES: UP FROM THE BOTTOM?

After a wild October, strategists predict smoother sailing

Playing the October stock market has become a matter of trick or treat. It's a bitter trick if you happen to buy before one of the market's steep drops, and a sweet treat if you're lucky enough to buy just after the sell-off.

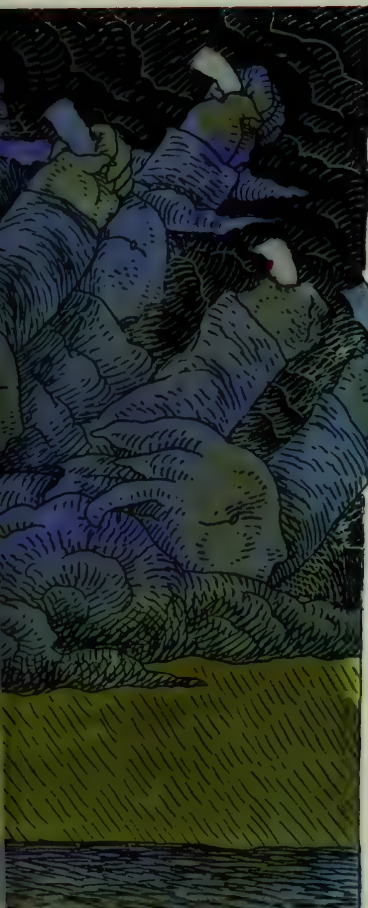
For those in the former camp, strategists say, the worst is likely over. All the same, they expect the market will still have some volatile ups and downs before ending the year flat to slightly higher. And even if returns improve in 2001, it's almost certain that, in the

longer term, investors will face much more moderate annual returns than the 20% rates they became used to in the late '90s. "Slower corporate profit growth and limited room for normal [price-earnings] expansion mean fewer stocks are likely to generate enormous price gains," says Edward M. Kerschner, PaineWebber Inc.'s chief investment strategist.

Meanwhile, the Nasdaq Composite Index, the Dow Jones Industrial average, and the Standard & Poor's 500-stock index have all been spooked by

steep declines in October, only to stage a comeback of sorts. By Oct. 12, Nasdaq had fallen 14% and the S&P to their year lows. And on Oct. 18, Dow dropped to its lowest levels since March. On Oct. 25, the Nasdaq plunged 5.6%—the biggest drop since May. So far, the market has managed to remain unfazed. "Most of the bad news is out of the way or already priced in the market," says Peter Canelo, U.S. equity strategist at Morgan Stanley Dean Witter.

That bad news came in a slew of warnings that third-quarter earnings would fall short of market expectations. However, the so-called confession season is mostly over. And now, despite shortfalls from Nortel Networks, Uniphase, and Ciena, many companies are reporting earnings that equal or better forecasts. Meanwhile, mutual-fund managers who needed to sell stocks for tax reasons have already done so. What's more, the unluckiest month in the stock market is coming to an end. "October has historically been a common month for bottoms, and there's usually a downward bias between election day and year-end," says Richard McCabe,



Inc. "We're feeling pretty good—in lots of areas, you can buy good businesses at good prices," he says.

Valuations do look more attractive. Based on expected earnings in the year ahead, the price-earnings ratio for the S&P 500 is 21.4—far from its January high of 25.3 and the lowest level since October, 1998, when the index was trading 20.7 times forward earnings, according to I/B/E/S, the earnings research firm. Goldman, Sachs & Co.'s Abby Joseph Cohen and PaineWebber's Kerschner maintain that the S&P 500 is undervalued by 15% and 12%, respectively. "Stock prices will likely benefit before yearend from the increasing availability of cash in

some kind of problem in tech. We don't know if it's just temporary or a longer term one due to the economic slowdown." One company that added to the tumble was Lucent Technologies Inc. On Oct. 23 it reported that fourth-quarter profits fell 22%, and slashed its sales and profit outlook for the first quarter of next year.

The new Securities & Exchange Commission rule that requires companies to provide full disclosure to both investors and analysts hasn't helped matters. In fact, it may have succeeded only in confusing investors as companies put out more information than before. In the fourth quarter so far, there have been 75 negative pre-announce-

COOLING OFF Although the worst may be over, long-term investors must adjust to much more moderate annual returns than those of the late '90s

many institutional portfolios, including mutual funds," Cohen wrote in a recent report. But she, along with many other strategists, expects only moderate profit growth in 2001 because of the slowing economy, which will certainly put the brakes on the stock market. Since the beginning of October, projected S&P 500 earnings growth for the first quarter of 2001 has fallen from 14.2% to 12%, a bigger drop than usual, according to First Call Corp., the earnings-research firm. "Large segments of the market have proven more vulnerable to an economic slowdown than originally thought," says Brown Brothers' Blood.

INVESTOR CONFUSION. That may be especially true in technology stocks. Since Oct. 1, fourth-quarter earnings estimates for tech stocks have dropped by a third—to 19% year-over-year growth from 29%, according to First Call. "This tech earnings revision is the steepest drop I can ever remember," says Charles Hill, First Call's director of research. "We know there's going to be

ments, vs. only 13 at the same point in the third quarter, according to First Call.

But slowing tech-earnings growth is worrying investors the most. Some blame pent-up demand for technology that occurred after the pre-Y2K slowdown, then the subsequent trailing off of that demand. "The companies have been telling us that revenue growth would slow, but analysts were ignoring the inevitable slowdown," says Canelo, who recommends avoiding software, personal computer, and semiconductor companies right now. Despite their recent downturn, he remains bullish long-term on infrastructure companies, with the idea that the network has to be built. "Those stocks have never gotten back to where they were in May," he says.

Some sectors are looking up in terms of earnings. Energy earnings for the third quarter are poised to double over last year, and are up 65% for the fourth quarter. Health-care earnings are predicted to be up around 17% in both the third and fourth quarters, while those for transports are expected to be up 17% and 21% in the third and fourth quarters, respectively.

Even so, earnings of most companies have begun to take a hit in the last two quarters. "No matter how you shake it, consumers and companies are starting to tighten the purse a bit," says Hill. And although a leaner environment may ultimately benefit the market, it may produce a mixed bag of tricks until yearend.

By Marcia Vickers in New York

ket analyst at Merrill Lynch & Co. Indeed, many strategists are calling October drop a market bottom. "The economy looks as if it's in for a soft landing, oil prices have peaked and will trend downward, and the euro remains weak," says Charles H. Blood Jr., head of financial markets strategy at Brown Brothers Harriman & Co. Wall Street expects the Federal Reserve will most likely start to lower interest rates after the election or at the beginning of next year. Blood is looking for a cut of a half to three-quarters of a percentage point. So what's the best strategy for now? Investors remain cautious-optimistic. And while some are merely sitting it out, others like David A. Katz of M&A Asset Advisors, a value investor that is up 7.5% so far this year, are being opportunistic. Katz is pouncing on beaten-down stocks such as medical products maker Boston Scientific Corp. He also likes retail and national banks such as Wachovia and First Union, and telecoms such as Centurytel



Draw a line from the application to

1.



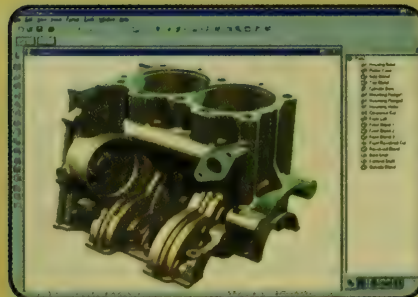
Microsoft Office 2000

2.



Adobe Photoshop 6.0

3.



Unigraphics Solutions' Solid Edge

processor that can now run it faster.

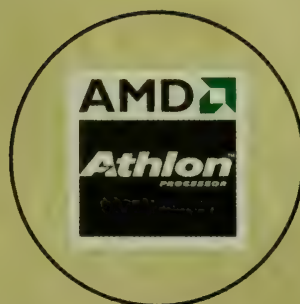
A.



B.



C.



Whatever applications you choose, run them on a PC based on the new, faster, 1.2 GHz AMD Athlon™ processor. The AMD Athlon was the first processor to break the gigahertz barrier. And with performance-enhancing cache memory and even faster speeds, they're better than ever. No wonder 4 of the world's top 5 computer manufacturers rely on AMD Athlon processors. To see how you can increase your productivity and run applications faster, head straight for www.amd.com/faster.

© 2001 AMD. Solid Edge is a trademark of Unigraphics Solutions, Inc. Other product names used are for identification purposes only and may be trademarks of their respective companies.

BANKING

A ROUGH PATCH FOR CHASE'S VC UNIT ROCKS THE PARENT'S EARNINGS

The bank's private equity shop isn't a cash cow any more

The head of Chase Manhattan Bank's private equity unit, Jeffrey C. Walker, seems remarkably calm considering what happened. On Oct. 18, the bank missed analysts' estimates of its third-quarter earnings by a huge 25¢ a share, in part because of a \$25 million net loss in the portfolio run by Walker's shop, Chase Capital Partners. "The market doesn't always rise," senior managing director Walker says. "You can't always get rich in two years. This is a good thing."

To many shareholders, the glory days of late 1999 were much better. In the final quarter that year his unit, which funds growing companies in exchange for equity in the firms, recorded a \$1.3 billion gain and contributed about a quarter of Chase's overall profits for the year. The turnaround sent Chase's stock reeling: At one point on Oct. 18 it was down 18%.

Top Chase brass, too, are worried about the impact the wild swings in earnings at Chase Capital Partners are having on the bank as a whole. "That's an issue we have to deal with one way or another," Vice-Chairman Marc Shapiro told analysts. So far, however, the key to harnessing the unit's profitability, without suffering from its volatility, has proven elusive. "We've changed opinions [about this] at least every month as the market moved," Shapiro says. The bank has considered, among other things, spinning the unit off or establishing a tracking stock. Chase will have an answer by yearend, he promises.

If you take Walker's long-term perspective, the latest quarter looks like a mere blip. In the past 16 years, Chase Capital Partners has netted an average 40% return a year on its investments. And despite such luxurious touches as Persian rugs, saltwater fish tanks, and a feng sui consultant at its offices on New



“ The market doesn't always rise. You can't always get rich in two years. This is a good thing ”

— JEFFREY WALKER,
Chase Capital Partners

York's Sixth Ave., Capital Partners' cost of doing business is far lower than that of most other Chase units.

The latest quarter's loss is mainly due to investments in telecom companies Telecorp PCS Inc. and Triton PCS Holdings Inc. Shares of both are more than 60% off their 52-week highs. Walker says he thinks the two are worth more and points out that Chase's stake in them is still worth five times the bank's initial investment, despite the

drop. His advice is to have patience. "Rather than look at quarterly swings in profits, I look at how much I can make from my investment in a four- to five-year period." Looking for the "next new thing," he's not investing in genomic science and manufacturers of the tools that genomic researchers need.

NOT ALONE. Chase is not the only bank in the risk business of private equity; it's just the biggest. And it reaped the biggest percentage of profits from private equity in 1999, followed by J.P. Morgan. Not far behind were Wells Fargo, First Union, and FleetBoston.

And, to be fair, Chase Capital Partners isn't solely to blame for the bank's earnings tumble. Trading and corporate finance fees fell from the second quarter, while expenses grew. Says ING Barings analyst Andrew B. Collins: "They've created volatility that they haven't been able to offset with other businesses." The combination of Chase and J.P. Morgan, announced Sept. 13, might take some of the heat off. Though J.P. Morgan's private equity shop will add \$1 billion to Chase Capital Partners' \$1 billion in holdings, the combined unit will be a smaller part of the merged bank than Capital Partners was Chase.

All the same, the disappointing quarter couldn't have come at a worse time for Chase, which has watched its stock slide since it announced the Morgan deal. But Chase executives would be shortsighted to toss out the Capital Partners unit. After all, Chase's shareholders may already have learned to live with greater volatility: Two days after the earnings surprise, the share price had regained their losses and climbed even higher.

By Heather Timmons in New York

There are some amazing places in the world.



Call us when you get there.

The Nokia 8890 wireless phone operates in over 140 countries, including the U.S., with great new features like voice dialing and mobile messaging. Now you can connect with the world's wonders without being left speechless.

NOKIA
CONNECTING PEOPLE

www.NokiaUSA.com

NASDAQ DEALERS

LAST OF THE RED-HOT MARKET MAKERS

Despite a profit dip, Knight could fetch billions

It's the kind of company, engaged in one of Wall Street's oldest lines of business, that some pundits predicted a year ago would be annihilated by technology. It's also a firm that earned just \$20.6 million in the last quarter. Yet analysts believe market maker Knight Trading Group Inc. could fetch over \$4 billion from a potential suitor.

Sound nutty? Not if you're the object of Wall Street's latest desire. Knight is the last large independent market maker left since investment banks began snapping up its rivals at increasingly rich prices. In June, Merrill Lynch forked over \$915 million for Herzog Heine Geduld, which handles roughly half as many trades of Nasdaq stocks as Knight. Four months later, Goldman Sachs agreed to plunk down \$7.4 billion for Spear, Leeds & Kellogg—a price estimated to be about 15 times the company's expected profits this year—partly because of its market-making division. Then, on Oct. 12, Deutsche Bank offered a rich 16 times adjusted earnings for National Discount Brokers Group.

NOT FOR SALE? The bottom line for Knight? Although it suffered from a weak third quarter with earnings down nearly 30% due to a difficult market environment over the summer and outlays on aggressive international expansion, the consensus of Wall Street analysts is that it will earn about \$260 million in 2000. If they're right, a deal at 18 times those earnings would give Knight more than a \$4 billion price tag. Knight's chief executive, Kenneth D. Pasternak, insists "the company is not for sale." But with would-be matchmakers talking up possible deals with the likes of Citigroup (talk on which Citi declines comment), Pasternak adds: "That does not preclude consideration of a buyout. At a price, everything in the world is for sale."

Wall Street's willingness to pay up shows that market makers still play a vital role. Invest-

ment banks have found that electronic communication networks (ECNs) are effective only at matching buy and sell orders in highly active stocks such as Dell Computer Corp. Humans still need to play a significant role in trading less-liquid shares: Traditional market makers like Knight keep their own inventories of shares electronically to ensure that there is always a buyer or seller for less actively traded shares. "The endgame is a marriage between the New Economy ECNs and the Old Economy market-making services," says Henry McVey, securities industry analyst at Morgan Stanley Dean Witter.

Pasternak is in a strong position to negotiate. "Knight can continue on its own," says Merrill Lynch analyst Sean Chin. Pasternak is investing \$40 million in another, larger trading room in Jersey City, N.J., while pressing ahead with plans to expand overseas operations in London and Tokyo. He expects revenues to rise 43%, to \$1.4 billion, this year and believes Knight can still keep increasing earnings by 25% a year. That growth wouldn't be as dramatic as the company's 60% profit jump in 1999. But more retail investors are flocking to the stock market—even during a volatile year with many Nasdaq declines.

Knight is riding that wave. It got its start

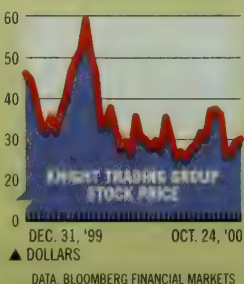
making markets for such online brokers as E*Trade Group, Ameritrade, and TD Waterhouse, which still account for one-third of Knight's business. But now such full-service brokers as Salomon Smith Barney and Morgan Stanley also use Knight to execute some orders, which has helped triple Knight's volume in the past two years, to an average of 575,000 trades a day. "There are very few firms now that don't trade something with us," Pasternak says.

CRUSADER. Pasternak is a proven crusader. Indeed, he keeps suits of armor in his office and, appropriately for Knight, owns a sword. A year ago Pasternak ignored doomsayers predicting ECNs would force Nasdaq market makers out of business. Instead, he expanded Knight trading room, which handles 18,500 stocks on Nasdaq at the New York and American stock exchanges.

Now, Pasternak's mettle being tested again. Knight remains Nasdaq's No. 1 market maker, but its share of Nasdaq trades has slipped, 15.7% from 17% in 1999. Knight's stock price has also fallen 51% since it

PASTERNAK: Buyout? "At a price everything in the world is for sale."

INVESTOR JITTERS



a high of \$59 a share on Mar. 24, vs. a 7% drop in the Dow Jones industrial average. There's another threat on the horizon: Investment banks newly armed with market makers could start to steal away more of Knight's orders.

But Pasternak bets they'll be preoccupied. "If you're vertically integrated, you get a lot of bad habits because you own your customers," says Pasternak. "We're paranoid and run fast." Pasternak will not lay down his sword easily.

By Emily Thorpe
in New York



It only took you half an hour to get 35 people
from 14 states to approve a quarter page ad.

What next?

From reviewing print ads to TV spots, to collaborating on marketing plans and product launches, if it has to do with marketing you can do it better with Magnifi. Anytime, anywhere, everything and everyone you need to perform miracles, is now all in one place.



magnifi.net

©2000 Magnifi, Inc. Call 800-301-0040 or visit www.magnifi.com.

Global marketing from a 12-inch screen.

Two visionaries working together can change the world.



*Excluding any impact of anticipated restructuring charges and transaction fees of \$1.7 billion to \$2.2 billion, any increased sales from collaborative activities and the \$1.8 billion termination fee paid by Warner-Lambert to American Home Products Corporation, but including cost savings which are expected to amount to \$1.6 billion annually by 2002. Forward-looking statements should be evaluated together with the many uncertainties that affect our business, particularly those mentioned in the cautionary statements in Part I of our 1999 Form 10-K and in our periodic reports on Form 10-Q and Form 8-K, which we incorporate by reference.

Wright Brothers™ Licensed by Wright Brothers Estate, Represented by The Roger Richman Agency Inc., Beverly Hills, CA 90212 www.wrightbrothers2003.com



Pfizer and Warner-Lambert have become one. The new Pfizer is the fastest growing pharmaceutical company. We have the world's largest pharmaceutical research team, with a scientific staff of 12,000 people on a mission to find the cures of the future. This year we're budgeted to spend \$4.7 billion on R&D, more than any other company, and in the coming years we'll invest even more. Which is one of the reasons the new Pfizer is redefining the future of medicine.

Pfizer and Warner-Lambert have an extensive line of patent-protected products and a robust product pipeline. We expect to have combined revenues of approximately \$30 billion this year, with a projected compound annual earnings growth rate for the next three years of at least 25% (excluding certain significant items and merger-related costs)*.

The new Pfizer is a leader in vital areas of research including diabetes, heart disease, HIV/AIDS, oncology, stroke, neurology and arthritis. And we're an innovative leader in both consumer products and animal health. Today, a new company has emerged. Tomorrow, people around the world will reap the benefits.



Life is our life's work.

www.pfizer.com

THE NEW PFIZER

LETTING THE FREE MARKET CLEAR THE AIR

Trading permits for pollution may make fixes for global warming cheaper

Julie Hardwick, a manager at a petrochemical division of oil giant BP Amoco PLC in Naperville, Ill., logs on to her computer each day to see how the market is doing. She's not pursuing private riches on company time. Instead, she's participating in an internal market at BP: trading in permits to emit the greenhouse gases that cause global warming. The profits from a successful trading strategy will go straight to the bottom line of her business unit—which in turn influences pay scales. Says Hardwick: "It's fun."

It's good for the environment, too. For the next 10 years, BP plans to ratchet down its emissions by 4% annually by giving each of its 150 business units a quota of emission permits and encouraging them to trade. If a unit cuts emissions and has leftover permits, it can sell them to units that are having trouble meeting their goals. Hardwick says she saved up permits in part by fast-tracking a furnace upgrade that allowed for the elimination of a second furnace. As a sizable side benefit, BP's program has unleashed a wave of creativity about ways to cut fuel consumption that has saved BP millions of dollars, according to Jeffrey S. Morgheim, BP's climate-change manager and trading-program guru.

Now comes the key question: Will trading of emissions permits be given a chance to work on the global scene? At



POLLUTION MARKET
Jeffrey Morgheim oversees trading in greenhouse gases among BP's far-flung business units. Could this save the rain forests?

stake is the success of the Kyoto Protocol, a greenhouse gas-reduction treaty signed three years ago as part of the U.N. Framework Convention on Climate Change. In November, representatives from more than 150 countries will gather at The Hague to set the rules for compliance with the treaty. Of the three compliance mechanisms on the

table, two involve giving credits for investments to cut greenhouse gases. Emissions trading of permits, which has the support of the U.S. government, most multinational corporations, and the vast majority of economists, is the only one with an incentive to find cost-effective solutions.

FAIRNESS. BP isn't alone on the emissions trading frontier. Everyone from Royal Dutch Shell Group to DuPont is giving it a try. Not only are they convinced it's the most cost-effective approach, they want to get experience before government mandates kick in. "They have to step ahead of the curve. Something's coming. And they can't tell their shareholders they don't see it," says Neil Cohen, a greenhouse-gas trader with New York-based energy broker Natsource LLC.

In an effort to enlarge markets, companies have even begun to band together. In October, seven of them formed a Partnership for Climate Action with the one day of linking systems to explore trade opportunities. And next month CO2e.com, a Web site specializing in emission trades that was jointly developed by Cantor Fitzgerald & Co. and PricewaterhouseCoopers, will begin marketing customized software for corporate exchanges. Emissions changes are also in the works in U.K., Denmark, and Norway, and under consideration in France and Germany. Chicago, futures market pioneer Risk Sander, CEO of Environmental Financial Products LLC, is working on a Midwestern regional trading model designed to scale globally. "There is an inevitable move for a market-based solution to global warming," he says.

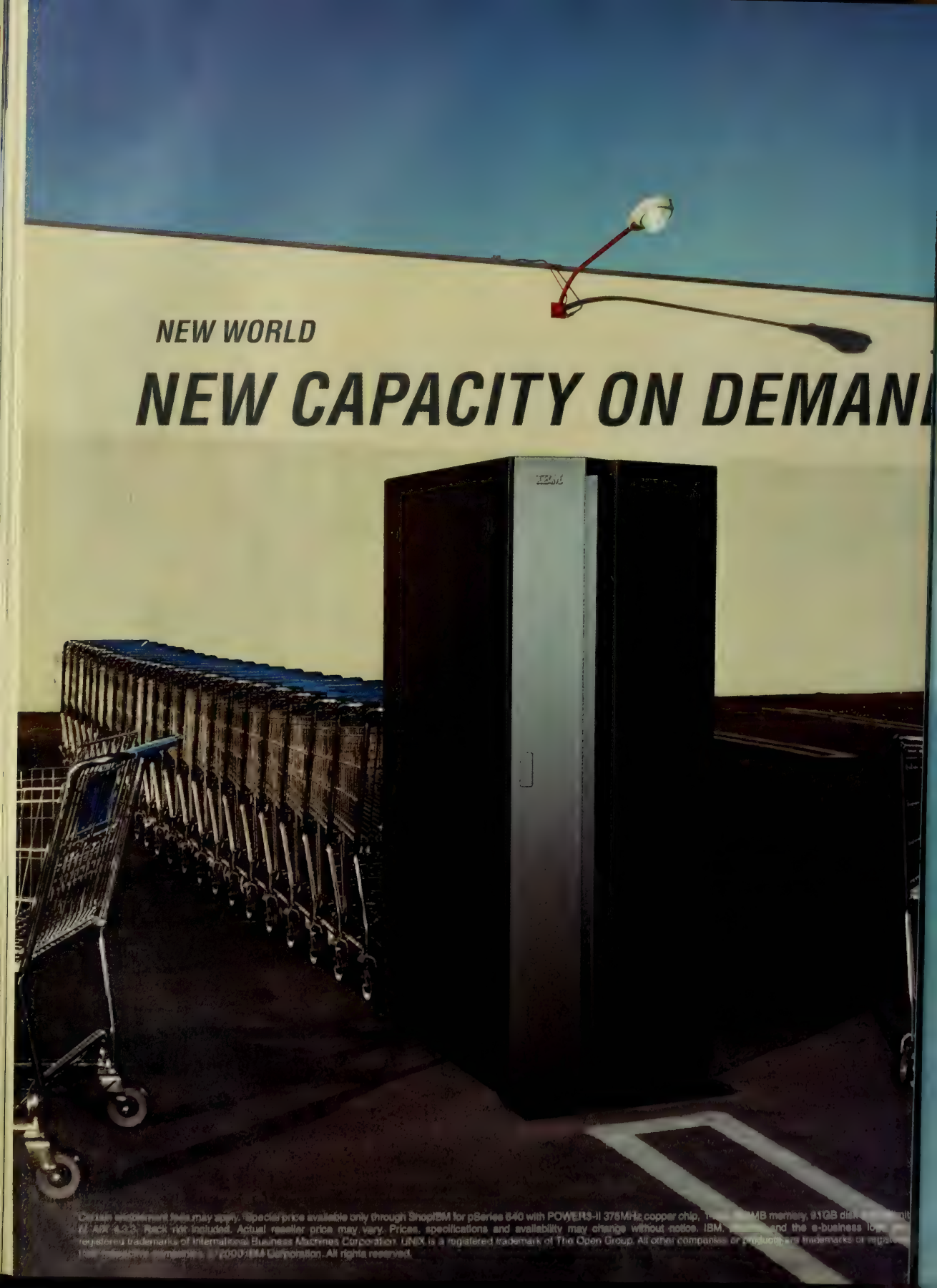
However, trading of emissions is



WHAT'S SETTING YOUR PRIORITIES?



Your IT infrastructure should know what matters most to your business and your world. Because when you don't want to miss out on what's really important, you need intelligent technology that understands the difference between a minor issue and a major problem. That's what Aprisma develops and delivers—solutions for what's really important. 877.437.0291 www.aprisma.com



NEW WORLD

NEW CAPACITY ON DEMAND

Certain restrictions may apply. Special price available only through ShopItSM for pSeries 640 with POWER3-II 375MHz copper chip, 1GB memory, 81GB disk, and 1000MB cache. IBM, the IBM logo, and the e-business logo are registered trademarks of International Business Machines Corporation. UNIX is a registered trademark of The Open Group. All other companies or products are trademarks or registered trademarks of their respective owners. © 2000 IBM Corporation. All rights reserved.

NEW SERVERS

[@server]

For the next generation of e-business.

New IBM servers offer additional growth capacity, ready to activate as needed on a pay-as-you-grow basis.

In e-business today, you can't afford not to be prepared for everything. However, most companies can't afford the cost of preparing for everything. That's where capacity on demand thinking comes in. IBM's new Capacity Advantage can provide additional internal processor capacity or entire servers, preinstalled onsite. In the event of increased traffic or other growth needs, the capacity can be activated, 24x7, with a few simple clicks. Only then are you charged the cost of the equipment! No new boxes, no shipments, no delay — just a service-oriented solution to managing real growth and real cash flow. For details on capacity offerings and new IBM servers, go to **ibm.com/eserver/cod**

▶ *IBM industry-standard rack, containing the IBM @server pSeries 640 UNIX® server and additional capacity on demand servers. pSeries models start at \$13,599.²*

IBM

universally popular. Critics point out that monitoring and enforcing compliance outside the confines of big corporations is difficult because of the vast number of different emission sources. Fairness is another sticking point. Under the protocol, industrialized nations have until 2012 to lower their emissions by an average of 5% below 1990 levels, while developing countries including China and India have no such mandated restriction.

Industrialized nations say that creates an unfair playing field. Still others argue on moral grounds that heavy polluters should be forced to clean up their factories at home, not use trading as a low-cost alternative.

RAIN FOREST DESTRUCTION. Whether or not trading is adopted internationally, countries such as the U.S. could still use trading domestically as a tool for reducing greenhouse gases. For instance, the Environmental Protection Agency could give permits to corporations and let them trade among one another. Under government pressure, some corporations are already beginning to trade for "offset rights." Offsets can be anything that displaces carbon emissions, from clean energy sources such as solar and wind power to so-called "carbon sinks"—forests and fields that absorb and contain carbon dioxide. The Nature Conservancy has brokered several deals over the past two years, pumping cash from companies such as Wisconsin Electric and Detroit Edison into rain forest preservation projects based in Central and South America. According to Michael



HARD RAIN
Global warming is blamed for an increase in severe weather, including floods like this one that ravaged a northern Italian town

Coda, director of the group's Climate Change Program, nearly one-quarter of the world's carbon dioxide emissions are due to rain forest destruction. "Never before has there been an economic incentive not to burn down the rain forest," Coda says.

Backers of trading worry that the political momentum is moving away from the free-market approach and toward less efficient traditional regulation. "We're heading toward a very political meeting at The Hague. Gains will be undermined

if we get political decisions that obstruct responsible, market-based approaches," says Thomas R. Jacob, manager for international and industrial affairs for DuPont.

So backers of trading are marshalling their counterarguments. While acknowledging that it's impossible to monitor every source of a country's emissions, they say that it's possible to get a good, rough idea by measuring how much coal, oil, natural gas, and other fossil fuels are consumed. As for fairness, they say that the exact number of permits that each country gets is something that can be worked out in the

political process. The important thing they say, is to establish clear rules of trading. "Until you can quantify the problem, you can't solve it or negotiate," says Sandor.

The advantage of trading is that it directs society's efforts toward the most cost-effective means of cutting greenhouse-gas emissions. Charles River Associates Inc., a consulting firm that is critical of the Kyoto Protocol, says that its estimate of the top cost for compliance with the Protocol drops from \$280 a ton if there's no trading, to \$100 with limited trading, to \$60 in a completely open market.

Other estimates for the cost of compliance are considerably lower (table). Sandor, who helped develop the market for trading sulfur dioxide, a cause of acid rain, points out that opponents predicted sulfur dioxide emission permits would sell for as much as \$1,000 a ton. Instead, they trade today for about \$150 a ton. He thinks greenhouse-gas permits could end up trading for about \$20 per ton of carbon—that trading will eclipse the \$3 billion sulfur-dioxide market at least tenfold.

Cleaning up greenhouse gases is purely a drag on the economy. As experience shows, it can stimulate creative thinking about energy efficiency that actually saves money. It could stimulate the development of new technologies such as solar power and wind power. Add in reduced health-care costs from cleaner air, and the problem of global warming begins to look like an economic opportunity. The answer, global warming might be as simple as buy low, sell high.

By Janet Ginsburg in Chicago

WHOSE NUMBERS DO YOU BELIEVE?

There's a free-market solution to global warming: Give each country a certain number of permits to emit greenhouse gases—and reduce the number of permits issued each year. Governments might allocate some of the permits to companies. Countries that don't use up their permits could sell the extras to countries that need more. Here are some forecasts for the cost of a permit to emit a ton of carbon.

CHARLES RIVER ASSOCIATES (LIMITED TRADING)	\$100
CHARLES RIVER ASSOCIATES (FULL TRADING)	\$60
RAND ENVIRONMENTAL POLICY CENTER (TRADING)	\$50 to \$100
ENVIRONMENTAL FINANCIAL PRODUCTS (TRADING)	\$20

DATA: BUSINESS WEEK

need a **lifeguard**

have you found a **dream weaver**

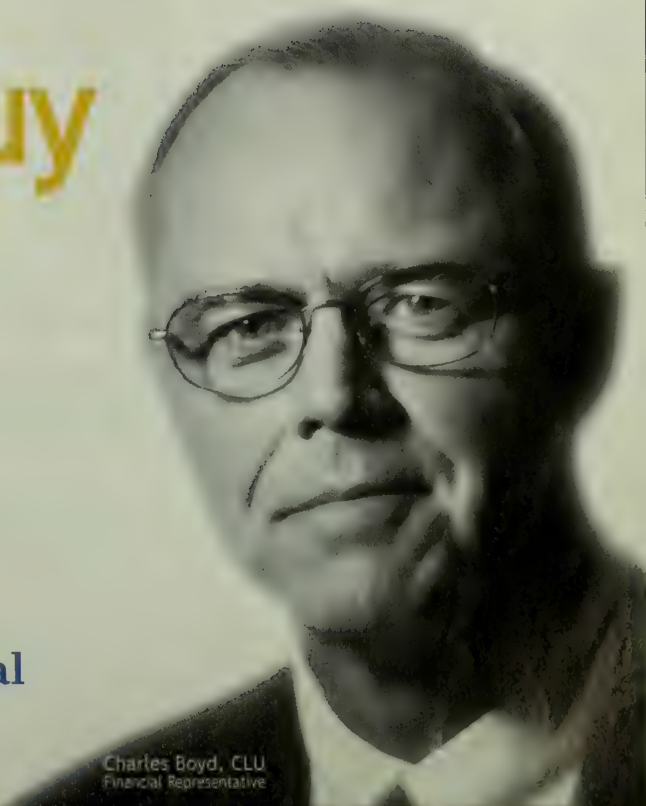
who will be your **go-to guy**

Your Northwestern Mutual Financial Network Representative can play a valued role in your family's financial life, bringing you expert guidance in Estate Planning and the specialists you need to make sure that what you want to leave your family... actually reaches them.



Northwestern Mutual
FINANCIAL NETWORK™

Charles Boyd, CLU
Financial Representative



Innovative solutions for estate, retirement, insurance, and personal finance. **Are you there yet?**

internet

address directory

Reach these Business Week advertisers on the Web:

24/7 Media
www.247media.com

3Com
www.3com.com

ABB
www.abb.com

Acura
www.acura.com

AeroMexico
www.aeromexico.com

Agilent
www.agilent.com

Alcatel
www.alcatel.com

Allianz AG
www.allianz.com

ALSTOM
www.alstom.com

American Airlines
www.aa.com

American Institute of Architects
www.aia.org

AT&T
www.att.com

Avaya
www.avaya.com

Axa Advisors
www.axa-advisors.com

BACKWEB TECHNOLOGIES
www.backweb.com

BP AMOCO
www.bpamoco.com

Broadwing
www.broadwing.com

Celanese AG
www.celanese.com

Charles Schwab
www.schwabwells.com

CHOPIN VODKA
www.chopin.org

Citibusiness
www.citibusiness.com

Commerce One
www.commerceone.com/

Commonfund
www.commonfund.org

Compaq
www.compaq.com

Computer Associates
www.ca.com

Concert
www.concert.com

Corio
www.corio.com

Corvis
www.corvis.com

CoSine Corporation
www.cosine.com

Dassault Falcon Jet
www.falconjet.com

Dell
www.dell.com

Deutsche
www.deutsche-bank.com

Deutsche Bank AG
www.db.com

Deutsche Post Danzas
www.danzas.com

Digex
www.digex.com

Diner's Club
www.citibusiness.com

Docent
www.docent.com

Expanets, Inc.
www.expanets.com

Fannie Mae
www.fanniemae.com

FedEx
www.fedex.com

Hewlett Packard/Branding
www.hp.com

Hilton Homewood Suites
www.homewood-suites.com

Homewood Suites
www.homewood-suites.com

HP/Customer Center
www.hp.com

Hughes Satellite
www.hughes.com

Iberia Airlines
www.iberia.com

IBM
www.ibm.com

IBM
www.ibm.com/eserver

ICG Communications
www.icgcommunications.net

Intel
www.intel.com

Intira
www.intira.com

J.P. Morgan
www.jpmorgan.com

JD Edwards
www.jdedwards.com/

Jeep
www.jeep.com

Kinko's
www.kinkos.com

LeadersOnline
www.leadersonline.com

Lexus Certified Pre-Owned
www.lexuscpo.com

Lincoln
www.lincolnhvehicles.com

LINCOLN FINANCIAL GROUP
www.lfg.com

Lucent
www.lucent.com

Maker's Mark
www.makersmark.com

Merrill Lynch
www.merrilllynch.com

Micron
www.micron.com

Microsoft Central Small Business
www.microsoft.com

MOTOROLA DIGITAL DNA
www.digitaldna.com

Nokia
www.nokia.com

NTT Communications Corporation
www.ntt.com/world

Pfizer
www.pfizer.com

PHILIP MORRIS
www.philipmorrisusa.com

Phillips Petroleum
www.phillips66.com

Primus
www.primus.com

PRINCIPAL FINANCIAL GROUP
www.principal.com

QMS Minolta
www.minolta.com/

Quantum
www.quantum.com

Rambus, Inc.
www.rambus.com

Ricoh Company, Ltd.
www.ricoh-usa.com

Robertson Stephens
www.robertsonstephens.com

Royal & Sun Alliance
www.royal-usa.com

Sage Software
www.sage.com

SalesLogix
www.interact.com

Salomon Smith Barney
www.smithbarney.com

Samsung
www.samsung.com

SAS
www.sas.com

Saturn
www.saturn.com

Siemens
www.siemensmobilebiz.com

SKYTEAM
www.skyteam.com

St Microelectronics
www.st.com

Sun Microsystems
www.sun.com

Teligent
www.teligent.com

TopTier Software
www.toptier.com

Toshiba America Information Systems
www.toshiba.com

Toyota Motor Sales
www.toyota.com

UBS WARBURG
www.ubs warburg.com

VERITAS Software Corporation
www.veritas.com

ViewSonic
www.viewsonic.com

Visioneer
www.visioneer.com/

dynamone.html

Visteon
www.visteon.com

Wall Street Journal
www.wsj.com

Williams
www.williams.com

WorldCom
www.wcom.com

ZURICH FINANCIAL SERVICES
www.zurich.com

BusinessWeek

Exceed shareholder & customer demands

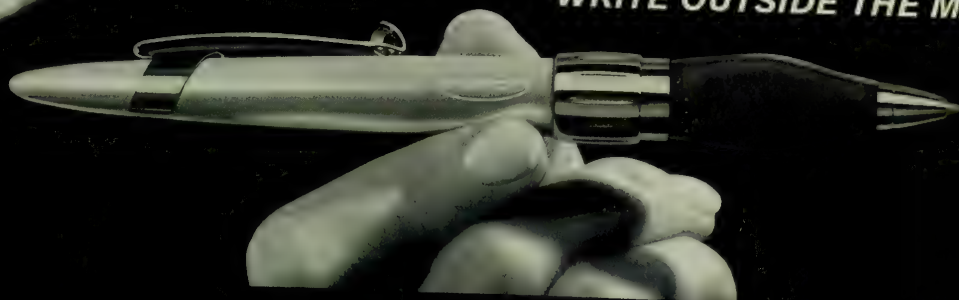
See and hear from the experts at
www.sas.com/webcast

The Power to Know.™

sas
e-Intelligence



WRITE OUTSIDE THE MARGINS.



Introducing Morph, the new pen from Cross. It actually transforms itself to provide unmatched writing comfort. Just twist the dial at the pen's center and it expands or contracts for the feel you want.

For an eyes-closer look, www.cross.com.



BONDS—FROM
AAA TO JUNK—
AND HOW TO
MANAGE THEM

BusinessWeek Investor

How Did Bonds Get So Sexy?

They're beating equities, but picking the right kind isn't easy

BY SUSAN SCHERREIK

When Jerry Thunelius, head of taxable fixed-income investments at Dreyfus Corp. speaks before brokers and their clients, he asks them this question: "Who owns stocks?" Everyone responds by raising a hand, he says. Thunelius then asks the crowd who owns bonds.

"On average, two to three percent raise their hands," he says. If that's so, then many investors may be missing an investment whose returns could come closer to stocks over the next few years, but with less risk. With the economy slowing, bonds may be set to become market leaders.

Indeed, for the first time since 1993, bonds are outperforming the stock market. From January through Oct. 20, the Lehman Brothers Aggregate Bond Index is up 8.06% and U.S. Treasury bonds maturing in 20 years or more have fared even better, gaining 15.53%. By comparison, the Nasdaq Composite Index is off 14.40% for the year and the Standard & Poor's 500-stock index is down 4.92%.

The \$15 trillion U.S. bond market, however, is not one harmonious entity. It's comprised of a variety of markets that often dance to different beats. U.S. Treasury bonds, for instance, have flourished this year because Uncle Sam is using some of the budget surplus to retire debt. Supply in the municipal bond market has similarly tightened—driving down the average yield for top-quality, 10-year munis from 5.09% in January to 4.78% recently because the strong economy has lessened state and cities' need to borrow. By contrast, the junk bond market is being bashed by concerns about deteriorating credit quality. Junk bond yields have

spurred from an average of less than five percentage points over comparable Treasuries at the start of the year to nearly eight

now. That's the highest level since February, 1998.

To make decisions tougher, today's bond market is less liquid and thus far more volatile than half-decade ago. That's because Wall Street firms burned by losses in 1998 after Russia defaulted on debt, are increasingly reluctant to put their capital at risk to make markets in bonds.

Bond Investing



Shifting some money into bonds doesn't mean riding up on stocks. History shows that a combination of both stocks and bonds reduces portfolio risk more than it reduces returns. Ibbotson associates figures that a portfolio comprised of 40% bonds and 60% S&P stocks would have earned an average of 13.3% annually since January 1, 1990, vs. 16.7% yearly for the S&P alone. The bond-stock portfolio would have been 33% less volatile (chart, page 210).

ALITY BECKONS. Slowing economic growth, which crimps corporate profits, is hurting stocks. It's also roiling some sectors of the bond market, especially high-yield bonds, that are highly sensitive to companies' fortunes. But while the economy is slowing, there appears to be little chance of recession. Moderate growth coupled with a tame rate of inflation is a good backdrop for investing in high-quality bonds.

The aim of most bond investors is to earn a rate of interest a bond pays when they purchase it. If inflation rises, bond prices decline, and investors wind up with a lower return. But with most economists expecting the Federal Reserve to hold rates steady over the coming months, high-quality bond prices and yields should hold fairly even. Some economists believe the Fed's next big move will be to lower short-term rates early next year. If that happens, bond prices will rise, and investors will earn price appreciation on top of the bond's yield.

High-quality bonds are a great buy right now," says Donald Berdine, chief investment officer at PNC Advisors in Pittsburgh, which manages \$50 billion for wealthy individuals.

Berdine, who suggests that clients keep 35% of their portfolios in bonds, especially favors municipal bonds for those in high tax brackets. One reason that Berdine is bullish on bonds is his belief that oil prices will trend lower over the next few months, allowing inflation to decline.

Berdine attributes the spike in September's consumer price index—to a 3.8% annualized rate from a 3.3% rate the prior month—largely to crude oil prices jumping 33% this year. He expects that by the middle of next year, the CPI will fall to a 2% rate, which he sees as the long-term inflation rate. By that measure, Berdine reckons bonds are cheap. Historically, bonds have returned around three percentage points more than inflation. With 10-year U.S. Treasury notes yielding about 5.6%, he figures investors are getting closer to four percentage points over the inflation rate.

Bond pros are divided about the best strategy. The riskier but potentially more rewarding approach is to be a value hunter, seeking out opportunities among beaten-down junk bonds and in the high-quality corporate market, which has also

Sizing Up Bond Market Returns

BOND	YIELD	YEAR-TO-DATE RETURN*
10-YR. U.S. TREASURY NOTES	5.64%	9.06%
30-YR. U.S. TREASURY BONDS	5.73	14.29
GNMA 15-YR. MORTGAGE SECURITIES	6.89	7.33
HIGH-QUALITY INTERM. CORP. BONDS	7.53	6.20
HIGH-YIELD INTERM. CORP. BONDS	13.48	-2.90
10-YR. AAA MUNICIPAL BONDS	4.78	7.71
20-YR. AAA MUNICIPAL BONDS	5.57	11.20

*As of Oct. 20

DATA: MERRILL LYNCH & CO., LEHMAN BROTHERS, BLOOMBERG FINANCIAL MARKETS

If the Fed's next move is to lower rates, bond prices will rise, benefiting those who invest now





Locally issued
municipal bonds
offer surprising
tax breaks for
high-income
earners

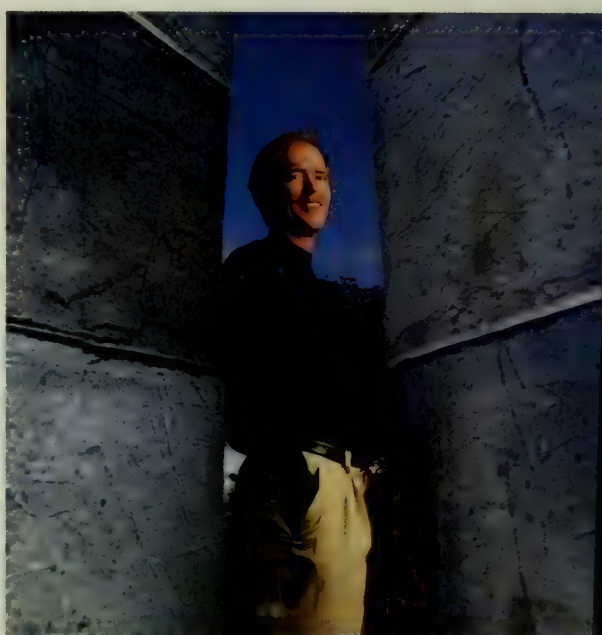
suffered from credit-quality jitters.

Indeed, value bond investor Laird Landmann of the top-performing Metropolitan West Total Return Bond Fund says he's scooping up top-notch corporate bonds like those issued by Ford Motor and Goldman Sachs, because they're selling at their highest yields in years relative to Treasuries. For instance, Landmann says he recently bought 10-year Goldman Sachs bonds yielding 7.8%, about two percentage points over the 10-year Treasury rate. In bond parlance, the Goldman bond is cheap.

True, Wall Street analysts recently lowered their earnings estimates for Goldman over concerns that underwriting fees will fall. Landmann points out that Goldman is a strong, diversified firm that can easily make good on its debt. In like manner, he is buying Bank of America bonds. Landmann admits, however, that the corporate bond market is still "full of minefields." He won't touch the bonds of most technology and telecom companies, which he believes their prospects can turn down quickly in an era of rapid technological change.

The other view is a far more cautious one. William Gross, managing director of Pacific Investment Management, which oversees \$212 billion in bonds, advises investors to avoid the corporate bonds altogether, both investment grade as well as junk, because he believes more credit downgrades are on the way.

Since the start of the year, Gross has pared PIMCO Total Return Fund's corporate bond holdings to 12% from 20%. Just 1% of the fund's assets sit in junk bonds, down from 4% last year. "In this kind of environment, investors tend to go for safety and high-quality," he explains. Typically, that means U.S. Treasuries. But because the



ANTICORPORATE: PIMCO's Gross predicts more downgrades

Treasury is retiring debt, Gross believes U.S. Treasuries are too pricey. So he says he's gone for the next best thing by putting a 60% share of the PIMCO Total Return Fund, the world's largest bond fund with \$36 billion in assets, in Ginnie Mae, Fannie Mae, and Freddie Mac mortgage-backed securities. He notes that these AAA securities have implicit government backing but yield about 1.6 percentage points more than comparable Treasuries.

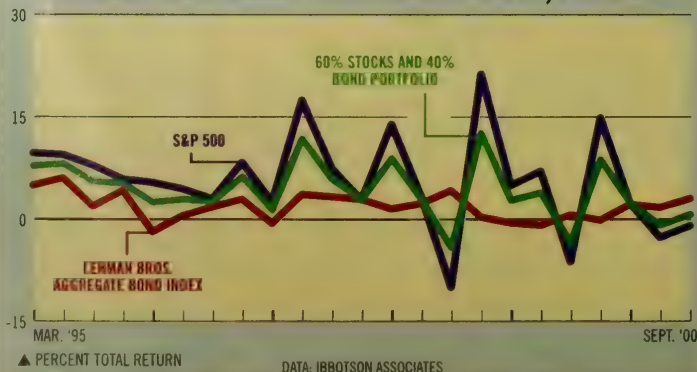
THE MUNI CASE. For investors in the highest tax brackets, municipal bonds make the most sense. Recently, AAA insured municipal bonds maturing in 10 years yielded 4.78%. At first glance, that yield doesn't seem impressive. But for investors in the 36% federal tax bracket, that translates to a 7.46% yield, and those in a 39.6% tax bracket, the aftertax yield is a juicier 7.91%. The muni payoff is even better in high-tax states, such as New York and California, where there's often no state income tax on income from locally issued bonds.

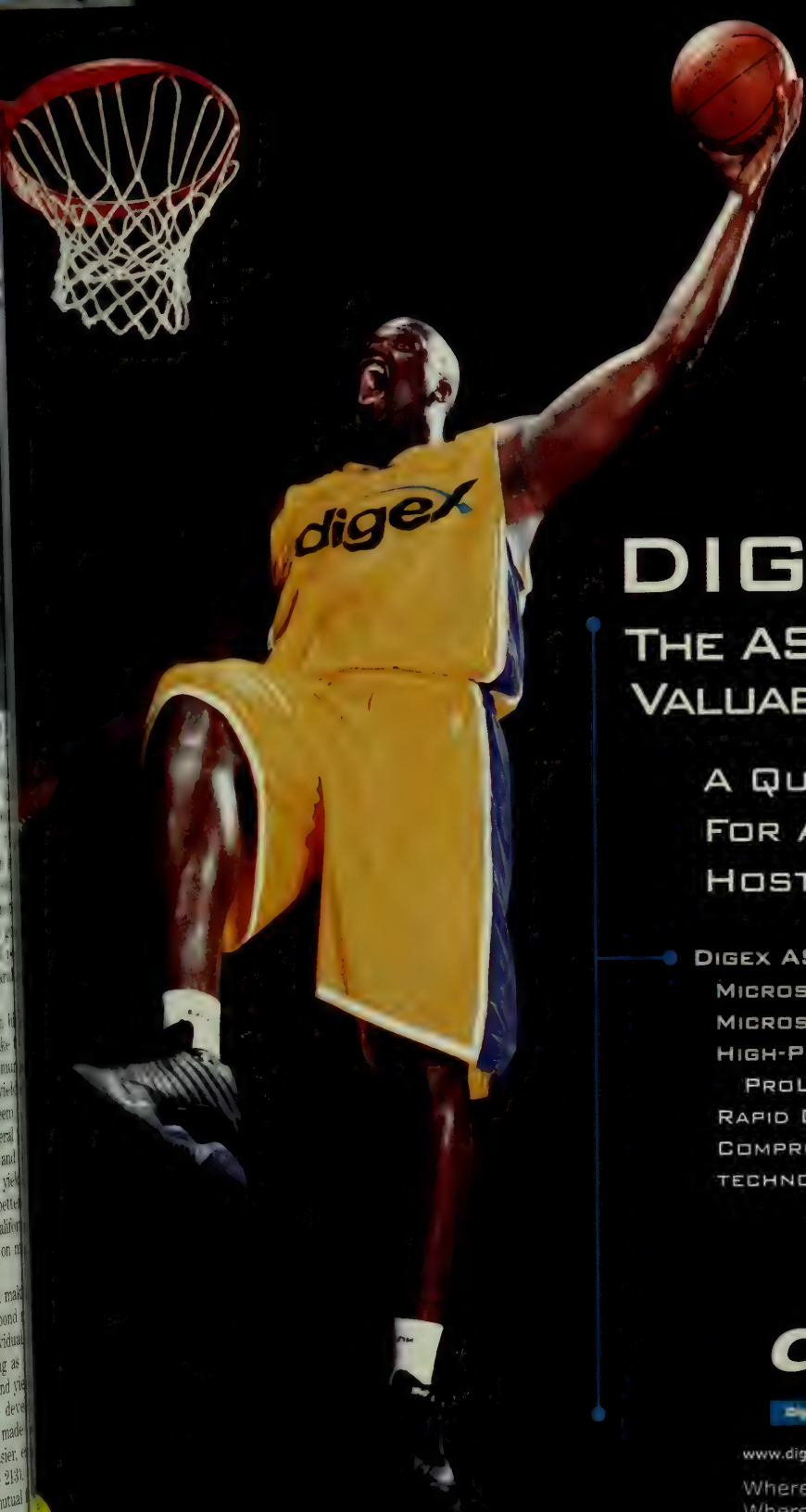
Another decision bond investors must make is whether to buy individual bonds or a bond mutual fund (page 212.) By buying individual issues, you can lock in the yield, as long as you hold the bonds until maturity. Bond-fund yields, on the other hand, aren't fixed. The development of the online bond market has made the process of buying individual issues easier, especially for Treasuries and munis (page 213). In trickier sectors such as junk bonds, a mutual fund may be the better choice.

Investing these days is no easy feat. Indeed, the increased volatility of today's financial markets only underscores why carefully chosen bond funds belong in every investment portfolio.

BONDS
%

Bonds: More Stable—And Better Returns, For Now





DIGEX

THE ASP'S MOST
VALUABLE PARTNER

A QUANTUM LEAP
FOR APPLICATIONS
HOSTING

DIGEX ASPWORKS FOR WINDOWS™

MICROSOFT WINDOWS 2000
MICROSOFT APPLICATIONS SUITE
HIGH-PERFORMANCE COMPAQ
PROLIANT™ SERVERS
RAPID DEPLOYMENT
COMPREHENSIVE MONITORING
TECHNOLOGY BETA PROGRAMS

digex™

Digex | Keeping businesses in business™

www.digex.com/asp 1-800-455-2968 Ext. 202

Where managed hosting began.
Where managed hosting is going.

COMPAQ Microsoft

Be Your Own Bond Fund Manager

You'll be compensated in savings for the extra effort it takes

BY ANNE TERGESEN

With bonds trouncing stocks for the first time in years, you suddenly have reasons to move money into an asset class that hasn't gotten much recent attention—or respect. But if you're about to make a sizable commitment to bonds, think twice before dialing your mutual-fund company. When it comes to high-quality bonds such as Treasuries and AAA-rated corporates, there's little aside from convenience a fund can give you that you can't get on your own. In fact, if you have \$50,000 or more to invest and plan to buy and hold, picking your own bonds can be a cheaper, more profitable way to go. "Bond funds don't add as much value as people think," says Marilyn Cohen, author of *The Bond Bible* (New York Institute of Finance; \$24).

According to a 1999 study by the Charles

Schwab Center for Investment Research, an investor with \$50,000 can build a diversified portfolio of high-grade bonds for no more, and often less, money than a comparable low-cost fund (table). To buy and hold \$50,000 in Treasuries costs 0.13% a year, including commissions and the higher price paid for buying small lots. That compares to about 0.15% for a low-cost fund.

Do-it-yourself investing looks better when you consider the typical bond fund's expenses. Treasury funds pocket an average of 0.77% of assets each year. But since these funds rose an average of 5.6% in each of the past five years, investors can ill afford to part with any return.

Another reason to go it alone is that you have little edge when picking Treasury, AAA-rated corporate, and insured municipal bonds. Such bonds stand virtually no chance of defaulting and trade frequently enough to give individual investors price data to secure good deals. So, investors face only one risk—that rising interest rates will punish bond prices. Since the pros have proven no better than others at forecasting rates, it makes no sense to pay one to do so.

UP THE LADDER. If the direct route appeals to you, buy at least five high-quality bonds maturing at different times. One method is to put at least \$10,000 each into 2-, 4-, 6-, 8- and 10-year bonds. When the two-year bonds mature, reinvest the proceeds in new 10-year bonds. This ladder strategy reduces the risk of losses that result from rising interest rates—which punish short-term securities less than long-term ones.

Bond funds still have a place in many portfolios. If you can only part with a little money, funds are the best route. And if your idea is to stay in bonds—say, to wait out the recent stock market turmoil—funds are the best solution, because transaction costs can sink do-it-yourselfers who trade. To see why, consider a low-cost fund that sells \$250,000 of Treasuries. While it faces commission and other transaction costs of about \$39—or 0.0156% of its investment—a mutual fund that unloads \$5,000 of Treasuries about \$68, a hefty 1.37% of assets, according to Jim Peterson, a vice-president at Schwab.

Moreover, the pros can add value in some situations. For example, with defaults on junk bonds rising and trading volumes falling, a fund manager can give you both expert credit analysis and market muscle to get good prices. That's why you give up in convenience, you'll gain in higher returns.



Bonds vs. Bond Funds

Here's a comparison of the costs of investing \$50,000 in a portfolio of individual investment-grade bonds vs. comparable mutual funds that invest in investment-grade bonds.

BOND TYPE	COST TO BUY BONDS*	COST OF LOW-PRICED BOND FUND	COST OF AVERAGE BOND FUND
TREASURY	0.13% (\$65)	0.15% (\$75)	0.77% (\$385)
CORPORATE	0.11% (\$55)**	0.20% (\$100)	0.74% (\$370)
MUNICIPAL	0.21% (\$105)**	0.19% (\$95)	0.68% (\$340)

DATA: SCHWAB CENTER FOR INVESTMENT RESEARCH

*TO REALIZE THESE COSTS, AN INVESTOR MUST HOLD TO MATURITY

**APPLIES TO AAA-RATED BONDS

Vinnowing Bargains On the Web

you're not put off by the effort, it's worth it

LEWIS BRAHAM

You point. You click. It's that easy to trade stocks online. If only it were so simple for bonds. While investors everywhere know how to get the lowest commissions for Web stock trades, finding the same deals for bonds is more difficult. The reason has little to do with the Internet and everything to do with the nature of the bond market.

The bond universe is vast and extremely fragmented. More than 4 million bond issues are available in the U.S. alone, and there is no central exchange, such as the New York Stock Exchange or the Nasdaq, on which they

trade. So prices often vary from dealer to dealer, and doing research is hard. It's also difficult to know whether you're getting a good price. Most bond brokers embed their trading commissions—or "markups"—into the bond's price, so you can't tell how much you paid for the trade. The only way to know if you scored or got taken is to compare the yields for the same bond at different brokers. These same problems exist both online and off.



That said, the Web does offer cost savings to investors who do their homework. About the closest thing to a no-brainer is TreasuryDirect at www.treasurydirect.gov, which allows you to buy Treasuries at government auctions with no transaction fees. Although Treasury prices are sometimes lower in the secondary market, one key advantage of buying at auction is that you know you're getting roughly the same price as all other investors, big and small. At the Treasury's savingsbonds.gov, you can buy the old-fashioned savings

bonds as well as the newer, inflation-adjusted I-Bonds, which now yield 7.49% (though the rate will be reset Nov. 1).

For other types of bonds, you have to comparison-shop. Your first stop for information should be the Bond Market Assn.'s www.investinginbonds.com. The site has many educational tools, articles about bonds, and links to other sites. But of crucial importance is the Daily Muni Bond Summary. This section offers a comprehensive price breakdown of the prior day's most actively traded municipal bonds. By looking at the daily trading range you can figure out whether your broker's prices fall in the high or low end of the spectrum.

For instance, BUSINESS WEEK recently found one broker, BondAgent.com, offering AAA-rated muni bonds issued by the New York State Energy Research & Development Authority at \$101. (In bond terms, \$101 is actually \$1,010 for a bond with a face value of \$1,000.) At \$101, the

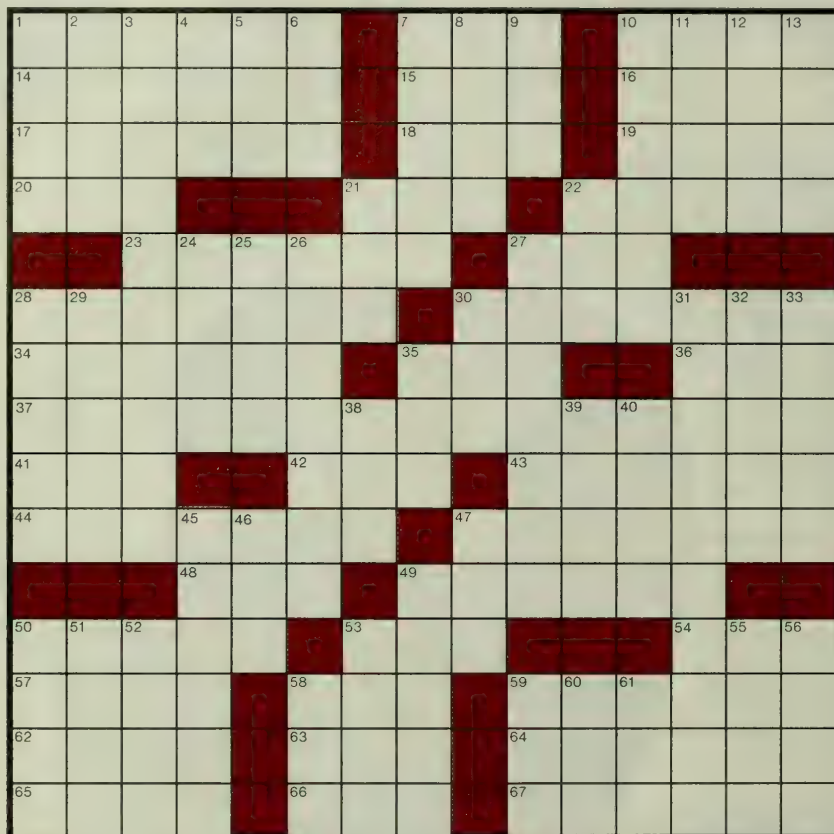


Surfing for a Bond Broker

SITE (WWW.)	BONDS OFFERED	COMMENTS
BONDAGENT.COM	Corp., muni, agency	Has electronic platform; no inventory; provides advice on selection; all bonds marked up
BONDSONLINE.COM	Treas., corp., muni, agency	Has platform only; all bonds marked up; site has good news and research features
TREASURYDIRECT.COM	Treas., corp., muni, agency	\$1 per Treasury; \$3 everything else; \$45 minimum trade; no markups; has platform only
BONDSANDTRADE.COM	Muni	All own inventory; no platform
BONDSDE.COM	Treas., corp., muni, agency	Has inventory and electronic platform; either \$40 or markup, depending on the trade
BONDSWEB.COM	Treas., corp.	Platform only; \$10,000 minimum; low markups
BONDSDIRECT.COM	Muni	\$2.50 to \$5 per bond depending on maturity date; no markups; platform only
BONDSVAB.COM	Treas., corp., muni, agency	Has inventory and is developing platform; \$35 to \$49 a trade or markup depending on bond type; most trades are live and executable
BONDSHOUSE.COM	Treas., corp., muni, agency	Has inventory and electronic platform; \$2.50 per corporate; \$35 minimum; others marked up

Mixing Business with Pleasure by Lincoln

Puzzle #34



ACROSS

1. One of the "4 C's" of diamonds
7. Piece of cookware
10. Colosseum's home, to natives
14. Wipes clean
15. High bond rating
16. Monumental
17. America __
18. Be too inquisitive
19. Penchant
20. Type of IRA
21. In the know, so to speak
22. Old Navy product

23. __skelter
27. News from the Fed
28. Intel chip
30. ARM maximum
34. Security devices
35. Objective
36. Mesabi mineral
37. Telecommuter's meeting, maybe
41. French summer
42. MOMA display
43. Humdinger
44. Word on a nutrition label
47. Strict disciplinarians
48. College-wall climber

49. Landlord, for example
50. With 47 Down, one on commission
53. Bureaucrat's way: Abbr.
54. Nonscheduled time-slot notation: Abbr.
57. London School specialty: Abbr.
58. __ culpa
59. Monotony
62. To __ (unanimously)
63. River bottom
64. "American __" (see page at right)
65. Singer Horne
66. BBDO creations
67. Hinders

DOWN

1. Jack Welch and Sandy Weill: Abbr.
2. "Rule, Britannia" composer
3. Third-party candidate in 2000
4. " __ was saying..."
5. Midmorning
6. Compass reading
7. Georgia-Pacific product
8. Seniors' lobby
9. One way to vote
10. Retail incentive
11. Like some markets
12. Money-making operation
13. Successful legislation
21. Line of fashion
22. Type of option
24. Raison d'__
25. VIP transportation
26. Italian wine region
27. Canon wares
28. Builds a road
29. A-list group
30. Staff decrease: Abbr.
31. Joint venture of a sort
32. Traveled a curved path
33. Jury members
35. Exemplar of industriousness
38. Nonprofit's Web site suffix
39. CD-__
40. Recently embattled currency
45. OPEC headquarters
46. Glucose solutions, at time Abbr.
47. See 50 Across
49. Mutual-fund charges
50. Stock-certificate adornment
51. High point
52. Part of S&L
53. __ money (initial capital)
55. Tupperware-closing source
56. Golfer Alcott et al.
58. Wharton offering: Abbr.
59. RN's specialty: Abbr.
60. From the Atlantic to the Urals: Abbr.
61. Half of MXXII

For answers to this puzzle:

Turn to page 223 in this week's issue of Business Week or visit Mixing Business with Pleasure by Lincoln on www.businessweek.com (URL: www.businessweek.com/adsection/puzzlesbylincoln/index.htm)

Puzzle created by: Stanley Newman.



1-800-688-8898

sterling silver flatware.

A 19th century mahogany bookcase.

A grandfather clock that can't even keep time. | Define luxury for yourself.



gator | Luxury isn't bound by rules. Which means the Control Trac 4WD system
100 pounds of towing capacity will serve you well even if shopping is your
an extreme sport. Visit lincolnvehicles.com, or call 800-688-8898.


LINCOLN
AMERICAN LUXURY

yield was 5.41%. The Muni Bond Summary showed a price range of \$96.50 to \$101 that day, meaning that BondAgent was selling at the highest price and lowest yield. In contrast, another broker, MuniDirect.com, was offering the same bond for \$98.50, yielding 5.62%. Meanwhile, TD Waterhouse Group was selling it for \$99, yielding 5.58%. Unfortunately, since the muni summary's prices aren't live, this knowledge comes after the fact. But you can still use the site before you buy a bond to see which brokers consistently come up with the best prices. The Bond Market Assn. does offer hourly

price updates of recently issued Treasuries. The best strategy is to open multiple online accounts and use one as your home base. Web brokers such as DLJdirect, Charles Schwab, and E*Trade offer a good selection of bonds (table).



If you're also registered with special brokers—such as MuniDirect, eBondTrade, BondsOnline, Tradebonds.com, BondAgent.com—you can shop around for the bonds you want, buy from the broker with the best price, and arrange to have the bonds delivered to your main account for free.

Of nine brokers that BUSINESS WEEK examined, only DLJdirect and MuniDirect disclosed all commission costs. DLJ charges \$3 for each \$1,000 corporate, muni, or agency bond, while MuniDirect charges \$2.50 to \$5 per bond, depending on the order. Other sites mark up the bonds, but the markups are generally less than off-line brokers, according to Todd Eyler, an analyst at Forrester Research who recently completed a study of online trading. "As an individual investor, you would traditionally pay a 5% commission for a bond at a full-service broker," he says. "It would take a year's worth of interest to recoup that if you bought a municipal bond. At sites such as eBondTrade, [the markup is a fraction of 1%]." When purchasing long-term bonds, say, 10 years or more, it's better to use flat-rate brokers such as DLJdirect. That's because brokers who make their money through mark-ups charge more for long-term bonds.

GUARANTEED INVENTORY. It's also important to know what trading platform a broker is using. Since no central bond exchange exists, many online brokers use electronic trading platforms that link themselves to other dealers. The broker with the best platform has access to the most bonds and can usually find the best prices regardless of the commissions they charge. E*Trade, DLJ, and Waterhouse all use BondDesk.com, which has access to 60 dealers and about 7,000 bonds. It has a big advantage: that many of its bonds are "live and executable" meaning prices are real-time and the inventory is guaranteed to be there. Another popular platform, Bond Express, has 15,000 bonds, but they are subject to dealer availability. So you may go to purchase a bond and find it's no longer available at the price quoted.

Some online brokers also have their own inventory of bonds, which they sell directly to investors without outside dealers. That allows them to guarantee availability. One such broker is e*Trade, which offers 450 of its own muni bonds. E*Trade and Waterhouse sell investors bonds from their own inventories as well as acquire them from others. Schwab sells from its inventory but is also building a new platform, ValuBond, that should go live in December. BondAgent.com is planned to give investors a crack at dealers' inventories, not just Schwab's.

All told, bond investors can find better prices online than off. It just takes more effort pointing and clicking.

Researching Bonds Online

WEB SITE (WWW.)

BOND MARKET ASSN.
investinginbonds.com

BONDRESOURCES
bondresources.com

BOND TALK.COM
bondtalk.com

BRIEFING.COM
briefing.com

BUREAU OF THE PUBLIC DEBT
publicdebt.treas.gov/

DPC DATA
dpccdata.com

DUFF & PHELPS
dcrco.com

E-MUNI
emuni.com

EQUITY ANALYTICS
e-analytics.com/
bonds/bonddir.htm

FEDERAL RESERVE BOARD
bog.frb.fed.us/

MOODY'S INVESTORS SERVICE
moody's.com

MUNI STATEMENTS.COM
munistatements.com

STANDARD & POOR'S*
standardandpoors.com/
ratings/corporates/

THE BOND BUYER
bondbuyer.com

TREASURY BULLETIN
fms.treas.gov/bulletin/
index.html

COMMENTS

Best overall site for beginners; try muni quote tool

Comprehensive daily news on every type of bond

Daily bond news, economic stats, and market commentary

Bond research and live quotes used by pros—\$25 a month

Great info source for Treasuries and savings bonds

Download muni annual reports and prospectuses for \$25

Offers free credit rating reports for over 3,000 companies

Free breaking muni news from Reuters, bond glossary

Detailed basic bond primer for beginners

Economic stats on interest rates, debt, and currency

Ratings reports, economic commentary, default overview

Large inventory of muni documents, free for 30 days

Free breaking ratings news and recent credit reports

Daily bond news/research used by pros for \$1,000 a year

Quarterly economic commentary and data for Treasuries



Iberia's Intercontinental Business Class. More space between seats.

...ling and relaxing can be one and the same. Especially when you have ergonomically designed reclining and 52 inches of room between your seat and the one in front. Enjoy access to 300 plus VIP lounges worldwide, and when flying on Iberia, members of oneworld frequent flyer programs, such as AAdvantage® may and redeem frequent flyer miles along the way. Iberia's Intercontinental Business Class. Just Smile.

For reservations contact your travel agent,
call Iberia Airlines at 1-800-772-4642, or visit www.iberia.com/ingles

Business
INTERCONTINENTAL

Distance measured between rows.



All our flights are non-smoking.

IBERIA

THE BEST KEPT SECRET OF EUROPEAN TRAVEL



Iberia Airlines® and AAdvantage® are registered trademarks of American Airlines Inc. American Airlines reserves the right to change the AAdvantage program rules, regulations, travel awards and special offers at any time without notice to end the AAdvantage program with six months notice. AAdvantage travel awards, mileage accrual, and special offers are subject to government regulations. Any such changes may affect your ability to use the awards or miles that you have accumulated. American Airlines is not responsible for products or services offered by other participating companies. For complete details about the AAdvantage program, visit www.aa.com.

BUYING MUNIS, NOT HEARTBREAK



BY ROBERT BARKER

An investment guru and former bond salesman avoids municipal-bond brokers entirely

For the longest time, Bill Schultheis was one of them. A broker. A cold-caller. A salesman who ran his finger through the Yellow Pages for people to buy municipal bonds from his firm, Smith Barney. Schultheis quit in 1997 and a year later wound up publishing a surprisingly subversive little book, *The Coffeehouse Investor: How To Build Wealth, Ignore Wall Street and Get on with Your Life* (Longstreet Press, \$13).

I like the book. But what I really wanted to know from Schultheis isn't in it: How can I avoid getting hurt if I try to buy muni bonds? I figured, after 13 years

selling them, Schultheis must know the ropes. And now that he's a partner in a \$25 million advisory firm, Pacific Asset Management, he's often on the other side of the trade. When clients need munis, he doesn't ring up one of the Street's old-line firms, where transaction costs run 3% and more. Schultheis uses a discount broker instead. What else does he suggest?

■ Beware of calls:

Many bonds can be "called"—that is, redeemed by the issuer before maturity. That's not necessarily bad, but you want to get paid for that risk, especially if you buy a bond when it's trading at a premium to its par value. You want to make sure that if, for example, the bond gets called in five years, your total yield will beat yields on similar five-year bonds.

A broker "will call you up and say, 'Hey, I've got a housing bond, and it's got a great yield on it,'" Schultheis said. "But you've got to be careful, because conceivably that bond could be called next week at par. I've seen it time and time again." Don't buy a muni unless you know when it can be called.

Minding Your Munis

Bill Schultheis offers this advice to investors:

- ▶ Don't be afraid to buy muni bonds trading at a premium to par value
- ▶ Make sure you know when a premium bond can be called by its issuer
- ▶ Don't go past five years in maturity, where there's a lot more risk for a little more reward

■ Consider premium bonds:

Everyone likes a bargain, so there's often more demand for bonds selling at a discount to par value. "Because of that psychology, you get a little bit of pickup in yield" with premium bonds, Schultheis said. For example, a AA-rated Washington State general-obligation bond issue maturing in 2010 recently traded over par, with a yield to maturity of 5.64%, 0.25 percentage points more than the comparable bonds' average. It can be called in September, 2004, and, if it is, it would yield 4.81%, a "kicker" of 0.35 points or so over the typical AA, four-year bond.

■ Watch interest-rate risk: The longer-term the bond, the more liable it is to lose value before maturity if interest rates rise. True, lower rates

boost a bond's value. Yet most individuals buy bonds for income or as a last against the stocks, not to trade for capital gains. However, the yield, average bonds with maturities past five years or so unless they're likely to be called sooner. The average AAA-rated, five-year muni yielded 4.64% recently, while AAA, 10-year bonds yielded 4.93%. "You get a ton of interest-rate risk with no upside," Schultheis says.



SCHULTHEIS: Now on the other side of the trade

Don't let a muni broker push you into it.

How does Schultheis buy munis now? He avoids muni brokers entirely, a choice he suggests for educated investors. He uses discount Charles Schwab's bond desk (800 626-4600), which usually operates not as a broker but as a principal. That is, it sells bonds from its own inventory and makes its money on the bid-ask spread without commissions. Bond desks at Fidelity Investments (800 544-6666) and Vanguard (800 669-0514) operate similarly. Schwab's chief John Ladensack told me that, depending on a bond's maturity and size of a trade, the take is 0.5% to 1.5% of the principal. If you want a bond desk the credit quality and maturity, they'll offer a selection, but no hard sell—just what this ex-salesman orders.

BusinessWeek online

For barker.online, go to www.businessweek.com/investor or AOL keyword: BW Daily



A hand is shown holding a blue computer mouse. The mouse has a cheetah face design on its top, with a large eye area featuring horizontal stripes. The background is dark and moody.

THIS WORLD, YOUR MOUSE BECOMES A CHEETAH.

In AT&T's broadband world, there's no more running to the fridge during downloads—whether you're racing to finish a heavy graphics presentation or laying down music on your MP3. There's no dial up, you're always on. Only seconds away from whatever you're on the prowl for—for work at home or play. Connecting thousands daily, AT&T makes the internet experience a whole new animal.

AT&T

BOUNDLESS

att.com/boundless

Speed
Net Access

High-Speed
Data Networking

Digital
Cable TV

Digital
Communications

Wireless
Data & Web

Drive with more intelligence.



ST microchips are in one-third of all new cars, making cars smarter and safer. And putting some of the pure fun back into driving.



Driving may never be all play, but it can be more fun and much safer – thanks to ST chips. They're in automotive systems for passenger safety, engine control, braking, security, navigation, entertainment, information and more. In fact, within five years cars will probably have greater microelectronic content than PC's. When it comes to making cars smarter and safer, ST is really moving.



We put more intelligence into everything.

STMicroelectronics (formerly SGS-THOMSON) • www.st.com • A world leader in semiconductors for consumer products, automotive, telecommunications, computer peripherals, industrial automation and control systems • For opportunities: <http://jobs.st.com>

STMicroelectronics

ALL EYES ON UNIVISION



GENE G. MARCIAL

panic TV's
vision may be
for a merger.
Vertex, IBM is
ing its growing
of clients.
ing its wounds,
looks abroad
resh growth

An impressive upswing in the third-quarter results at Univision Communications (UVN), the 800-pound gorilla in U.S. Spanish TV, has halted the stock's steep slide. Trading at 62 in August, it had dropped to 26 in mid-October. But it has since revived, closing at 38 on Oct. 24. The 56% third-quarter earnings jump (before special charges) and a 20% rise in sales helped.

But takeover speculation was partly behind the uptick, say some pros. "The stock's oversold condition has awakened interest in Univision from the likes of industry consolidator Clear Channel Communications," says one fund manager. Clear Channel owns 19 TV stations and is affiliated with 874 radio stations. It also has a 26% stake in Hispanic Broadcasting, a U.S. network. Clear Channel has been a "participant in the consolidation" of fast-growing Spanish broadcasting, notes analyst Richard Rosenstein of Goldman Sachs.

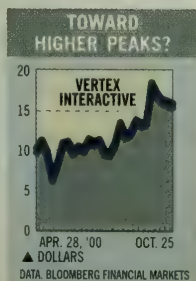
CEO Jerrold Perenchio, 68, who owns 10% of Univision, may be ready to "pursue other interests" and agree to do a deal, says an investor close to Univision. In August, Perenchio bought an additional 1 million shares at 45 to 47 apiece.

Analyst Frank Bodenchak of Morgan Stanley Dean Witter thinks the Spanish-language TV and radio sectors are "ripe for consolidation, given the massive pullback in the stocks." Univision, the nation's fifth-largest TV network, reaches 98% of Hispanic households in America through its 19 TV stations and its network of 33 affiliates and 1,100 cable affiliates. Analysts value Univision at 50 to 60 a share. A buyout could push it to 70.

HIGHER PEAKS MAY LOOM FOR VERTEX

Know about "supply chain"? It is an emerging industry the Street is starting to take a shine to. Supply chain execution, says Scott Wright of H.C. Wainwright, uses the Web and wireless technology to improve efficiency and worker productivity in managing customers, inventories, warehousing, and route accounting.

That's why Wright has a strong-buy rating on Vertex Interactive (VETX), a tiny player in supply-chain solutions. Its customers include IBM, Merck, Verizon, Motorola, and Dell. At Merck, Vertex automated four distribution centers, resulting in cutting the time to fill orders from 24 hours to 4 hours, according to co-CEO Nic Toms.



"We have positioned Vertex to be a strong player against larger companies," says Toms, "such as i2 Technologies," trading at 174 a share, with a market cap of \$34.6 billion. By contrast, Vertex' market cap is \$361 million. The SCE market is estimated by AMR Research to grow from \$4.5 billion in 1999 to \$18 billion by 2003.

Industry sources say Vertex will get a \$6 million supply-chain contract from IBM, which could grow to a \$20 million pact in three years. Vertex will provide a supply-chain network to 6,000 IBM customer locations nationwide. Wright sees sales of \$47 million in fiscal 2000, and \$101 million in 2001, when he expects Vertex to move into the black. He sees the stock, now at 15%, rising to 30 in 12 months.

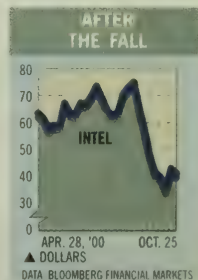
INTEL'S NEW HORIZONS COULD BE IN ASIA

Who's afraid of Intel? Almost everyone on the Street is. A massive sell-off by institutional investors since August has slashed \$272 billion, or 52%, from the company's market value, as the stock plunged from summer's 75 to 35 on Oct. 11. It has since rallied feebly, to 41. "The sky is not falling, but next year looks tough," says Joseph Osha of Merrill Lynch.

But some value players, who regard Intel's low price as a big fire sale, have scooped up shares, which they say are bound to shine again. One such investor is Stephen Leeb, editor of the *Personal Finance* market letter, who sees Asia as a big source of growth for Intel in the next few years. Leeb notes that in the past two years, orders from Asia (excluding Japan) have grown more than twice as fast as those from the U.S. and Europe. "Asian demand has grown to 20% of Intel's total revenues and should be even much bigger next year," says Leeb.

Even during the Asian flu two years ago, Intel's sales in Asia grew by 15%, recalls Leeb. Asia is sure to boost Intel's prospects in its core business, argues Leeb. And Intel's forays into nonchip businesses will help greatly, he adds. Intel has established strong footholds in businesses that are growing faster than its core business, including flash memories and products for telecom equipment.

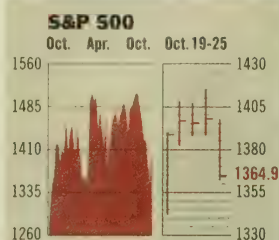
With Intel's forward price-earnings ratio down to 25, "the stock is a steal," says Leeb. Over the long term, "we expect Intel to expand earnings at 15% a year, if not better," says Leeb. He thinks Intel will rebound to 70 within 18 months.



BusinessWeek online

Watch for Gene Marcial's Inside Wall Street Online column every Tuesday afternoon at www.businessweek.com/today.htm

STOCKS



COMMENTARY

The markets got thrashed again this week, but landed on two feet. Although earnings woes persist, the Dow Jones industrial average gained 3.5%, aided by news of General Electric's takeover of Honeywell and a report of strong software sales from Microsoft. Although the tech-heavy Nasdaq suffered its biggest one-day loss in five months, it rose almost 2%, as did the S&P 500.

Data: Bloomberg Financial Markets
Bridge Information Systems, Inc.

U.S. MARKETS

	Oct. 25	Week	% change Year to date	Last 12 months
S&P 500	1364.9	1.7	-7.1	5.5
Dow Jones Industrials	10,326.5	3.5	-10.2	-0.2
Nasdaq Composite	3229.6	1.8	-20.6	14.7
S&P MidCap 400	495.0	0.6	11.3	29.4
S&P SmallCap 600	204.6	2.4	3.4	19.2
Wilshire 5000	12,733.7	1.9	-7.8	7.7

SECTORS

	Oct. 25	Week	% change Year to date	Last 12 months
Business Week 50*	1091.7	2.4	-16.1	3.6
Business Week Info Tech 100**	773.8	0.9	NA	NA
S&P/BARRA Growth	772.8	0.8	-12.9	2.3
S&P/BARRA Value	608.4	2.8	-0.4	8.3
S&P Energy	899.5	-2.3	7.8	9.6
S&P Financials	152.8	5.3	14.8	18.8
S&P REIT	80.0	-1.6	8.8	9.2
S&P Transportation	598.5	5.5	0.3	0.4
S&P Utilities	311.7	-3.0	37.2	32.2
GSTI Internet	323.9	3.8	-54.5	-30.8
PSE Technology	913.7	0.5	-6.0	47.5

*Mar. 19, 1999=1000 **Feb. 7, 2000=1000

BEST-PERFORMING GROUPS

	Last month %		Last 12 months %
Tobacco	27.5	Defense Electronics	179.3
Household Products	18.9	Hospital Management	91.2
Engineering & Constr.	12.3	HMOs	73.1
Regional Telephone Cos.	11.1	Invest. Banking/Bkrge.	67.3
Cosmetics	10.1	Multi-line Insurers	62.4

EQUITY FUND CATEGORIES

4-week total return	%	52-week total return	%
Leaders		Leaders	
Large-cap Value	-0.2	Health	87.5
Mid-cap Value	-0.3	Technology	49.2
Health	-0.8	Mid-cap Growth	47.8
Domestic Hybrid	-1.0	Small-cap Growth	46.0
Laggards		Laggards	
Latin America	-11.1	Precious Metals	-23.4
Technology	-8.3	Japan	-11.4
Diversified Emerging Mkts.	-7.5	Diversified Pacific/Asia	-7.9
Pacific/Asia ex-Japan	-6.6	Pacific/Asia ex-Japan	-0.2

EQUITY FUNDS

4-week total return	%	52-week total return	%
Leaders		Leaders	
SunAmerica Focused Val. II	15.2	Dresdner RCM Biotech. N	222.3
Smith Barney Telec. Income	11.2	Munder Fram. Hlthcare. B	199.4
Prudent Bear	9.3	Franklin Biotech. Disc. A	175.3
KPM Equity	7.2	PBHG Select Equity	169.9
Laggards		Laggards	
Frontier Equity	-26.7	ProFunds UltraShort OTC	-71.5
Jacob Internet	-23.4	Apex Mid Cap Growth	-47.0
Amerindo Technology D	-22.0	U.S. Glob. Inv. World Gold	-43.6
Potomac Internet Plus	-20.1	Midas	-41.4

Data: Standard & Poor's

THE WEEK AHEAD

PERSONAL INCOME Monday, Oct. 30, 8:30 a.m. EST ► Personal income likely increased 0.4% in September, says the median forecast of economists polled by Standard & Poor's MMS, a unit of The McGraw-Hill Companies. Consumer spending likely jumped 0.6% in September, the same gain posted in August.

CONSUMER CONFIDENCE Tuesday, Oct. 31, 10 a.m. EST ► The Conference Board's confidence index likely stood at 140 in October, down from 141.9 in September.

PURCHASING MANAGERS' INDEX Wednesday, Nov. 1, 10 a.m. EST ► The National Association of Purchasing Management's index likely fell to 49.6% in October, from 49.9% in September, says the S&P MMS median forecast.

BEIGE BOOK Wednesday, Nov. 1, 2 p.m. EST ► The Federal Reserve Board's compilation of regional economic activity will be released in advance of the policy meeting on Nov. 15. Analysts will be looking for reports on domestic demand.

PRODUCTIVITY & COSTS Thursday, Nov. 2, 8:30 a.m. EST ► Output per hour in the third quarter probably grew at an annual rate of 3.5%. That follows a 5.7% jump in the second quarter, as labor costs were probably unchanged.

EMPLOYMENT Friday, Nov. 3, 8:30 a.m. EST ► Nonfarm payrolls probably added 190,000 new jobs in October, with 252,000 added in September. The employment rate likely edged up from 3.9% in September.

GLOBAL MARKETS

	Oct. 25	Week	% change Year to date
S&P Euro Plus (U.S. Dollar)	1303.7	3.7	-13.1
London (FT-SE 100)	6367.8	3.6	-8.1
Paris (CAC 40)	6277.9	5.7	5.1
Frankfurt (DAX)	6748.2	4.1	-3.1
Tokyo (NIKKEI 225)	14,840.5	-0.2	-21.1
Hong Kong (Hang Seng)	15,601.1	4.2	-13.1
Toronto (TSE 300)	9511.8	-4.2	13.1
Mexico City (IPC)	6003.7	4.1	-15.1

FUNDAMENTALS

	Oct. 24	Wk. ago
S&P 500 Dividend Yield	1.14%	1.18%
S&P 500 P/E Ratio (Trailing 12 mos.)	27.2	26.7
S&P 500 P/E Ratio (Next 12 mos.)*	22.5	21.5
First Call Earnings Surprise*	3.09%	2.30%

*First Call Corp.

TECHNICAL INDICATORS

	Oct. 24	Wk. ago
S&P 500 200-day average	1443.3	1444.3
Stocks above 200-day average	47.0%	46.0%
Options: Put/call ratio	0.63	0.76
Insiders: Vickers Sell/buy ratio	2.10	2.13

WORST-PERFORMING GROUPS

	Last month %		Last 12 months %
Office Equip. & Supplies	-38.0	Metal & Glass Containers	-38.0
Photography/Imaging	-31.3	Office Equip. & Supplies	-31.3
Specialty Retailers	-22.2	Long-Dist. Telecomm.	-22.2
Metal & Glass Containers	-20.3	Photography/Imaging	-20.3
Communications Equip.	-20.3	Gold Mining	-20.3

INTEREST RATES

KEY RATES

	Oct. 25	Week ago
MONEY MARKET FUNDS	6.14%	6.14%
90-DAY TREASURY BILLS	6.37	6.30
1-YEAR TREASURY BILLS	6.02	5.91
10-YEAR TREASURY NOTES	5.68	5.66
30-YEAR TREASURY BONDS	5.74	5.77
30-YEAR FIXED MORTGAGE†	7.69	7.86

†BancQuote, Inc.

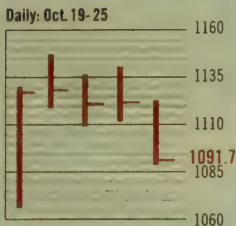
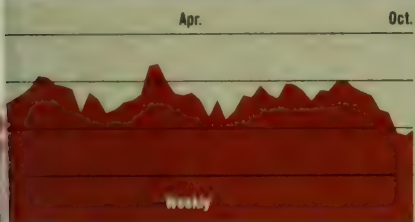
BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt bonds, assuming a 31% federal tax rate.

	10-yr. bond
GENERAL OBLIGATIONS	4.76%
TAXABLE EQUIVALENT	6.90
INSURED REVENUE BONDS	4.90
TAXABLE EQUIVALENT	7.10

BUSINESS WEEK FIFTY

THE
BUSINESS
WEEK



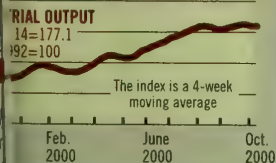
ad a strong week, up a healthy 2.4%. Computer Associates rose 17.7% after profits topped reduced id Tyco International soared 21.7% on strong profit growth. Weak performers ranged from biotech's s, down 8.0%, to financial stocks, such as Capital One, down 10.5%. Bellwether tech stocks—Cis-Lucent, and Sun Microsystems—ended the week on a desultory note.

COMPANY PERFORMANCE

Company	% change		Rank	Company	% change	
	Week	Since 3/1/00			Week	Since 3/1/00
1 Intel	18.4	-32.6	26 Intel	8.2	-28.7	
2 Pfizer	2.9	-15.5	27 Tribune	1.7	-4.1	
3 Sun Microsystems	-3.1	-23.1	28 Xilinx	-7.3	-17.3	
4 Enron	2.4	-3.8	29 Enron	-3.3	10.3	
5 Lexmark International	-0.1	52.3	30 Lexmark International	8.7	-72.4	
6 Omnicom Group	4.6	-80.9	31 Omnicom Group	15.5	-9.6	
7 America Online	7.0	3.8	32 America Online	0.2	-17.5	
8 Guidant	9.3	-50.9	33 Guidant	1.6	-18.7	
9 MBNA	-4.2	-68.7	34 MBNA	1.0	61.4	
10 Pfizer	4.4	-0.2	35 Pfizer	2.7	41.0	
11 Soletron	-1.5	10.9	36 Soletron	8.1	33.2	
12 Gateway	5.9	-49.1	37 Gateway	-4.1	-31.2	
13 Wells Fargo	6.9	0.2	38 Wells Fargo	0.4	22.3	
14 General Dynamics	5.0	-31.1	39 General Dynamics	3.1	60.9	
15 Texas Instruments	-1.4	-39.8	40 Texas Instruments	15.8	-48.1	
16 Capital One Financial	-5.5	-22.5	41 Capital One Financial	-10.5	59.9	
17 General Electric	-8.4	28.6	42 General Electric	-4.5	21.0	
18 Kansas City Southern Industries	-3.4	6.1	43 Kansas City Southern Industries	4.5	86.5	
19 Wal-Mart Stores	1.6	5.5	44 Wal-Mart Stores	-1.7	-6.3	
20 Paccar	14.6	-68.0	45 Paccar	0.2	-7.8	
21 PE Biosystems Group	15.9	-47.2	46 PE Biosystems Group	-8.0	-9.9	
22 Merck	21.7	48.0	47 Merck	11.7	45.5	
23 Adobe Systems	17.7	-56.7	48 Adobe Systems	4.6	34.5	
24 Reliant Energy	-2.7	-21.7	49 Reliant Energy	-10.1	98.8	
25 Citigroup	-12.1	-52.7	50 Citigroup	2.1	30.8	

PRODUCTION INDEX

Change from last week: 0.0%
Change from last year: 14.1%



index was unchanged for the week end- weekly index continues to underscore dent in the monthly factory indicators. on of the four-week moving average, 177 from 176. Seasonally adjusted autos, trucks, coal, and lumber in- il refining output and rail-freight traf- ged, while electric-power production

of the index components is at www.business-week.com
index Copyright 2000 by The McGraw-Hill

ONLINE RESOURCES

BW50 Track the index and the com- panies in it all day long. Plus: our exclusive Info Tech 100 index.

S&P PERSONAL WEALTH Real-time mar- ket coverage, industry analysis, and personalized retirement advice.

MUTUAL FUNDS Search for funds, view BW ratings, and read Q&A's with fund managers.

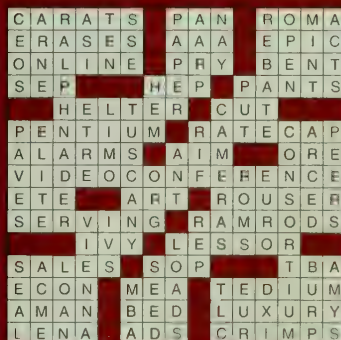
COLUMNS Hot stocks, takeover plays, and the latest strategies for manag- ing your money.

BusinessWeek online

For more investment data and the components of the production index, visit www.businessweek.com.

Special Advertising Feature

Mixing Business with Pleasure by Lincoln

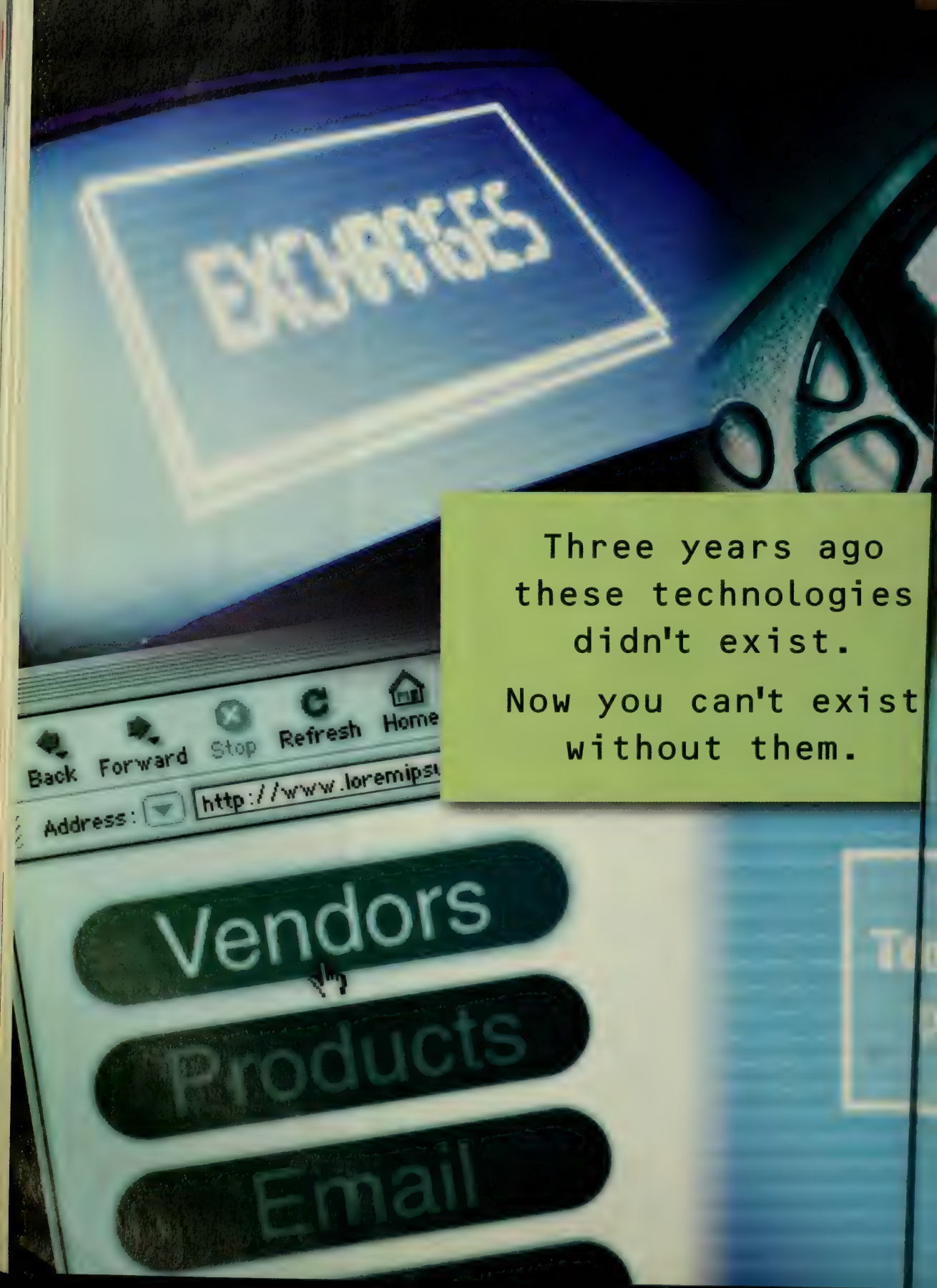


Answers from puzzle #34
in Business Week.



LINCOLN

www.lincolnvehicles.com



EXCHANGES

Three years ago
these technologies
didn't exist.

Now you can't exist
without them.

Back Forward Stop Refresh Home

Address: 

Vendors

Products

Email

BusinessWeek e.biz Atlanta **live**

Exchanges, supply-chain management, technology on tap, and the mobile net are redirecting the course of e-business – not to mention the entire economy. If you can implement them today, they can make your business more profitable and more competitive. If you can't, you may not last through this next round of the revolution.

Find out how to dominate the marketplace with networks at the BusinessWeek e.biz Live: Atlanta conference. On November 9, you'll interact with influential visionaries, technologists, financiers, and practitioners as they explore four pivotal e.biz technologies. And when you speak with the pioneers in e-business, you'll learn the practical, relevant information that you'll need to make bolder, better, and smarter decisions in the months ahead.

Only a limited number of professionals will be able to take part in this event. Reserve your space early.

Go to: <http://www.conferences.businessweek.com/2000/ebiz5>

e-mail: ebiz_atlanta@businessweek.com

Phone: 888-239-6878

Fax on demand: 888-239-6878, document #210



Don Tapscott, Author,
*Digital Capital: Harnessing
the Power of Business Webs*



Michael Hawley, Professor
of Media Technology,
MIT Media Lab



Vincent I. Cammiti,
Senior Vice President, E-Business,
Delta Air Lines, Inc.



Michael S. Levin, Founder,
Chairman and CEO,
e-STEEL



Mark Lorimer, President
and CEO, autobytel.com inc.



Andrew A. Stern, CEO,
USinternetworking, Inc.

ADDITIONAL CONFIRMED SPEAKERS: Robert J. Corliss, President and CEO, The Athlete's Foot Group, Inc. • John Dillon, President and CEO, Salesforce.com • Tracey A. Esherrick, Executive Vice President, Online Brokerage, Fidelity Personal Investments and Brokerage Group, Fidelity Investments • Terrell B. Jones, President and CEO, Travelocity.com • Tony Kobrinetz, Vice-President and General Manager, Personal Area Networks and Mobile Internet Exchange, Personal Networks Group, Motorola, Inc. • Zev Laderman, President and CEO, VerticalNet Solutions, a division of VerticalNet • Michael McCloskey, CEO and Chairman of the Board, Kana Communications • Ian Small, Chief Strategist and Knowledge Officer, marchFIRST • John A. Sutthoff, Chief Operating Officer, UPS Logistics Group

Presented by:



A Division of The McGraw-Hill Companies

Co-produced by:



m
marchFIRST

Sponsored by: BMC Software • VerticalNet Solutions, a division of VerticalNet, Inc.

With the support of: Wharton Executive Education

Index to Companies

This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

A

ABCP Architecture 126
Accel Partners 104, 112
Activision (ATVI) 183
Airborne Logistics Services 104
Airbus Industrie 16
Alcatel (ALA) 51
Altera (ALTR) 48
Amazon.com (AMZN) 60, 104
Ambasz (Emilio) 140
America Online (AOL) 149, 157
Ameritrade (AMTD) 196
Amway 60, 149
Appelbaum (Ralph) 129
Apple Computer (AAPL) 28, 208
Archer Daniels Midland (ADM) 54
Ascend Communications (LU) 176
AT&T (T) 51, 52, 64, 149, 167, 173, 180, 183
Aventis (AVE) 54

B

Banana Republic (GPS) 112
Banco Santander Central Bank of America (BAC) 60, 208
Bank One (ONE) 16
BBDOWorldwide 12
Bear Stearns (BSC) 51
Bell Laboratories (LU) 176
BellSouth (BLS) 173
Benninger (Christopher) 122
Berkshire Hathaway (BRKA) 149
Bernstein (Sanford C.) 104
BlueLight.com 104
Boeing (BA) 16
Boston Scientific (BSX) 190
BP Amoco (BA) 200
Bridgestone/Firestone 12
Brown Brothers Harriman 190

C

Caldwell Architects 132
Cantor Fitzgerald 200
Caterpillar (CAT) 149
Cendant (CD) 60
Century Telephone (CTL) 190
Cerent 168
Champion Products 84
Charles River Associates (CRAI) 200
Chase Manhattan Bank (CMB) 194

Chevron (CHV) 94
Children's Place 138
CIBCWorld Markets 168
Cisco Systems (CSCO) 28, 50, 78, 167, 168
Citigroup (C) 60, 196
Clear Channel Communications (CCU) 221
CNBC.com (GE) 14
Coca-Cola (KO) 60
Communication Industry Researchers 176
Compaq Computer (CPQ) 196
Corvis (CORV) 168

D

Daiichi Mutual Life 140
DaimlerChrysler (DCX) 12
Dataquest 51, 176
Davis Brody Bond 130, 138
DDB Chicago 16
Dell Computer (DELL) 196, 221
Deloitte & Touche 96
Delphi Automotive Systems (DPH) 78
Detroit Edison (DTE) 200
Deutsche Bank (DBK) 196
DLIdirect (DLI) 213
Draper Fisher Jurvetson 184
Dreyfus (MEL) 173, 208
DuPont (DD) 200
Duracell (G) 52

E

Eastman Kodak (EK) 48, 52, 60
eBay (EBAY) 116, 149
EchoStar Communications (DISH) 149
ElfTotalFina 94
Environmental Financial Products 200
Ericsson (ERIC) 51, 78
E*Trade (EGRP) 196, 213
Exxon Mobil (XOM) 94

F

Fannie Mae (FNM) 208
FCB (TNO) 12
Federated Department Stores (FD) 60, 112
Fidelity Investments 218
Fingerhut 104
First Call 190
First Union (FTU) 190, 194
FleetBoston (FBF) 60, 194
Flextronics International (FLX) 78
Ford (F) 12, 14, 16, 48, 149, 208

Forrester Research (FORR) 14, 213
Freddie Mac 208
Freeport-McMoRan Copper & Gold (FCX) 88

G

Gap (GPS) 72, 80, 104, 112
General Electric (GE) 40, 42, 78, 168
General Motors (GM) 72, 183
Gillette (G) 52
Ginnie Mae 208
Goldman Sachs (GS) 42, 190, 196, 208, 221
Goodrich (B.F.) (GR) 42
Ground Zero 124

H

Haier Group 78
Halliburton (HAL) 60, 149
Hanjin Shipping 132
Herbert Lewis Kruse Blunck 134
Herzog Heine Geduld 196
Hewlett-Packard (HWP) 78
Hispanic Broadcasting (HSP) 221
Honeywell International (HON) 40, 42
Huffy (HUF) 84
Hyatt 149
HyperEdge 16

I

iBazar 116
I/B/E/S 48, 190
IBM (IBM) 48, 50, 78, 221
INGBarings 194
Intel (INTC) 48, 221
International Data 28
International Paper (IP) 149
i2 Technologies (ITWO) 221
Iwataya Department Store 137

J

Jardine Matheson 16
JDS Uniphase (JDSU) 60
Juniper Networks (JNPR) 167, 168
Jupiter Media Metrix (JMXI) 104

K

Kellogg (K) 54
Key Corp. (KEY) 60
Kmart (KM) 104
Knight Trading Group (NITE) 196
Korean Bank HCB (HCB) 96
KRC Communications Research 56

L

Leeds Equity Partners 56
Legend Computers 78
Lehman Brothers (LEH) 167, 208
Level 3 Communications (LVL) 167
Liz Claiborne (LIZ) 80, 84
Longstreet Press 218
Lucent Technologies (LU) 28, 48, 167, 168, 176, 180, 190

M

Major League Baseball 58
Matrix Asset Advisors 190
Mattel (MAT) 72, 84, 183
McDonald Investments 60
McGraw-Hill (MHP) 117, 222
MediaOne (T) 173
Mellon (MEL) 60
Merck (MRK) 221
Merrill Lynch (MER) 190, 196, 221
Metropolitan West Total Return Bond Fund (MWTRX) 208
Microsoft (MSFT) 60, 184
Miramax Film 164
Mitsubishi 51
Mitsui Real Estate 140
MMXEurope 116
Moody's Investors Service (DNB) 176
Morgan (J.P.) (JPM) 194
Morgan Stanley Dean Witter (MWD) 117, 168, 190, 196, 221
Motorola (MOT) 51, 221

N

Nabisco Group (NBH) 149
National Discount Brokers (NDB) 196
NatSteel Electronics 78
New Balance 84
New Enterprise Associates 168
New Line Cinema 164
Nihon Sekkei 140
Nike (NKE) 72, 78, 84
Nokia (NOK) 51, 162
Nortel Networks (NT) 60, 176
Northern Trust (NTRS) 36
Novell (NOVL) 149
NT&K Kyushu Development 137
Occidental Petroleum (OXY) 88
ONI Systems (ONIS) 168
Ontario 149
Oracle (ORCL) 149

O

Occidental Petroleum (OXY) 88
ONI Systems (ONIS) 168
Ontario 149
Oracle (ORCL) 149

P

Pacific Asset Management 218
Pacific Investment Management (PIMCO) 208
PaineWebber (PWI) 190
Panasonic 51
Parker Hannifin (PH) 42
Petroneas 94
Philip Morris (MO) 149
Philips Electronics (PHG) 78
PlanetRx.com (PLRX) 104
PNC Advisors (PNC) 208
Polshak Partnership Architects 129
PricewaterhouseCoopers 200

Q

Qeyton Systems 168
Qwest Communications (Q) 167
QLX.com 116

R

RealNetworks (RNWK) 104
Redback Networks (RBAK) 168
Reebok (RBK) 84
Rockwell International (ROK) 42
Royal Dutch/Shell (RD) 88, 94, 200

S

Safeway (SWY) 54
Salomon Smith Barney (C) 173, 196
Samsung (SMAWY) 51
SBC Communications (SBC) 173
Schwab (Charles) (SCH) 212, 213, 218
Schweicher & Associates 168
SCI Systems (SCI) 78
Seagram (VO) 162
Sears (S) 104
Shubin & Donaldson 124
Siemens 51
Softbank Venture Capital 184
Software.com 168
Sony (SNE) 162, 164
Spear Leeds & Kellogg 196
Sprint PCS (PCS) 51
Standard & Poor's (MHP) 222
Starbucks (SBUX) 72
Stewart (Robert) 132
Sticks 134
Stride Rite (SRR) 84
Sun Microsystems (SUNW) 117
SunTrust (STI) 60

Superior Cooperative Elevator 54

T

Takenaka 140
Target (TGT) 104
TD Waterhouse (TD) 196, 213
Tele-Communications (T) 173
Texas Instruments (TXN) 48
3Com (COMS) 28
Timberland (TLB) 84
Time Warner (TWX) 149, 157, 162
Timken (TKR) 149
True North Communications (TNO) 12
TRW (TRW) 149

U

UAL (UAL) 149
United Technologies (U) 40, 42
Univision Communicati (UVN) 221
U.S. Bancorp (USB) 60
U.S. Investors Bond Gro Fund (GROW) 168
US West (Q) 167

V

Valeo Thermal System 117, 130
Vanguard Group 218
Verizon (VZ) 173, 190
Verizon Wireless 167
Vertex Interactive (VET) 221
Victoria's Secret 112
Vodafone AirTouch (V) 173

W

Wachovia (WB) 190
Wainwright (H.C.) 22
Walker Group/CNI 13
Wal-Mart Stores (WM) 104, 112
Walt Disney (DIS) 11, 157, 162, 164
Wayport 28
Wells Fargo (WFC) 6
Wilson (Peter) 122
Wisconsin Electric (V) 200
WorldCom (WCOW) 167, 168, 173

X

Xerox (XRX) 50

Y

Yahoo! (YHOO) 149, 208
Yankee Group Rese 173

Business Week (ISSN 0007-7135) published weekly, except for one week in January & August, by The McGraw-Hill Companies, Inc. Executive, Editorial, Circulation, and Advertising: 1221 Avenue of the Americas, New York, N.Y. 10020. U.S. subscriber rate \$54.95/year, Canada \$69.95/year. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J. 08520.

AOL Anywhere!

If you have access to the Internet, you have access to your AOL e-mail!

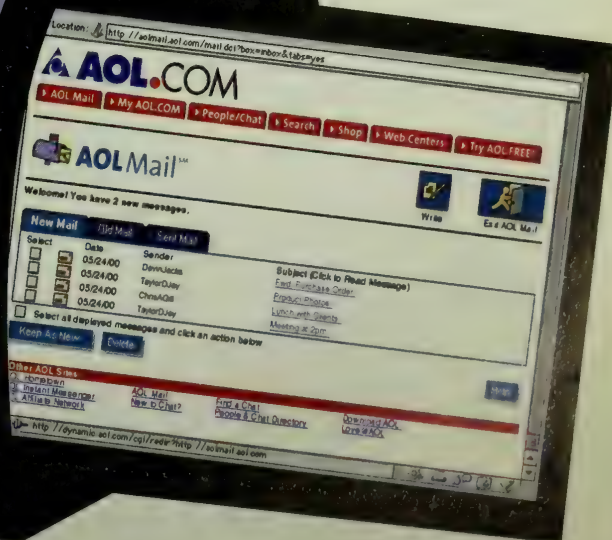
It's easy! Exclusively for America Online members, AOL Mail on the Web lets you send and receive your AOL e-mail from any computer with a Web browser.

- ▶ Just go to AOL.COM and click Read My AOL Mail NOW!
- ▶ Type in your AOL screen name and password.
- ▶ Read, save, respond to and forward your AOL e-mail anywhere, anytime!



So easy to use,
no wonder it's #1

Sign Up Today!
877-480-6295



GLOBALIZATION: LESSONS LEARNED

The heady, unrealistic days of globalization appear to be over. Where once it was promised that the simple spread of markets would melt poverty, dissolve dictatorships, and integrate diverse cultures, today the mere mention of globalization generates anger, discord, and accusations. The sharp worldwide financial crisis of 1997-1998, which devastated Asia and Russia, the unexpected oil shock of 1999-2000, which is hurting the U.S. and Europe, the crash of the euro, and the plummeting of stock markets everywhere have combined to cast doubt on the efficacy of globalization. Despair is replacing euphoria, and defensiveness is taking the place of triumphalism.

A double backlash is generating skepticism about the ability of globalism to do good. In the First World of the U.S. and Europe, the children of the middle class join with labor unions to protest in Seattle and Prague against globalization as a form of capitalist exploitation. They are opposed to what they see as multinational corporate exploitation of Asian and Latin American workers and the overseas environment. They seek to extend, if not impose, First World standards on Third World societies.

The Third World backlash is more complex and pragmatic. Asians, Africans, and Latin Americans protest against the rules of the globalization game but not against globalization itself. They want more controls over the hot, short-term Western capital flows into their countries that can destabilize them. At the same time they want more long-term corporate investment and fewer restrictions in Western markets for their exports. The Third World believes that the imposition of First World labor and environmental standards on their societies is simply a protectionist device to curb their exports and hold back their economic growth.

The backlashes against globalization mark the end of its naive, euphoric beginning and the start of a more complex stage in its evolution. To focus the debate, *BUSINESS WEEK* assembled a team of 16 journalists to fan out across the world to dissect what globalization means to people on the ground (page 72). Their conclusions:

■ Despite the Sturm und Drang of the backlashes, globalization remains the dominant driving force in the world economy, reshaping societies and politics as it changes lives. Moreover, an expanding high-tech, information-based economy increasingly defines globalization and shapes the business cycles within it. Much of the flow of capital, labor, service, and goods among Asia, America, and Europe are technology-based. Without chips, screens, and software help from Asia, the U.S. economy would grind to a halt.

■ How nations respond to globalization defines whether they prosper from it or not. At a minimum, policymakers have to be able to devise and implement sophisticated macroeconomic fiscal and monetary policies that control inflation and take advantage of global flows of capital, direct investment, and trade.

■ Regulation and rules count as much as the free flow of capital. To be productive, capital must move within a context of

transparent markets and regulated banks. It's a delicate balance the U.S. has been working on for two centuries. Something officials at the Treasury Dept. and the International Monetary Fund forgot when they pushed many Asian countries to open up prematurely in the early 1990s. *Laisssez faire* ideology is no substitute for practical investments.

■ Governance counts as much as free markets. The Congo, Nigeria, and, to a degree, even Russia, show that without effective, operating state and a legal system that protects private property and individual rights and enforces contracts, globalization can lead to corruption, exploitation, and impoverishment. Russia has one of the highest levels of education in the world, with many of the best scientists and engineers, but it has failed to grow because of the anarchy of the state and the failure of the legal system.

■ Education is one of the most important variables in determining how much and how fast Third World countries benefit from globalization. It allows them to move up the value-added chain, producing more advanced goods and services for the world market. Countries with the most education can plug into the high-tech global economy and gain the greatest benefits. Taiwan, India, Korea, China, and other Asian countries are now integrated into the Information International economy, which rises and falls with the high-business cycle. Africa, with among the lowest levels of education in the world, is out.

One of the great questions surrounding globalization is that of responsibility. Who, for example, is responsible for sweatshops in Latin America and Asia that produce so many American, Japanese, and European goods? The answer is clear—consumers are demanding that corporations be responsible for their employees anywhere around the world. Corporations must accept reasonable codes of conduct for their contractors overseas. It is also clear that global markets have to reflect the checks and balances found in the advanced economies to be effective.

But going further and imposing Western standards of human rights, worker benefits, and environmental protection on Third World countries, many of them democracies, runs the risk of protesters becoming the arrogant imperialists so many are protesting against. Globalization is the most powerful manifestation of capitalism seen yet. Capitalism has always operated within a context of law and rules, and it now has time to do some fine-tuning. But the danger in turning away from the markets is to return to the days when the World Bank and governments allocated capital for political reasons and the Third World wound up with dozens of steel mills that generated little growth and no prosperity for the people.

In the cacophony of voices being heard about globalization today, it is important to listen most of all to the leaders of the Third World who vociferously proclaim that the last thing their people want is to choke off the very economic growth that is lifting so many from poverty.

Ever wonder how these
people who have all the answers
got all the answers?

Chances are, we had something to do with it. Fact is, 98 out of the FORTUNE 100 count on business intelligence solutions from SAS to explore information, better understand customer and supplier relationships, predict behavior, and unlock hidden opportunities. Today, SAS is leading the industry in bringing this same level of intelligence to the world of e-business. With e-Intelligence from SAS, you can capture, analyze and react to data gathered at any point of contact. And then just as quickly disseminate new findings to anywhere they're needed across your extended enterprise. To get the answers you're searching for, call us today at 1-800-727-0025 or stop by www.sas.com.

The Power to Know.



© 2000 SAS Institute Inc. All rights reserved. SAS, SAS Institute Inc., product or service names are registered trademarks or trademarks of SAS
Institute Inc. in the USA and other countries. ® indicates USA registration. © 2000 SAS Institute Inc. 36009US.0000



*WE ARE THE CHILDREN
OF THE INTERNET.
WANT TO COME OUT
AND PLAY?*

BusinessWeek

NOVEMBER 13, 2000

THE MCGRAW-HILL COMPANIES

United



What's behind its woes

GE



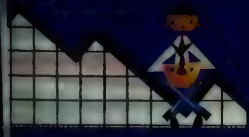
Is it overrated as a school for CEOs?

Ford

A new idea for manufacturing

Investing

Time to let the dogs out



BURLINGAME
NOV 6 - 2000
LIBRARY

BERTELSMANN'S

deal with Napster could kick-start a bold plan for the media and entertainment giant

A NEW NET POWERHOUSE?

PAGE 46

#BXDBDD*****CR-RT-SORT C030
#0602 1050111600# 103 0101 000001650

|||||

0109
102

BURLINGAME PUBLIC LIBRARY
400 PRIMROSE RD
BURLINGAME CA 94010-4010

CEO
Thomas
Middelhoff





Your business is as unique
as your DNA, which is why at



NO TWO EYES SEE THE SAME WORLD.
NO TWO BUSINESSES ARE IDENTICAL.
AND NOW ONE COMPANY CREATES
INTERNET SOLUTIONS UNIQUE TO YOU.

Fujitsu, a \$50 billion global provider of IT and telecommunications solutions, we approach every Internet challenge individually. With 60,000 IT service and support professionals and operations in over 100 countries, no matter where you are, we're right at your side. Observing your business from your perspective. Understanding your objectives. Responding to your customers. And selecting from our complete range of leading-edge solutions the unique combination that will deliver tangible business results for your business. A one-to-one solution designed specifically for you. It's not just the way we conduct business. It's in our genes.


FUJITSU

THE POSSIBILITIES ARE INFINITE

www.fujitsu.com

it's the bad mamma-jamma of wireless computing



SPANworks® software with the Toshiba Bluetooth PC Card allows network and file sharing, presentation sharing, chat and business card data exchange

Bluetooth PC Card delivers up to 20 times the speed of a traditional V.90 modem with a range three times farther than other PC cards: up to 100 feet

Bluetooth is standards-based, so it works virtually worldwide and with all Bluetooth devices

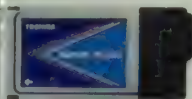


pentium® III

Toshiba recommends Microsoft® Windows® 2000 Professional for business.

¹The Toshiba Bluetooth PC Card is compatible on Microsoft Windows 98 Second Edition and Microsoft Windows Me. ²When products become available. ©2000 Toshiba America Information Systems, Inc. Tetra and Select are trademarks of Toshiba America Information Systems, Inc. SPANworks is a registered trademark of SPANworks, Inc. Intel, the Intel Inside logo and Pentium are registered trademarks and Intel SpeedStep is a trademark of Intel Corporation. All specifications are subject to change without notice.

Introducing the totally new Tecra 8100. The first ever Bluetooth PC solution.



The Toshiba Tecra® 8100 with the Bluetooth™ PC Card¹ is so fine, it's poetry in motion. With the Bluetooth PC Card, you can connect effortlessly with other Bluetooth PCs, handheld devices, LAN and Internet connections — all without

wires or cables.² Bluetooth is the latest mobile computing innovation pioneered by Toshiba through a joint venture with industry leaders. Now you can truly work without being tethered to old technology. So free yourself from the cables and wires that bind. You don't need them anymore.



Bluetooth has 128-bit encryption, which ensures that every connection is secure.

Superfast Mobile Intel® Pentium® III processors up to 850MHz featuring Intel SpeedStep™ technology and configurable from 5.6 lbs. light and 1.5" thin.

Up to 20 billion byte hard drive and a 14.1" diagonal TFT active-matrix color display.

choose freedom™

TOSHIBA

To buy direct, visit bluetooth.toshiba.com or call 1-800-TOSHIBA

Registered trademarks, and choose freedom is a trademark of Toshiba America Information Systems, Inc. and/or Toshiba Corporation. Bluetooth is a trademark owned by its proprietor and used by Toshiba under license. Availability are subject to change. All other product, service and company names are trademarks, registered trademarks or servicemarks of their respective owners. All rights reserved.

An elderly couple is captured in a joyful moment on a swing set. The man, positioned higher on the swing, is wearing a dark blazer over a blue cable-knit sweater and glasses, smiling broadly. The woman, on the lower swing, is wearing a light blue button-down shirt with a floral pattern, a matching light blue hat, and a pearl necklace, with her arms raised in excitement. They are both holding onto the ropes of their respective swings. The background is a lush, green park with trees and foliage, suggesting a bright, sunny day. The overall mood is one of happiness and active living.

See yourself succeeding.™



Pamela Gouws

Fidelity Investments
Representative

August 17, 2000
1:21 PM

Investor: We're calling for no other reason than to say thank you.

Fidelity Rep: That's a wonderful reason to call. Thank you.

Investor: My wife and I are truly enjoying our retirement and want to thank you for your wonderful assistance throughout the years.

Fidelity Rep: Well...that makes me feel great. And I'll pass that message along to everyone here.

Investor: Especially a Mr. David Coyne. Is he still with the company?

Fidelity Rep: Oh, yes. David's been with us for close to 30 years.

Investor: Well, he's a gem. He really is. He's the one that got us started.

Fidelity Rep: He's a very good man.

Investor: And Mr. Peter Lynch. We followed his principles faithfully.

Fidelity Rep: Many people have. But not everyone calls.

Investor: Well, I just want you to know that we feel very fortunate.

Fidelity Rep: Thank you.

Investor: No. Thank you!



1-800-FIDELITY Fidelity.com

Who can explain progress? The restless need to push the limits and move to a higher level. Not just to see what's coming next, but to create it. This is the spirit that's driving HUGHES to produce the next generation in communication. Satellite delivered broadband. Interactive TV. High-speed business networks. Innovations that will take the future of information and entertainment to its highest potential.

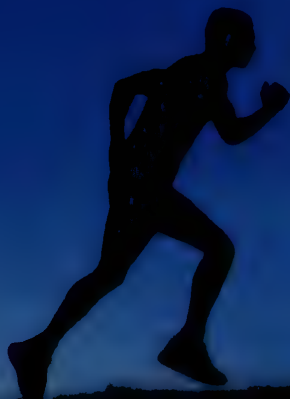
Because there's no limit to what you can accomplish when you keep looking beyond the horizon.

THE FIRST ONE

TO THE FUTURE

HAS THE

BEST VIEW.



satellite

television

wireless

internet

broadband

networks

e-commerce

convergence

HUGHES

Breaking the thought barrier.™

DIRECTV | Galaxy Latin America | PanAmSat | Hughes Network Systems

BusinessWeek

NOVEMBER 13, 2000



**WILL IT
FLY?**
United's
bid for

US Airways may
never take off page 180

COVER STORY

DIGITAL DUO

Bertelsmann's
Napster deal could
change the Internet
landscape page 46



Cover Story

46 A NEW NET POWERHOUSE?

Talk about an October surprise. Staid, 165-year-old media conglomerate Bertelsmann makes a deal with the Devil: music-downloading, file-sharing, upstart renegade Napster. Why? Bertelsmann chief Thomas Middelhoff envisions a future when all of his company's content will be digitalized and downloadable for a fee—using Napster software. But the deal is fraught with risk

50 BERTELSMANN'S DIGITAL ACE

E-Commerce Group President Andreas Schmidt is the point man

52 COMMENTARY: NAPSTER

Going legit means getting rid of the pirates on the music service

News: Analysis & Commentary

54 PRODUCTIVITY: STILL UP THERE?

The nation's supercharged productivity growth may slow as companies rein in capital spending

56 SMALL BIZ FEELS THE PINCH

Entrepreneurs are scaling back in anticipation of a slowdown

58 GM THINKS SMALL

To regain market share, it refocuses on entry-level cars, costing \$20,000 or less

60 COMMENTARY: CEO SHORTAGE

It's getting harder to fill Corporate America's top jobs as boards show lackluster leaders the door

62 COMMENTARY: MICROSOFT

The software giant has made it easy for hackers by not plugging the holes in its products

64 THE BUSHDAQ? THE GOREDEX?

Wall Street firms are tracking portfolios of stocks they expect to rise or fall according to who wins

66 IN BUSINESS THIS WEEK

International Business

70 JAPAN: HIGH-TECH REFORM

Investors remain wary even though the electronics giants are attracting more consumers and profits are up

72 GERMANY: AUTOS

That noise under Mercedes' hood? Tough competition and pressure on its profit margins

74 INTERNATIONAL OUTLOOK

Is NATO about to make a bad move in the Baltics?

Economic Analysis

38 ECONOMIC VIEWPOINT

Garten: It's time to deal with antitrust from a global perspective

42 ECONOMIC TRENDS

A shortage of scientists and engineers, falling job satisfaction, U.S. trading rivals limit wage

43 BUSINESS OUTLOOK

Is the slowdown enough to keep labor costs from fueling inflation?

Government

69 WASHINGTON OUTLOOK

High-tech issues will get tough

171 WHO'S GIVING SOFT MONEY

Microsoft, the telecoms, and financial firms top the list

Special Report

78 A FORD REDESIGN

It's remaking the factory Henry built into 21st century powerho

Media

92 NIPPING AT THE NETWORKS

Affiliates are banding together exploit new digital technology



IT SHOWERS
pelted the candidates with
those dollars page 171



E GRADUATES
alums don't
ays excel page 98



BETTER IDEA?
Ford's factory of
the future page 78



LETTING THE DOGS OUT
All those stocks you bought that
tanked could help at tax time page 208

Corporation

WHEN GE EXECS MIGRATE

They're the most highly sought
stars around, but their track
records are mixed

Science & Technology

BLOCKBUSTER OR BUST

Like most biotech upstarts, Cell
Pathways is betting its entire
future on a single drug

DEVELOPMENTS TO WATCH

Weather planes, a virtual reality
ball, overactive bladders in mice

Information Technology

WILDSTROM: TECHNOLOGY & YOU

3Com's Audrey Net appliance is
cute, but it's no world-class beauty

DOMAIN DUD

The business of registering Web
names is no license to print money

Regulation

CAN UNITED RECOVER?

Its US Airways deal has gone sour
—and set off a chain reaction that
has left the whole industry reeling

192 WILL THIS DEAL FLY?

Investor doubts and industry
objections may ground DC Air

Finance

196 ARTHUR LEVITT'S COMPROMISE

His push for greater accountability
among auditors nears conclusion—
and it looks like a qualified win

198 A TALK WITH ROBERT MUNDELL

The Nobel prize-winning economist
on the euro and the ECB

202 CHICAGO LOVES THE EURO

Pit traders are doing great with
the volatile currency

Marketing

203 BRAND-NAME CAR PARTS

Drivers are paying more attention
to who made their alternators

BusinessWeek Investor

208 MAKING THE BEST OF LOSSES

Your portfolio's clunkers can be a
boon come tax time. Here's how to
play them

TECHNOLOGY BUYING GUIDE



*From smaller notebooks to smarter cell
phones, gadgets have learned a lot of
new tricks in the past year—and we've
sorted through them for you*

A table of contents for the
special section appears on page 103

210 WATCHING CONSUMER TRENDS

How shoppers spend affects
inflation—and your portfolio

214 PICKING A HEALTH PLAN

Last year's choice may not be the
best bet as insurers tack on new
fees to cover rising costs

216 HERS: TODDI GUTNER

Wall Street trailblazer Muriel
Siebert sets up shop on the Web
with a savvy site for women

219 THE BARKER PORTFOLIO

With donor-advised funds, you can
give to your favorite cause, get a
tax break, and avoid capital gains

223 MARCIAL: INSIDE WALL STREET

Features

14 UP FRONT

20 READERS REPORT

21 CORRECTIONS & CLARIFICATIONS

30 BOOKS

De Soto: *The Mystery of Capital*

Gilder: *Telecosm*

226 FIGURES OF THE WEEK

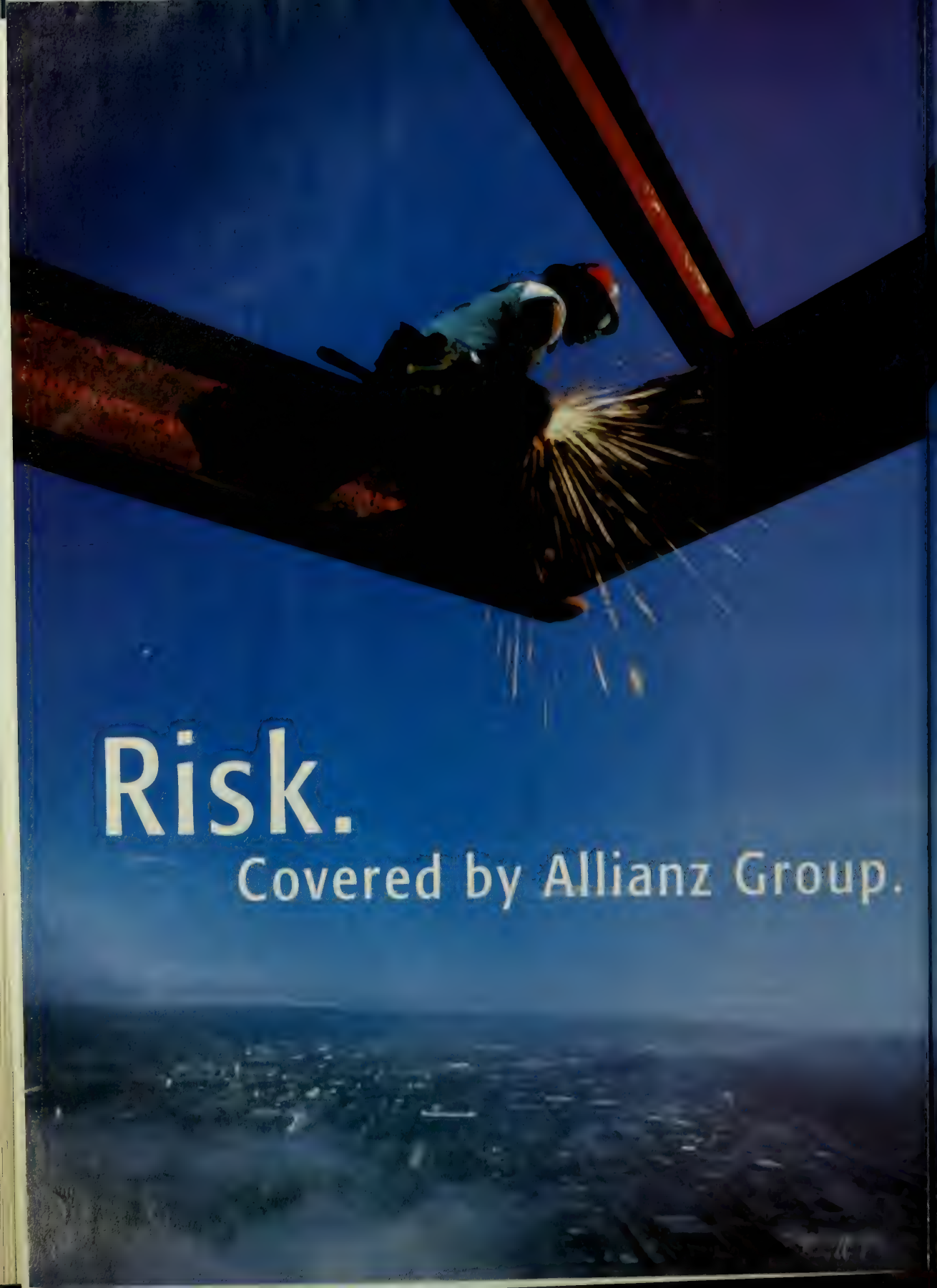
228 INDEX TO COMPANIES

230 EDITORIALS

BusinessWeek online

www.businessweek.com

America Online Keyword: BW



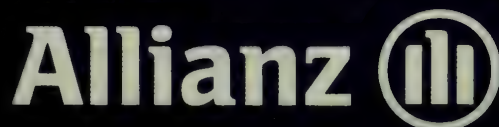
Risk.

Covered by Allianz Group.

Wherever you are, whenever you
need us, the Allianz Group is
always there for you.

To us, risk management means thinking the unthinkable
to prevent risk turning into loss. As one of the world's
leading insurers our financial strength and technical
expertise combine to make Allianz Group the partner
you can trust whenever and wherever you need us.

Allianz. The Power Beside You.



Allianz Group. Europe's leading global insurer
and provider of financial services.

Updated every business day at **www.businessweek.com**



Winner of the 2000 National Magazine Award for General Excellence in New Media

VIDEO VIEWS

Original streaming video featuring industry experts and BW editors

■ **GLORY DAYS:** Baseball Commissioner Bud Selig talks about the tough internal issues currently facing the sport



■ **BAD RAP?** Globalization has done more good than harm overall, says BW's Bruce Nussbaum



TOOLS

■ **CAPITAL-GAINS CALCULATOR:** Here's how to figure if you should hold, or sell and reinvest



■ **MBA SEARCH:** Which is the right business school for you and your needs?



■ **SALARY SURVEYS:** How much money should you be paying your staff?



■ **YOUR PORTFOLIO:** Check on the health of your investments



INTERACTIVE FORUMS

■ Join other readers in ongoing discussions on investing, info tech, business schools, bad customer service, and more—or start your own

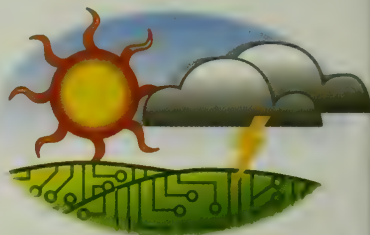
Track the daily performance of the top 50 companies of the S&P 500



Find quick links to everything on this page at the Nov. 13, 2000, issue's table of contents online, or go directly to www.businessweek.com/2000/00_46/online.htm

The Tech Wreck

How bad is it? This economic lynchpin sure has been crunched. Still, our Special Report finds wide areas of strength and continued promise, from chipmakers to telecoms



DAILY BRIEFING

Business and investing news, commentary, and analysis

www.businessweek.com/bwdaily/

Q&A: Walmart.com's Jeanne Jackson talks about what customers expect when they shop online

POWER LUNCH: Did John Malone take AT&T for a ride with his vision of Net, cable, and telecom synergy?



INVESTING

Investing insights powered by S&P Personal Wealth

www.businessweek.com/investor/

STREET WISE: That whoosh is cash rushing into foreign mutual funds
INSIDE WALL STREET ONLINE: A rebound—and more—for Merix?

SMALL BUSINESS

A resource for entrepreneurs

frontier.businessweek.com

SMART ANSWERS: Selecting a foreign partner is a lot like marriage: Don't rush to the altar—and always insist on a pre-nup



TECHNOLOGY

State-of-the-art coverage of info tech

www.businessweek.com/technology/

SECURITY NET: Microsoft's hacker invasion highlights the gaping holes that can be closed with standard security software



B-SCHOOLS

Business Week's exclusive rankings and profiles

www.businessweek.com/bschools/

Q&A: The University of Maryland's Bob Baum talks about a new program that teaches students how to launch a startup

GLOBAL BUSINESS

In-depth coverage of Asia, Europe, and Latin America

www.businessweek.com/globalbiz/

MOVEABLE FEAST: LVMH emerges as a possible bidder for Sotheby's
EYE ON JAPAN: At last, a nation of individual investors?

CAREERS

Advice and tools for upper management job seekers

www.businessweek.com/careers/

EMPLOYMENT TRENDS: That dot-com job may not be so sexy now





Want to make your business more productive? Take the office with you.

The Sprint PCS Wireless WebSM for business gives your employees a fast, secure connection to your company's network, even when they're out of the office. With their wireless Internet-ready Sprint PCS Phone[™], they can submit reports, check inventory, place orders, send and receive e-mail – all in real time, with features that work the same way anywhere they go on our nationwide network. Plus, they'll enjoy crystal-clear calls, thanks to the only all-digital, all-PCS nationwide network serving more than 300 major metropolitan areas, including major airports.

To start making your business more productive, call 1-888-214-1559 or visit sprintpcs.com.



The Sprint PCS Clear Wireless Workplace.[®] Because business can't wait.SM

Sprint PCS[®]

The Sprint PCS Wireless Web Browser is not available while roaming off the Sprint PCS Network. Subject to credit approval. Sprint PCS Wireless Web service may not be immediately available in select affiliate markets. Terms and restrictions for Sprint PCS Wireless Web services are available in the Wireless Web brochure. ©2000 Sprint Spectrum L.P. All rights reserved. Sprint, Sprint PCS, Sprint PCS Wireless Web, Sprint PCS Phone and the diamond logo are trademarks of Sprint Communications Company L.P.

Up Front

EDITED BY ROBERT McNATT

CAR TALK

CHRYSLER: NOT QUITE SO EQUAL

EMPLOYEES AT DAIMLER-Chrysler's Chrysler Group were still reeling from their first quarterly loss since the early 1990s when they found out that Daimler-Chrysler Chairman Jürgen E. Schrempp had lied to them all.

Schrempp recently told the *Financial Times* that he had never really intended for the combined auto giant to be "a merger of equals," as he said at the time. He added that he chose to be "misleading" for "psychological" reasons. If he had been honest, there would have been no

deal, and he couldn't have made Chrysler into just another Daimler operating unit.

A Schrempp confidant now says he was only trying to convey satisfaction with the corporate structure. But as a result, Chrysler workers say morale has plummeted at its suburban Detroit headquarters.

"People were devastated," says one ex-employee. Workers have been posting Schrempp's com-

SCHREMPP

ments on bulletin boards in the building and sending them out to former co-workers. Forget the financial results. Chrysler's biggest loss may well be the little goodwill left between management and the troops.

Jeff Green



TALK SHOW "There is the possibility of a foreign interest purchasing the deciding vote margin and presenting us with a true Manchurian candidate" —Deborah Phillips, who chairs the Voting Integrity Project, on the sale of votes over the Internet.

STREET NEWS

WHO IS THE FAIREST GURU OF THEM ALL?

THE DEATH SPIRAL IN INTERNET stocks since March has taken the wind out of the sails of two top analysts—Morgan Stanley Dean Witter's Mary Meeker and Merrill Lynch's Henry Blodgett. That's prompting investors to seek out new Net seers.

One prospect: Lehman Brothers' Holly Becker. She has garnered kudos for her tough "neutral" (read: sell) call on Yahoo! in June. Yahoo stock has since sunk 60%. But she was criticized for not downgrading Amazon.com until Sept. 25, months after Lehman's bond analyst soured on the e-tailer. Some investors look to small firms. At Adams, Harkness

& Hill, Steven Frankel earns high marks for two savvy 1999 picks, BroadVision and Macromedia. In addition, Faye Landes, a Net analyst only since the summer, has caught investors' attention for her acumen at Sanford Bernstein.

Analytical skills, however, aren't the only consideration. Merrill and Morgan Stanley are both big Net stock underwriters. So Meeker and



FRANKEL AND BECKER: Looking savvy



Blodgett "are in a difficult position to be anything else but bullish," says Ryan Jacob, manager of the Jacob Internet Fund. But Lehman and Adams, Harkness underwrite few Net stocks. Sanford does none. That's probably no coincidence. Geoffrey Smith

CASE AND LEVIN: Bush boost?

the prospective partners are convinced that the antitrust case for blocking their merger is weak, since it is based on complex legal doctrine untested in decades. According to one lawyer close to the talks: "If you try to

translate this into anything that looks like an antitrust case, it suddenly gets very confused." The FTC, however, is still pushing a key demand that AOL and Time Warner open their cable network to rival Internet service providers.

So a friendly face in the

White House may indeed be a help to Time Warner and AOL. But if Al Gore wins? In that case, the deal could actually close a little sooner. Three of the five FTC commissioners are Democrats anyway. But the terms could be tougher on AOL and Time Warner.

Dan Carney



CORPORATE COUPLINGS

STEVE CASE WANTS YOUR VOTE

THE PROTRACTED MERGER talks between Steve Case's America Online, Gerald Levin's Time Warner, and the Federal Trade Commission may come to a head with the Nov. 7 election.

A win by George W. Bush could subtly aid the merger partners, say sources close to both companies. How? Although Bush has taken no stance on the merger, he is expected in general to be less inclined towards aggressive antitrust action. What's more,

THE LIST BUT THE MONEY DOESN'T HURT

"We're not in it for the money" is a common mantra. But *Stay Free!*, an iconoclastic New York magazine, found several execs whose actions speak louder than their words

QUOTE

"I'm not in this for the money"

"We're not doing it for the money"

"I never cared about money...it's just a by-product"

"You're not doing it for the money"

SPOKEN BY

Benno Schmidt, Chairman The Edison Project

Shelly Archambeau, Sr. V-P for e-commerce Blockbuster

Ted Forstmann, Co-founder Forstmann, Little

Henry Samuelli, CEO Broadcom

OCASION

Said after leaving Yale, to head the for-profit Edison schools

Spoken in 1999 after the money-losing video-rental company accepted a \$30 million investment from AOL

Said in 1998 of his investment in Gulfstream, later sold for a profit of \$2.8 billion

Said in 1999 about his computer chip-company where 60% of the employees became millionaires



DATA: STAY FREE, BUSINESS WEEK

FACING CATAclySMIC DEADLINES?
NEED EXTRAORDINARY EXPERTISE?
SOUNDS LIKE A JOB FOR THE ELANCERS.*



BUSINESS STRATEGIST

GRAPHIC ARTIST

PROGRAMMER

REVOLUTIONIZE WORK

Introducing eLance, home of the dynamic new workforce known as the eLancers. More than mere freelancers, eLance represents a revolutionary new way to work online and get the job done. Not bound by time, distance or even office politics, eLancers give you the ultimate flexibility—skilled professionals at your fingertips. From programming and web development to market research and logo design, simply post your job in the eLance

marketplace and sit back as countless qualified companies and individuals bid on your job. You can review qualifications right on the eLance website. And with powerful resources such as private workspaces and payment options, it's never been easier to manage your job online. So whenever you face catastrophic workloads, simply sound the eLance distress signal. And consider it done. www.elance.com

elance
DONE

Up Front

PRODUCT PEEK

WHEN AISLE SEAT EYES ARE PRYING

FIRE UP YOUR LAPTOP ON THE red-eye from Los Angeles to New York, immerse yourself in a top-secret corporate file, and the last thing you want to worry about is the guy beside you sneaking a peek. Privacy truly is a problem at 35,000 feet.

Soon it won't be. Next spring, inViso, a Sunnyvale (Calif.) startup, expects to introduce



SCREENED: Her eyes only

eShades, 3.3-ounce plastic glasses. Hook them up to your laptop—then you, and you alone, can view the equivalent of a 19-inch computer screen. The shades also

have built-in headphones. InViso says it has perfected a way to put a liquid crystal display on the tiny silicon chips inside the glasses so that—unlike with DVD-viewing glasses—users can easily read a computer display screen. EShades are set to retail for \$500 to \$600.

And the dork factor? “We spent a lot of energy trying to make them look stylish,” says CEO Joy Weiss. But Forrester Research analyst Frank Prince, while acknowledging people's concerns about privacy, is skeptical about how eShades look: “I would suggest there are an equal number of people concerned with looking silly wearing funny glasses.” *Joan Oleck*

VIRTUAL FUTURE

NOBODY'S WATCHING YOUR EVERY MOVE

THE PERSON WATCHING THAT video security monitor may not be the street-smart, savvy security pro that you think is there. In fact, in more than a few places these days, it may not be a person at all.

Thanks to the growing field of motion-based recognition, human beings may no longer be essential to watching surveillance monitors. Computers will do it for them. One of the first big commercial tests of such electronic monitoring—the military has already explored it—begins in November in Orlando, where the city has



installed four surveillance setups in a high-crime neighborhood. They will replace a lot of “mindless watching” of monitors, says Police Captain Mike Holloway. The system can detect, say its builders, fires or any “unusual” body movements, after which it alerts a live human being to investigate. “We are not saying it can totally replace humans, but it can help,” says Mubarak Shah, a University of Central Florida prof who helped build the system.

But the new-fangled monitoring angers privacy advocates. Says Evan Hedricks, editor of *Privacy Times*: “This kind of project should be stopped in its tracks until the legislature does a privacy impact analysis.” *Dennis Blank*

DRAWN & QUARTERED



CAMPAIGN 2000

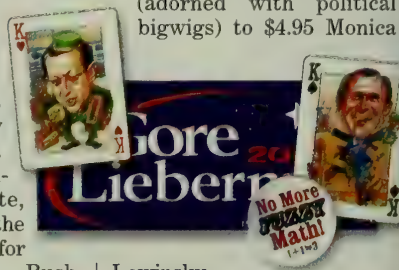
BUSH LEADS GORE IN THE DOODAD VOTE

POLLS? FOCUS GROUPS? HA! To find out who's really ahead in the Presidential race, think sales, not votes, by checking out Internet sales of political memorabilia. If online buying patterns are any sort of predictor at all, it'll be the GOP by a nose in November.

On the Political-Gifts.com Web site, which claims to be the biggest-selling site for political doodads, Bush-Cheney buttons outsell Gore-Lieberman buttons 48% to 43%. “Since the debates, we've had quite a rise in Bush-Cheney buttons, which were running neck-and-neck with Gore-Lieberman buttons

most of the year,” says Stan Anapol, who launched the Web site last year on, appropriately enough, July 4. The buttons cost \$2.95 each, and no, neither party offers you a tax credit if you buy one.

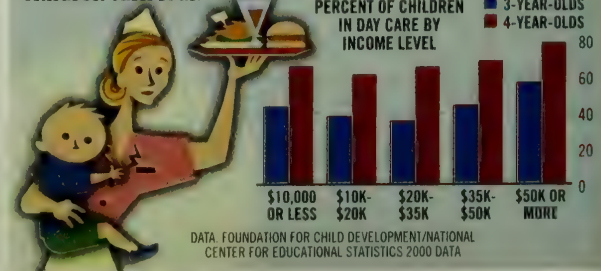
Other items range from \$14 decks of playing cards (adorned with political bigwigs) to \$4.95 Monica



Lewinsky cigars, whose wrappers sport pictures of her and President Clinton. As predictors of the vote, sales of those are likely unreliable. Unlike a good button, sometimes a cigar is just a cigar. *Amy Borrus*

THE BIG PICTURE

DAY-CARE SQUEEZE The working poor (incomes \$10,000 to \$35,000) have less access to day care than the affluent or the very poor, who often receive subsidies. With publicly supported pre-K programs, the disparity narrows when children turn four.



FOOTNOTES Retailers who know if shoppers have visited their Web sites: **5%**; retailers who know, and are computer sellers: **100%**

Market summaries? Account balances? Trades?



It's your call.

So easy to use, so much access—so what is it? An Internet-ready phone with Schwab PocketBroker™ service.



**Schwab
PocketBroker™**

What can you do with it? Even when you are on the move, you can manage your accounts, get market updates, make trades and more with the power of Schwab. And you can do it all via your Internet-ready cell phone.

And as you'd expect from Schwab, PocketBroker is also available from your choice of Palm™ IIIxe or Palm Vx handhelds. And the RIM Wireless Handheld.™

With Schwab's PocketBroker you get a whole new level of convenience and control. After all, if you're a well-connected investor, you can be a smarter one.

If you already have an Internet-ready phone, you can find us on your phone's web menu or at pb.schwab.com.*

OPEN AN ACCOUNT: GET AN INTERNET-READY PHONE.

Open a Schwab account online with a minimum of \$10,000 and get your choice of an Internet-ready phone, compliments of Schwab.

Just log on to schwabwelcome.com.

Or call 1-800-3-SCHWAB or visit a Schwab branch near you.

schwabwelcome.com

where every investor is always welcome™

Charles Schwab

creating a world of smarter investors™

*Customers are subject to service levels, privacy, security, fees and usage policies of their wireless service provider.

Offer valid for new Schwab or SchwabOne accounts opened online and funded between 10/16/00 and 2/15/01. Offer does not include retirement and Schwab Institutional accounts. If you work at Schwab, a Schwab employee or service provider, another financial institution, broker-dealer, news or financial information media company, you are also not eligible for this offer. Offer is valid until 2/15/01, unless terminated earlier by Schwab. Terms and conditions apply. Please consult Schwab for details. Web phones are manufactured and supplied by independent third parties that are not affiliated with Schwab. Selection of web phones may also be limited due to market availability or compatibility requirements of the wireless service providers. PocketBroker Service, including real-time quotes, news and trading features may be delayed, limited or unavailable due to limits of wireless coverage and during periods of peak demand, market volatility, system upgrades or maintenance. Palm is a trademark of Palm, Inc. or its subsidiaries and Research In Motion. RIM and the RIM Wireless Handheld family are trademarks of Research In Motion Limited, independent companies not affiliated with Schwab. Domestic US customers only. Limit one per customer. Offers must be redeemed no later than 6/30/01. Deposits must be new to Schwab; margin loans and deposits or transfers between Schwab accounts do not qualify. Exceptions may apply. ©2000 Charles Schwab & Co., Inc. All rights reserved. Member SIPC/NYSE (1000-8562).



A black and white photograph of a baby sitting in the open cockpit of a rocket ship, smiling. The rocket is flying through a cloudy sky. The text is overlaid on the right side of the image.

Who cares about size when you've got power.

Imagine if small companies

suddenly had strength far

beyond their dimensions.

If efficiency increased so

radically, you couldn't tell who

had ten employees or ten

thousand. What if the ability

to grow was as limitless

as your ambition. Meet

NetLedger. We leverage the

power of the Internet to turn

your accounting system into

an e-business rocket. Visit us

at NetLedger.com or

call 1-800-NETLEDGER.

Then stand back and watch

the capability of the small

get very, very large.

NetLedger™

Small business powered by

ORACLE™

EDITOR-IN-CHIEF: Stephen B. Shepard

MANAGING EDITOR: Mark Morrison

CHIEF ECONOMIST: William Wolman

ASSISTANT MANAGING EDITORS:

Joyce Benabib, Frank J. Connors, Robert I. Dowling, G. David Wallace

ART DIRECTOR: Malcolm Frouman

CHIEF OF CORRESPONDENTS: James E. Ellis

SENIOR EDITORS: Bob Arnold (New Media), Rick Green (Frontier), Neil Gross, Mary Kuntz, Jeffrey M. Laderman, Christopher Power, Kathy Rebello, Jane A. Sasse, Ciro Scotti, John Templeman, Lee Walczak (Washington), Elizabeth Weiner, Seymour Zucker

EDITORIAL PAGE EDITOR: Bruce Nussbaum

SENIOR WRITERS: Catherine Arnt, Robert Barker, Aaron Bernstein, Anthony Bianco, John A. Byrne, Peter Elstrom, Gene G. Marcial, Otis Port, Paul Raeburn, Gary Weiss

ECONOMICS: James C. Cooper (S. Economist/Bus. Outlook ed.), Kathleen Madigan, Michael J. Mandel (Economics ed.), Peter Coy, Charles J. Whalen, Gene Koretz (Trends ed.), Christopher Farrell (Contributing ed.)

INTERNATIONAL: Patricia Kranz (European, Latin American Editions ed.), Michael S. Semill (Sr. editor), Peter Engardio, (Sr. news eds.); Rose Brady (Sr. writer); Sherrill Prasad (Asia), Cristina Lindblad (Latin America), Julia Lichtblau (Int'l. finance)

ASSOCIATE EDITORS: Dan Beucke, Amy Dunkin, Mike France, Todd Gutner, Steve Hamm, Ira Sager, Eric Schine, Fred Strasser, Marcia Vickers

PICTURE EDITOR: Lawrence Lippman

MANAGING ART DIRECTOR: Jay Petrow

SENIOR ART DIRECTOR: Steven Taylor

INTERNATIONAL ART DIRECTOR: Christine Silver

DEPARTMENT EDITORS: Books: Hardy Green. Computers: David Rocks.

The Corporation: Diane Brady, Nanette Byrnes. E-Business: Timothy J.

Mullane. Finance & Banking: Emily Thornton, Debra Sparks, Heather

Simons. Frontiers: Larry Kantor, Robin D. Schatz. Industrial Management:

Adam Aston. Internet: Spencer E. Ante. Management: Louis Laville.

Markets & Investments: Mara Der Hovanesian. Media: Tom Lowry

News: John Potts. People: Susan Berfield. Personal Finance: Susan

Scherreik, Anne Tergesen. Science: Ellen Licking. Scoreboards: Frederick

F. Jespersen. Technology Strategies: Marcia Stepanek. Telecommunications:

Steve Rosenbush. Up Front: Robert McNatt. Working Life: Michelle Conlin

CONTRIBUTING EDITOR: Mark Hymen (Sports business)

STAFF EDITORS: Dennis K. Berman, Lewis Braham, Jeanette Brown,

Heather Green, Jennifer Merritt, Joan O'Leary, Kimberly West

COPY EDITORS: Prudence Crowther, Harry Maurer, Marc Miller (Deputy

chefs); Jim Taibi (Asst. chief); Tim Belknap, Aleta Davies, Jack Robbins,

Doug Royalty (Sr.); Giles Blunt, Joy Katz, Barry Maggs, Anne Newman,

David Pengilly, Malika Percal, Monica Roman, Lourdes Valeriano.

Researchers: Maria Chapin, Gail Fowler, Alicia Rosano

PRODUCTION COPY EDITORS: Lawrence Dark (Chief), Céline Keating,

Robert J. Rosenberg (Deputy chiefs), Alethea Black, Sarah B. Davis,

Halberg Hallmündsson, Robert S. Norman, David Purcell, Victoria Rubin

ART: Don Besant, Alice Cheung (Assoc.), Jamie Ellis, Judith Gutierrez,

Peter Marzush (Asst.), Graphics & New Media: Arthur Eves (Creative dir.);

Joan Deaucher (Graphics dir.); Rob Doyle (Deputy graphics dir.); Jaime

Beauchamp, Laurel Dauris Allen, Alan Baseden, Joe Calvillo, Matthew

Kopit, Alberto Mesa, David Rudes, Ray Vella (Illustrators); Eric Hoffmann.

Imaging: James Leone (Mgr.), Alan Bomzer (Asst.), Rich Micheli, Leo

Nieter, Joseph Rhames

PHOTO EDITORS: Scott Mlyn (Deputy); Ronnie Weil (Sr.); Cynthia Carris

Alonso, Bettina Gaudoin, Paula Gillen, Kathleen Moore, Anne Murray,

Andrew Popper (Assoc.), Sarah Greenberg-Morse (Asst.), M. Margarita Eiroa

(Traffic mgr.); Lucy Conticello, Mindy Katzman (Researchers); Butte Hughes

(Researcher/Librarian)

EDITORIAL OPERATIONS: Susan Fingerhut (Director); Ken Lockwood

(Mgr.). Karen Butcher, Francisco Cardozo, Thomas R. Dowd, Stephen R.

Lebrun, Jody A. McGrasso, Jose L. Martin, Peter K. Nideberg, Jane M.

Perkinson, Laura Reissman, Karen Turk, Ilse V. Walton, Barbara Wilhelm.

Mark Lang

EDITORIAL TALENT: Thomas L. Morgan (Director), Christopher

Amado, Richard Balestrino, David Bandier, Y. Steve Ben-Ari, Amanda

Chan, Lawrence Crowe, Beth Higgins, Jane Neil MacLeod, Mike

Marubio, John Navarro, Juan Rodriguez, Marta Skrelja, Mauro Vaisman,

Julian Wong

BUSINESS WEEK ONLINE: Michael Mercurio (Managing. ed.), A. Peter

Clem, John A. Dierdorf, John Johnson; Heather Barry, Stefani Eads, Sam

Jaffe, B. Kite, Jessica Loudon, Joseph Mandel, Tzy Ng, Patricia O'Connell,

Margaret Popper, Alex Salkever, Mica Schneider, Arney Stone, Kathy

Vukosavlac

CORRESPONDENTS: Atlanta: Dean Foust (Mgr.), Charles Haddad, Ayia

Pascual. Boston: William C. Symonds (Mgr.), Norm Alster, Rochelle Sharpe,

Geoffrey Smith. Chicago: Joseph Weber (Mgr.), Michael Arndt, Robert

Berner, Roger O. Crockett, Julie Forster, Pallavi Gopal, Darnell Little

Connecticut: Pamela L. Moore. Dallas: Wendy Zellner (Mgr.), Stephanie

Anderson Forest. Detroit: Kathleen Kerwin (Mgr.), Jeff Green, Joann Muller,

David Welch. Los Angeles: Ronald Grover (Mgr.), Larry Armstrong,

Christopher Palmer (Sr. correspondents), Steven V. Brull, Ariane Weintraub

Philadelphia: Amy Barrett. San Francisco: Valerie Lind-Himelstein (Mgr.),

Peter Burrows, Ben Elgin, Jay Greene (Seattle), Joan O'Connell, Hamilton,

Robert D. Hof (Sr. correspondent), Jim Kersletter, Louise Lee, Andy

Reinhardt, John Shinal. Washington: John Carey, Paula Dwyer (News

eds.); Howard Gleckman, Mike McNamee (Sr. correspondents); Rich Miller

(Sr. writer); Amy Borris, Dan Carney, Laura Cohn, Stan Crook, Richard S.

Dunham, Paul Magnusson, Nicole St. Pierre, Christopher H. Schmitt,

Stephen H. Wildstrom (Tech. & U.S.), Lorraine Woelert, Catherine Yang,

Douglas Harbrecht (Online. Sr. News ed.), Beth Belton (Online. News ed.).

Beijing: Dexter Roberts (Mgr.). Bombay: Manjeet Kripalani (Mgr.).

Brussels: William Echikson. Frankfurt: Jack Ewing (Mgr.), David Fairbank,

Christine Tierney. Hong Kong: Mark L. Clifford (Mgr.), Frederik Balfour,

Bruce Einhorn. London: Stanley Reed (Mgr.), Kerry Capell. Mexico City: Gen

Smith (Mgr.). Moscow: Paul Starobin (Mgr.). Paris: John Rossant (Mgr.).

Stephen Baker, Carol Matlack. Rome: Gail Edmondson (Mgr.). Seoul: Moon

Ihwan. Singapore: Michael Shari (Mgr.). Tokyo: Brian Bremner (Mgr.).

Washington: Jeff Condit (ed.), Ken Belson, Irene M. Kuni

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager:

Barbara Boynton. Communications: Robert Pondiscio (Director), Christine

Fountainne, Andrew Palladino, Nancy Shee. Information Services: Jamie

B. Russell (Director), Susan Rutledge (Research mgr.), John Cady

(Technology mgr.), Lara Christensen, Fred Katzenberg, Jennifer Reyes-

Orellana, David Polek, Susan Zegall. Office Manager: Roselyn Kopf.

Readers Report: Yvette Hernandez. Reprint Permission: Wendy Hernandez.

Special Asst. to Editor-in-Chief: Christine Susserson

REVIEWING THE CASE AGAINST KPMG

In the case of Roger Ham heard in New Jersey Superior Court, the only noteworthy news is that it was dismissed outright—at the close of Mr. Ham's presentation on Oct. 23—before the ink was dry on your rash article ("The Big Five's credibility gap is getting wider," Management, Oct. 30).

Here are some facts that fatally undercut Ham's unsupported claims:

•Ham is not a CPA. He lacked the professional capabilities to make the conclusions he drew, and this is the reason his report was rewritten.

•The report was revised, as it should have been, by KPMG's audit personnel in the firm's Philadelphia and Dept. of Professional Practice offices.

•Ham was not a KPMG partner. He would have needed to be a CPA to be a partner in the firm.

Indeed, the court, after hearing these facts, dismissed Ham's complaints and found that there was no evidence to support his claim that KPMG "white-washed" the 9-year-old report in question; and that there was nothing improper in the phone call between [Deloitte & Touche LLP general counsel] Howard Krongard and [KPMG general counsel] Leonard P. Novello. The bottom line is that the Superior Court concluded that Ham's case was without merit.

As for Ham's arbitration case with KPMG, we would be more than willing to waive confidentiality if Ham was also willing, so that the results could be made public immediately.

George J. Ledwith
National Director
Corporate Communications
KPMG LLP
Montvale, N.J.

Editor's note: The case involving Roger Ham was dismissed after BUSINESS WEEK went to press. Ham was identified by BUSINESS WEEK as a former partner with KPMG, based on filings made by his lawyer and defendant Deloitte & Touche. Though not a partner, he was a principal with a partnership stake in KPMG. The judge determined that there was nothing improper in Krongard's phone call to Novello. Similar rulings were made in two earlier cases. "The court's ruling should finally put an end to the efforts of a disgruntled former principal of KPMG to extract money and blame someone else for his being voted out of the firm," says Krongard. The judge did not address the broader issues raised in our story about self-regulation in the industry.

HIZZONER SAYS: 'LIFE IS GOOD IN CHICAGO'

Chicago has created four times as many jobs in the past 10 years as New York and Los Angeles combined ("Chicago Blues," Cover Story, Oct. 16). Chicago's unemployment rate is well below theirs, and so is the cost of living. Crime is down, the schools are improving, downtown is booming, neighborhoods are being renewed, and new houses and office buildings are being built all over the city. As BUSINESS WEEK wrote in "Richard Daley's kind of town" (Government, Mar. 1, 1999), "life is good in Chicago."

So it was a surprise to see you proclaim that Chicago is "slipping...fading...struggling" as a business and financial capital, in comparison with New York, Los Angeles, and other cities. How did the magazine reach that conclusion? First, by turning positives into negatives. Chicago has long prided itself on its diversified economy,

SR. VP, OPERATIONS: Gary B. Hopkins

SR. VP, ASSOCIATE PUBLISHER: Constance E. Bennett

SR. VP, MARKETING & BUSINESS DEVELOPMENT: Keith L. Fox

SR. VP, BUSINESS WEEK ONLINE: Gregory J. Zorithian

VP, CONSUMER MARKETING/CIRCULATION: Thomas Masterson

VP, U.S. ADVERTISING SALES DIRECTOR: Joanne K. Bradford

VP, STRATEGIC PLANNING & PRODUCT DEVELOPMENT:

Kimberly Greer

PRESIDENT & PUBLISHER: William P. Kupper Jr.

VPS, SALES: Karen Christiansen (Southeast reg.), Robert H. Kelly (Northeast

reg.), Gary London (Midwest region), Michael Dace (Western region)

VP, MANAGING DIRECTOR: Alan Lammiman (Asia), Paul Maravaglia (Europe)

VP, TECHNOLOGY/NEW MEDIA: Christopher C. Rousseau

VP, CONTROLLER: Kevin P. Pascale

VP, ADVERTISING BUSINESS & PRODUCTION: Linda F. Carvalho

VP, ACCOUNT DEVELOPMENT & RESEARCH: Charlene Trentham

VP, STRATEGIC PROGRAMS: Jim Richardson

Business Week

A Division of The McGraw-Hill Companies

NOVEMBER 13, 2000 (ISSN 0007-7135)*** 3707

Published weekly, except for one week in January and one in August, by The

McGraw-Hill Companies, Inc. Founder: James H. McGraw (1860-1948).

Executive, Editorial, Circulation, and Advertising Offices: The McGraw-Hill

Companies Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Tele-

phone: 212-512-2000. Telex: Dowdnt 270633. Int'l 270633. U.S. subscrip-

tion rate: \$54.00 per year; \$24.00/6 issues; \$9.00/3 issues; \$3.00/1 issue; back

issues: \$5. Write for rates in other countries. Subscriber Services: 1-800-451-1200.

TDD: 1-800-654-1579.

Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 490, Hight-

stown, NJ 08520. Periodicals postage paid at New York, N.Y., and at additional

mailing offices. Postage paid at Montreal, P.Q. Canada Post.

International Publications Mail Product Sales Agreement No. 246584

Registered for GST as The McGraw-Hill Companies, Inc. GST #R123070673. Copyright 2000 by The McGraw-Hill Companies, Inc. All rights reserved. This

registered in U.S. Patent Office. European Union Patent, McGraw-Hill

House, Maidenhead, Berks, England. Telephone: 01628-25431; Telex: 848640

Officers of The McGraw-Hill Companies, Inc.: Harold W. McGraw III, Chair-

man, President, and Chief Executive Officer; Kenneth M. Vittor, Executive Vice

President and General Counsel; Robert J. Bakshi, Executive Vice President and

Chief Financial Officer; Frank D. Pugliese, Senior Vice President, Treasury

Operations.

PHOTOCOPY PERMISSION: Where necessary, permission is granted by

the copyright owner for those registered with the Copyright Clearance Center

(CCC), 222 Rosewood Drive, Danvers, MA 01923, to photocopy any article

herein for the flat fee of \$1.00 per copy of each article. Send payment to the CCC.

Copying for other than personal or internal reference use without express per-

mission of The McGraw-Hill Companies, Inc. is prohibited. Address requests for

customized bulk reprints to Business Week Reprints, 1221 Avenue of the

America, New York, NY 10020 or call 212-512-2000. ISSN 0007-7135/00\$10.00

PRINTED IN THE U.S.A.

CORRECTIONS & CLARIFICATIONS

"Financial services: No ordinary downturn" (News: Analysis & Commentary, Oct. 30) misidentified a company. It should have read "the much-anticipated IPO of Verizon Wireless, 55% owned by Verizon Communications and 45% owned by Vodafone, was recently postponed."

The entry for Merrill Lynch Chairman and CEO David H. Komansky in a table accompanying "Do CEOs vote? Not always—and not often" (Government, Nov. 6) was incorrect in saying that he has not voted in at least five years. Komansky voted in 1996.

A photo in "What is business casual?" (Lifestyle, Oct. 30) misidentified the man holding a tape measure against the arm of ex-boxer Gerry Cooney. He is David Butler, manager of the Rochester Big & Tall store in midtown Manhattan.

which protects us from downturns in a single industrial sector. The fact is, Chicago has several economic engines: the transportation industry, convention and tourism, financial services, manufacturing, and now, an emerging high-tech industry.

Similarly, Chicago boasts a moderate cost of living for a big city. But BUSINESS WEEK says it's a sign of weakness that the average house in the Chicago area costs \$182,100, vs. \$345,000 in the Boston area. Try explaining that to someone who has been offered a job, at the same salary, in both cities.

Next, the magazine chose to compare economic growth in various cities only from 1997 to 2000. This rewards cities that grew in fits and starts and penalizes Chicago, which has had steady, long-term growth. Since 1990, financial, insurance, and real estate employment has risen in Chicago but dropped in New York and Los Angeles.

This is not meant to denigrate New York, Los Angeles, or any other city. Nor am I being complacent. We know we have to work hard to attract new industry, especially in the technology sector, and we've had notable successes. Global Steel Exchange, the largest such exchange in the world, recently relocated here from New York. Orbitz, the online airline consortium, chose Chicago over California. Centerpost, a leading wireless tech company, chose Chicago because of its quality of life and huge technology talent pool.

Nothing is more important to a city's economic future than the quality of its schools, and Chicago's education reform efforts are looked to as a model for the country. Chicago has a fun-

damental commitment to turn the public education system around after years of failing. We have much more to do, but we have an entire city behind our efforts to graduate students who are prepared with the reading, math, and other skills needed to join the workforce.

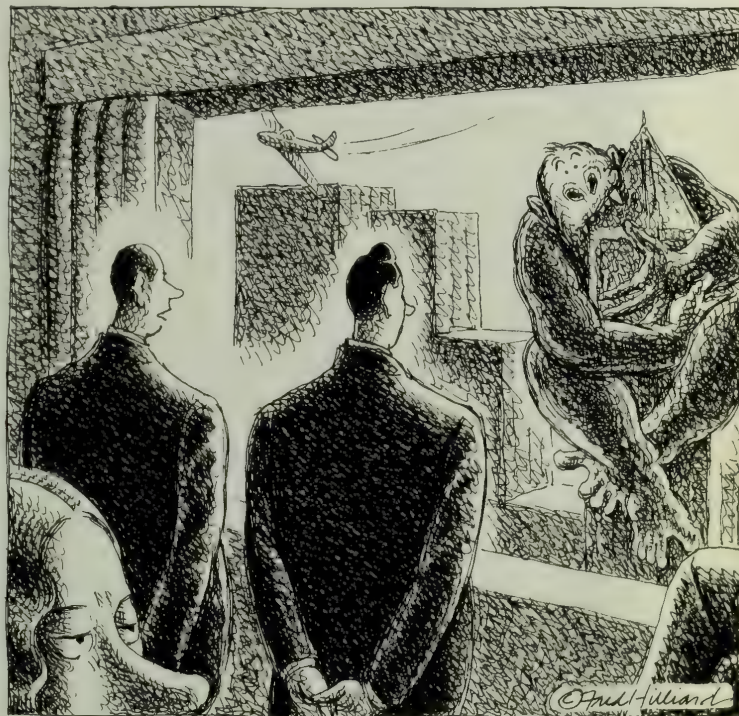
Life is good in Chicago, and it's only going to get better.

Richard M. Daley
Mayor
Chicago

YOU CAN'T WAIT FOR THE FINAL NUMBERS TO PROTECT DRIVERS

In "The tire flap: Behind the feeding frenzy" (Government, Oct. 16), Stan Crock blames everyone but Ford Motor Co. and Firestone—the true culprits—for the deaths of 119 people and injuries to 500 in crashes caused by tire separations. He mistakenly quotes me as saying the case against the companies remains unproven. I have said repeatedly that the Firestone tire and the

©2000 The Williams Companies, Inc.



"I'd like to stay and watch, but I can't afford to miss the 'uE' on EnergyNewsLive.com."

www.EnergyNewsLive.com. Where you'll find the "uE," Williams' new index of energy pricing trends that monitors commodities like the Dow tracks stock. That's true news. But not for everyone. Just everyone in energy.

William's
ENERGY

www.EnergyNewsLive.com

1-800-WILLIAMS • NYSE: WMB & WCG



You can do ANYTHING

It's an unusual sight all right: eBusiness projects not only being approved, but embraced. But that's how life is when you've got a Black Rocket.™ The world's first Network Services Platform for eBusiness.

What is Black Rocket?

Black Rocket is a fully managed, secure and com-

**GENUITY is the leading
Network Services Provider for
businesses changing the world.™**

prehensive platform for building eBusiness solutions like high-speed eCommerce Web sites.

Black Rocket consists of integrated Internet access,

mailing, security, transport and platform software, operating systems, database and Web development tools — all for a single monthly fee with a service level agreement.



with a BLACK ROCKET.

int of accountability.

We deliver Black Rocket in 10 business days or less so you can launch your eBusiness project faster than ever. And, Genuity™ backs Black Rocket with the industry's first platform Service Level Agreement.

eBusiness leaders like IBM, Cisco and Cap Gemini Ernst & Young are already joining together with Genuity to offer eCommerce, eMarkets and other eBusiness

solutions built on Black Rocket.

See for yourself. You can do anything with a Black Rocket. For more information, check out our white paper at www.genuity.com/blackrocket or call 1-800-GENUITY.

GENUITY

Ford Explorer make a lethal combination. While the full story remains elusive (the companies and the government have refused to release all of the data), there is ample evidence of design defects in the recalled tires and the rollover-prone Explorer.

Crock selects statistics to back his thesis that the controversy was overblown. But defect determinations cannot be based solely on numbers that compare failure rates with other models of tires or vehicles. The government never has complete numbers on what causes highway deaths and ethically cannot wait for a body count to order a recall, although in this case there has been a grim toll. Rather, as the courts have said, if there is a failure of a critical element in the vehicle that can kill or injure, and it can happen again, the agency should make a defect finding.

Finally, Crock sneers at auto safety advocates, saying we took advantage of the fiasco to push "pet projects." The reforms we sought—including an update of the 30-year-old tire standard, a standard to prevent rollovers of SUVs and light trucks (which kill an astonishing 10,000 people per year), and criminal sanctions for corporate executives who cover up deadly defects—may be "pet projects" to Crock, but to me they sustain the sanctity of life.

Joan Claybrook
President
Public Citizen
Washington

'PRICELINE.COM IS MAKING THE RIGHT DECISIONS'

"Finding the right formula" (News: Analysis & Commentary, Oct. 23) cites "fewer spare seats" in a "crowded" airline market as a potential problem. The fact is that airlines fly more than 500,000 empty seats every day. This also refutes the suggestion that a competitive Internet service being launched by the airlines will adversely affect priceline.com's supply of airline seats. Given the substantial supply, our airline supplier partners are wise to pursue a multichannel distribution strategy, which is probably why airline tickets are the largest e-commerce category on the Web today.

We believe priceline.com is making the right decisions to position ourselves as one of the long-term winners in e-commerce. Further, we believe that travel is the right core category on which to build out a larger business. We've built the second-most-recognized e-commerce brand, with a customer

base of some 7 million. We're fixing those areas where we haven't executed as well as we would have liked. We have confidence in our business model, and we're expanding into nontravel categories such as insurance and business-to-business.

Richard S. Braddock
Chairman
priceline.com
Norwalk, Conn.

FIXING CORPORATE AMERICA'S SERVICE PROBLEM

One critical issue is the dramatic impact that negative word of mouth can inflict on a company's image and reputation ("Why service stinks," Cover Story, Oct. 23). When service is degraded or denied to 80% of the customers, how



LONG MEMORY

"Today's small customers may be tomorrow's high rollers. When they are big, they won't forget the disdain of businesses that didn't care about them"

many potential high-profit consumers (the 20%) avoid your brand based on horror stories relayed by friends, colleagues, and family?

When traveling on business, I share any positive or negative experiences I have with my corporate travel department and colleagues. Even though a company may not value my direct business, my opinion may influence the spending patterns of people and organizations whose business they do value.

Reputation and goodwill are among the most valuable assets a corporate entity has. Tinkering with customer service may offer short-term savings with serious long-term consequences. The road back from a poor reputation, deserved or not, is a long one.

David A. Engerman
Dallas

Bad service is not a new phenomenon, nor is it caused primarily by technology. Affluent customers always received excellent service regardless of industry. Take banking. If you are a business owner or a key executive in a company and you invest a large amount of money in a bank, it is likely that you get to deal with the manager directly. Ordinary people with a small amount

of money to invest usually do not receive this special privilege. Similarly, you will get seated only in the back row of a concert hall or a baseball stadium if you buy a low-price ticket. Customers are prioritized according to what they are worth to the business.

Technology may have helped these businesses to identify the low-key customers quickly, but is not the primary reason why they get poor service. In the New Economy, business is paced at Internet speed, and companies are under constant pressure from investors to make profits. If they don't comply, the outcome is to be slapped with diminished market value and loss of investment dollars. So it is not surprising these companies put profitability ahead of customer service as a priority. Consequently, companies are finding ways to increase prof-

it margins by going after accounts that generate a higher return on investments. This translates to bad service for customers who are not "high rollers."

Mathew Abraham
Elkins Park, Pa.

Most of the hours (yes, hours) of my time I have wasted waiting for a human customer service represen-

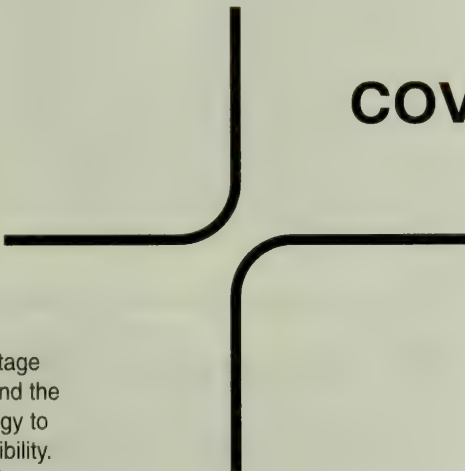
tative to answer the phone are the result of products or services offered by a company that have not performed as advertised. Whether these calls involve faulty DSL connections, incorrect charges on my long-distance phone bill, or software that fails to work properly, in each case the "service" I am so expensively requesting is merely that the company provide what was promised in return for money I have already paid.

If customers like me are "unprofitable," these companies should either stop selling defective products to low- or middle-end customers, or else advertise these products and services with the full disclosure that they frequently won't work and restoring them to functionality will involve long waits for a customer service representative who may or may not know how to fix the problem. If these companies do not offer either a better product or better "customer service," perhaps only a lawsuit based on warranty of merchantability or false advertising will force them to provide customers with what they promised.

Robert J. Peterson
Arlington, Va.

The flaw in the logic of the new customer-service paradigm is that today's

The wisdom of experience.
The energy of youth.
Limitless potential.



covisint

Covisint, combining the heritage of the automotive industry and the promise of Internet technology to open a new window of possibility. Covisint is a global automotive business-to-business exchange developed by DaimlerChrysler, Ford Motor Company, General Motors, Nissan and Renault.

Here, connection increases organization.
Collaboration transcends geography.
Speed breeds efficiency.
Knowledge is exchanged securely.
This time, everyone gets to grow.

covisint.com



small customers may be tomorrow's high rollers. When they become big, they won't forget the disdain of those businesses that didn't care about them on their way up. Wal-Mart Stores Inc. is just one example of a company whose fortunes were made by offering good service and extra values to the "little" guy. My personal business experience has taught me that I'm much better off with a large number of small customers, whose needs are easy to meet, than tying my business to a small number of big customers whose big demands keep chipping away at profit and employee morale.

Carol G. Aubitz
Lancaster, Pa.

Your report on poor service and the de facto "redlining" of less profitable customers reminds me of the story of the bum who, dressed shabbily, went car shopping at all the dealers in town. Most treated him like a bum, and not surprisingly, the "bum"—really a wealthy business owner—bought a luxury car from a salesman who had treated him with consideration. His reasoning was that anyone who would treat a person poorly just because of his supposedly low station in life would not know

how to treat other customers, either.
Al Phillips
Salt Lake City

Now I understand what's behind the poor customer service witnessed in the U.S. over the past 10 years. All along, I thought it was lack of proper training for employees or low-end skill sets that turned routine business transactions into nightmare experiences. Unfortunately, like so much in this consumer-driven society, it's evident that the core value of customer courtesy has given way to high-profitability segmentation models.

I'm not sure this new value system does much to promote a healthy work ethic. What are we telling employees? Work hard, but only for those who can pay the big bucks? I can't remember a customer service call I have made recently that did not involve a never-ending menu of nonhuman interaction choices in voice-mail hell—or worse, a Web-based hell of frequently asked questions.

Companies should beware: Enough word-of-mouth about negative service experiences can still sink a business or a product line.

Yvette Tazeau
San Jose, Calif.

BusinessWeek online

The full text of Business Week, the Business Week Daily Briefing, and five years of BW archives are available on the World Wide Web at:

www.businessweek.com

and on America Online at Keyword: BW.

HOW TO REACH BUSINESS WEEK

LETTERS FOR READERS REPORT

All letters must include an address and daytime and evening phone numbers. We reserve the right to edit letters for clarity and space and to use them in all electronic and print editions.

Mail: Business Week, 1221 Avenue of the Americas, 43rd floor, New York, NY 10020

Fax: (212) 512-6458

Internet: bwreader@businessweek.com

America Online: readersbw

SUBSCRIBER SERVICES

For individual subscriptions, corporate subscriptions, renewals, changes or problems, and single copies.

Phone: (800) 635-1200 or (609) 426-7500

Fax: (609) 426-7623

Internet: bwcustsv@businessweek.com

Library fee-based services: (212) 512-6704

REPRINTS AND COPYRIGHT PERMISSIONS

For custom reprints (minimum order of 1,000) contact:

(212) 512-3148

Fax: (212) 512-2337

Internet: www.businessweek.com/reprints/

For permission contact:

Phone: (212) 512-4801

Fax: (212) 512-4938

Curing MS is serious business but so is saying "Thank you."

This year, thousands of dedicated employees from some of the nation's largest corporations walked and biked their way across cities and towns throughout the country on a mission to end the devastating effects of multiple sclerosis. On behalf of the National Multiple Sclerosis Society and the hundreds of thousands of families affected by this dreaded disease, we salute this year's TeamMS 2000 nationwide teams and say "Thank you."

Mike Dugan
General, USAF, (Ret.)
President & CEO

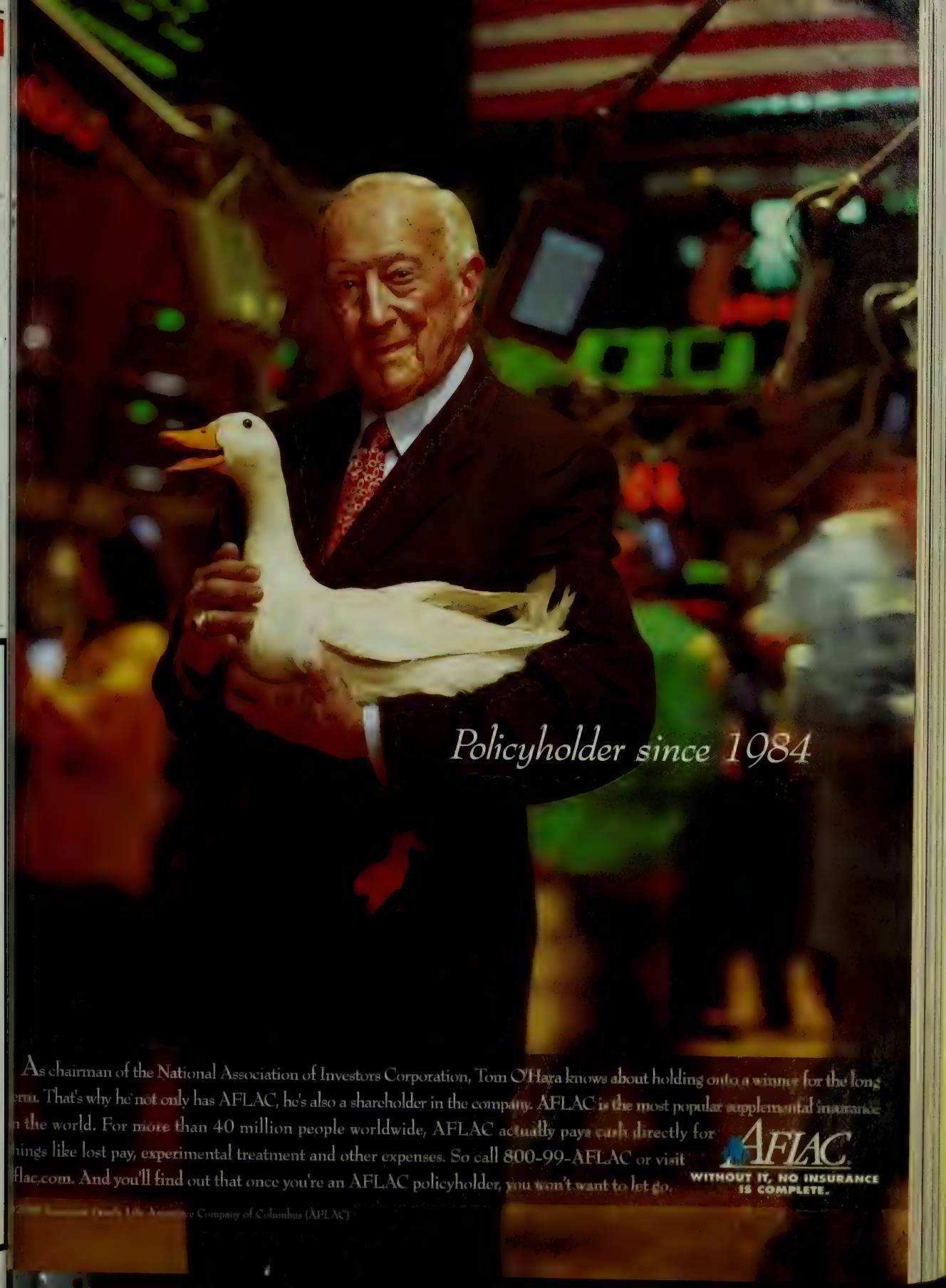
TeamMS 2000 Nationwide Teams for The MS Walk® and MS Bike TourSM

- | | |
|-------------------|-------------------------------|
| • Arthur Andersen | • Brinks Home Security |
| • Ernst & Young | • ICG Communications |
| • Milgard Windows | • Miller Brewing Company |
| • Pinn Fund | • Travelers Property Casualty |



NATIONAL
MULTIPLE SCLEROSIS
SOCIETY

If you would like to bring your company's employees together for a great cause and be part of TeamMS 2001, call the TeamMS Hotline at (303) 813-6624 or send an e-mail to teamms@nmss.org

A color photograph of Tom O'Hara, an older man with white hair, wearing a dark suit, white shirt, and a red patterned tie. He is smiling and holding a white duck with an orange beak. The background is a blurred film set with various lights and equipment.

Policyholder since 1984

As chairman of the National Association of Investors Corporation, Tom O'Hara knows about holding onto a winner for the long term. That's why he's not only has AFLAC, he's also a shareholder in the company. AFLAC is the most popular supplemental insurance in the world. For more than 40 million people worldwide, AFLAC actually pays cash directly for things like lost pay, experimental treatment and other expenses. So call 800-99-AFLAC or visit aflac.com. And you'll find out that once you're an AFLAC policyholder, you won't want to let go.

AFLAC

WITHOUT IT, NO INSURANCE
IS COMPLETE.

©2000 American Family Life Assurance Company of Columbus (AFLAC)





LOOK
THOROUGHLY
INTERESTED
AND CHECK
E-MAIL AT THE
SAME TIME.



The ingenious new Compaq iPAQ™

*BlackBerry™ is always connected to
your company network. So you can
receive or send e-mail anytime, from
just about anywhere. And since it fits
in your hand, it's as easy to check as
your watch. Welcome to the new IT.
Inspiration Technology from Compaq.
To find the nearest reseller call
1-800-AT-COMPAQ. To learn more
visit us at compaq.com/blackberry.*

COMPAQ
Inspiration Technology

THE MYSTERY OF CAPITAL

Why Capitalism Triumphs in the West and Fails Everywhere Else

By Hernando de Soto

Basic Books • 276pp • \$27.50

WHY THE WORLD'S POOR STAY THAT WAY

Centuries ago, poverty was inevitable. Castles and jewels aside, even kings and queens were poor in a way, scraping along without indoor plumbing, phones, or refrigerators, let alone low-fat cheese snacks and Internet hookups. Today, though, parts of the world are fantastically rich. So why is so much of the rest stuck in poverty?

The persistence of poverty amid plenty is the most troublesome conundrum in all of economics, and it's the topic of a provocative and elegantly written book by Peruvian scholar Hernando de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. Although de Soto oversimplifies the solution to poverty, he performs a valuable service by highlighting a problem that's often underestimated: the failure of the legal system to acknowledge and respect the property of the poor.

De Soto says that people in poor countries are just as smart and entrepreneurial as people in rich countries. The key difference, he asserts, is that most of them live as squatters. Because they don't have legal title to their land, homes, or businesses, they can't use them as collateral for loans. They often can't get services such as water and electricity. And if they do accumulate any wealth, they're vulnerable to shake-downs by the authorities.

The Mystery of Capital says that legal systems in the developing world have failed to cope with "a gigantic movement away from life organized on a small scale toward one organized in a larger context"—from farms to cities. That failure has produced shantytowns on the outskirts of every major city in the developing world. Writes de Soto: "What national leaders are missing is that people are spontaneously organizing themselves into separate, extralegal groups until government can provide

them with one legal property system."

As de Soto sees it, capitalism will be justifiably hated in developing countries as long as the poor can't accumulate any capital. He and colleagues have calculated that poor people around the world unofficially own approximately \$9 trillion in assets, mainly their homes. This is more than all the foreign aid ever supplied to developing nations. But because the properties aren't recorded anywhere, they can't be borrowed against. De Soto argues that reforming the legal system would free that "dead capital" to become an engine for growth, as capital is in rich countries.

De Soto advocates turning squatters into minicapitalists by giving people legal title to what they already consider theirs. In a fascinating chapter, he explains how the U.S. did exactly that in the 19th century, when Congress and the Supreme Court grudgingly granted property rights to squatting settlers and gold prospectors.

De Soto first gained attention in 1989 with *The Other Path*, a book focusing on barriers to entrepreneurship. As an adviser to Peruvian President Alberto Fujimori, he led a project to secure property rights and cut red tape. (He and fellow researchers found it took 728 steps for a squatter to obtain, from the city of Lima, legal title to a home.) His Lima-based Institute for Liberty & Democracy has also studied Egypt, Indonesia, and Haiti. These days, de Soto is advising Mexico's President-elect, Vicente Fox.

The villains of de Soto's story aren't the rich. He says they benefit from reform because it stimulates the econo-

my and reduces crime. His villains are lawyers: Most attorneys in poor countries, he says, have been trained to defend the system exactly as they found it. "No group—aside from terrorists—is better positioned to sabotage capitalist expansion," writes de Soto. "And unlike terrorists, the lawyers know how to do it legally."

Unfortunately, de Soto overreaches by dismissing other theories about the persistence of poverty. His message that capitalism would work if only the lawyers played along makes him popular with the likes of economist Milton Friedman and former British Prime Minister Margaret Thatcher, who supplied book-jacket blurbs. But de Soto's is not the whole story. Economists such as Jeffrey Sachs and Robert Barro have written persuasively about how flawed macroeconomic policies can stall development. Meanwhile, Michael Porter's

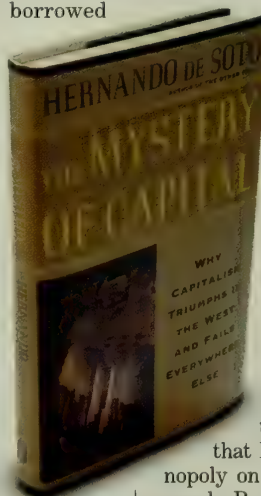
The Competitive Advantage of Nations and Michael Fairbanks' and Stace Lindsay's *Plowing the Sea* underscore the role of corporate strategy, explaining that companies in developing countries need to get away from relying on cheap labor and natural resources and focus more on understanding their customers.

While de Soto mostly ignores those theories, he's downright hostile to another explanation for poverty—culture. He argues, for instance, that Protestants don't have a monopoly on the work ethic. That's true enough. But de Soto's own analysis has a cultural component: He says that property reformers should discover the makeshift, often unwritten laws that already exist rather than imposing rules on populations. And what are such improvised laws but manifestations of a culture?

De Soto discovered while traversing rice fields in Bali that, while he didn't know their boundaries, the dogs did. "Every time I crossed from one farm to another, a different dog barked." *The Mystery of Capital* is about recognizing the wisdom of those dogs.

BY PETER COY

Coy is associate economics editor



IN THE DEVELOPING WORLD, THEIR PROPERTY IS NOT PROTECTED BY THE LEGAL SYSTEM

**CREDIT
SUISSE**

**FIRST
BOSTON**

T'S A NEW DAY.



**CREDIT SUISSE FIRST BOSTON AND
ARE ONE COMPANY.**



**CREDIT
SUISSE**

FIRST
BOSTON

DONALDSON, LUFKIN & JENRETTE



www.csfb.com

It's a new day in investment banking. With a new global superpower: Credit Suisse First Boston. We're now #1 in M&A deals, #1 in IPO volume and #1 in high-yield debt underwriting. We also have the strongest team of research analysts and unparalleled global reach in sales and trading. Which means that now, more than ever, we're in a position to flawlessly execute transactions anywhere in the world. And of course, that's just the beginning.

CREDIT SUISSE FIRST BOSTON.

EMPOWERING CHANGE.SM

M&A, IPO and high-yield rankings are based on Securities Data Corporation pro forma information from January 1 to September 30, 2000. ©2000 Credit Suisse First Boston Corp. All rights reserved.

TELECOSM

How Infinite Bandwidth Will Revolutionize Our World

By George Gilder

Free Press • 351pp • \$26

PUSHING THE WEB TO THE SPEED OF LIGHT

The Internet has morphed, in its short life, from a U.S. military research project to a communications channel to an incubator of multibillion-dollar businesses. It is now poised for another transformation, says George Gilder in his new book, *Telecosm: How Infinite Bandwidth Will Revolutionize Our World*. At the heart of that change are two types of limits: the speed of light and the span of a human life. "A physical limit and a biological limit," the author explains. "These are the governing scarcities of the Information Age."

Information coursing across the Internet is bumping up against the first of these limits. But most of the data spend only a small part of their time on fiber-optic networks, the glass superhighways of what Gilder calls the Telecosm. In the name of speed, the author says, the very core of the Internet must be recrafted as pure fiber optics. And that may help mitigate the second limit. All the wealth in the world can't supply what many people crave most: additional time to enjoy life. On this point, Gilder believes that the infinite bandwidth of "fibersphere" will banish network delays, give consumers only what they want, and spare them unwanted messages in media and advertising.

Gilder lays all this out in a fast-paced argument punctuated with deft technical explanations. His arguments aren't new: The author has been airing the key ideas for years in magazine and newspaper articles. And as in his earlier writings, the vision is clouded in places by a conservative ideology that feels tacked on to the technical analysis. Nevertheless, he has pulled together some

of his most original thinking in this book, which deserves a broad audience.

For much of the past decade, Gilder writes, PC-based computing power has been cheap and abundant, while bandwidth—meaning communications speed—was scarce. In the coming age of Gilder's Telecosm, this arrangement will be reversed. Ubiquitous glass fiber will provide bandwidth to burn. At the same time, the circuitry of handheld computers and cell phones will shrink down to single chips, which will be forced to economize

on limited battery power and silicon real estate.

"This reversal is forcing a massive and drastic reorientation of the entire structure of the information economy," the author contends. "Every electronic system and infrastructure must be reformed to take advantage of the new canonical abundance."

In the opening chapters, Gilder takes the reader quickly through the physics of light, the structure of semiconductors, the history of fiber, and the origins and architecture of telephone and computer networks. Along the way, he hammers home a smart, contrarian point: Internet traffic yearns to travel in the form of photons, at the speed of light. But today's "intelligent" telecom networks, run by the likes of AT&T, slow information down by managing the traffic electronically in silicon chips. "The remedy," he says, "is not more processing, but less...not intelligent switches but dumb pipes of boundless bandwidth." Don't worry about getting the data to a destination, Gilder urges. In this formulation, the ocean of bits will be sorted out by smart devices at the periphery of the network,



not by central switches at the core.

Gilder isn't the only one advocating such a shift. Among the many narratives in *Telecosm* is the story of AT&T rebels David Isenberg and Joe Nacchio. The former left his research post at Bell Labs to become a proselytizer for dumb networks. The latter, says Gilder, left AT&T consumer long-distance to build such a network at Qwest Communications International Inc.

At his epigrammatic best, the author compresses complicated ideas into sharp prose that is rich in metaphor. No one delivers a more colorful explanation of the electromagnetic spectrum than Gilder—in just four short pages of the first chapter. Intentionally or not, he's also amusing when he gets sidetracked, in the closing chapters, in a medley of rants against the U.S. government, the television industry, the education system, and assorted businesses that waste consumers' time. But in these same sections, he flounders when it comes time to lift the veil on the future. He wheels out a predictable telecommuting family of the future. It's *Father Knows Best* meets William Gibson's *Neuromancer*.

Following Gilder's meandering thought process isn't always easy. He piles on too much technical detail in some chapters. In others, he tells stories—the founding of Netscape Communications, for example, or the origins of Qualcomm Inc.—that seem old-hat and off the point. Indeed, for readers of the author's monthly newsletter, the *Gilder Technology Report*, or his frequent contributions to *Forbes* ASAP, much of this book may feel recycled.

On the flip side, plenty of Gilder fans have made money from the author's predictions—investing in optics companies such as JDS Uniphase Corp., for which Gilder was an early evangelist. If his vision of a paradigm shift is on target, much bigger fortunes will be made.

As for politics, Gilder has toned down his usual rhetoric in *Telecosm*. And when it comes to rants, he's often right: Institutions do waste our time, as does television, buggy personal computers, and much of consumer culture. One can share Gilder's yearning for some kind of liberation—and hope he finds it in the fibersphere.

BY NEIL GROSS

Gross writes about science and technology.

THE VERY CORE OF THE INTERNET MUST BE RECRRAFTED AS PURE FIBER OPTICS, SAYS GILDER

WELLS
FARGO

The Next Stage



We're taking
online investing
to the
next stage.

enter

wellsfargo.com

Introducing Wells Fargo Online Brokerage. Offering you everything you expect from a top online brokerage. Like real-time quotes. Alerts. Stock screening you can customize any way you like. And 24-hour customer service seven days a week. Plus you get the convenience of online banking and online investing all in one place. For investment advice, speak with a Financial Consultant at your local Wells Fargo branch. **WELLS FARGO ONLINE BROKERAGE**

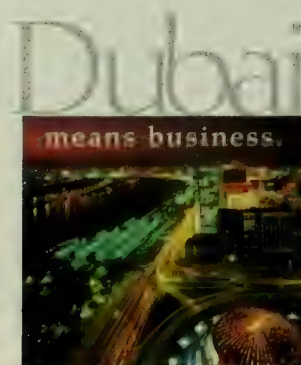
Visit wellsfargo.com or call 1-800-TRADERS.

INVESTMENT PRODUCTS: • NOT FDIC INSURED • NO BANK GUARANTEE • MAY LOSE VALUE

Online brokerage accounts offered through Wells Fargo Securities, Inc. (member NASD/SIPC), a non-bank affiliate of Wells Fargo & Company. Wells Fargo Securities online brokerage accounts are carried and cleared through Fiserv Securities, Inc. (FSI), member NYSE/NASD/SIPC. FSI is not affiliated with Wells Fargo Securities, Inc., or any affiliate of Wells Fargo & Company. Financial Consultants are registered representatives of Wells Fargo Securities, Inc. System response times and account access may vary due to a variety of factors, including market, system and other conditions.



It's where golden
opportunities are hatched.



The global city. A gateway to a \$1.3 billion market. Planned for efficiency. Geared for excellence.

Designed to respond to the global needs of world-class corporations. Dubai. Where you get it right the first time.



GOVERNMENT OF DUBAI

DEPARTMENT OF TOURISM AND COMMERCE MARKETING

8, Penn Center, Philadelphia PA 19103, U.S.A. Tel.: 001 215 751 9750. Fax: 001 215 751 9551.

e-mail: dtcm_usa@dubaitourism.co.ae

901, Wilshire Boulevard, Santa Monica, CA 90401, U.S.A. Tel.: 001 310 752 4488. Fax: 001 310 752 4444.

Website: <http://dubaitourism.co.ae> e-mail: dubaiusa@aol.com

BY STEPHEN H. WILDSTROM

ech&you@businessweek.com

AUDREY: CUTE, BUT NO RAVING BEAUTY



3Com's Ergo Audrey, a Net appliance for those who already own a PC, is a work in progress

The Ergo Audrey's name makes me think of the blood-sucking plant in *Little Shop of Horrors*. And its 1950s retro-futuristic design makes it look like something left behind by the Jetsons. But once you get past these odd popular-culture associations, Audrey turns out to be an interesting entry in the burgeoning market for consumer Internet appliances.

Audrey is the first in a new line of products from 3Com Corp., a networking company moving into consumer markets. Previous Netpliances, such as the Compaq iPAQ Home Internet Appliance or the Netpliance iOpener, are meant for people without home computers. And they have wireless-phone business models, where Internet service providers (ISPs) subsidize the cost of the hardware. For example, the Compaq device, which works only on Microsoft Network, lists for \$499, but a \$400 rebate comes with a three-year, \$21.95 per month MSN subscription.

By contrast, Audrey can be used with any ISP (although it doesn't currently work with America Online). Its intended market is people who already have a PC and want an additional terminal in the kitchen or bedroom. But with no ISP subsidies, Audrey costs \$499 (\$50 more in one of four colors).

Audrey is certainly eye-catching, from its flower-pot shape to the transparent stylus that sticks out of the top and flashes green when you have new mail. 3Com owned Palm until it was spun off last year, and there is a lot of Palm in Audrey. First is the ability to synchronize calendar and address book with a Palm, Handspring Visor, or other Palm OS device, using either a USB or standard serial port. Second, Audrey uses a touch screen and a stylus instead of a mouse or other pointing device to navigate around the screen. I found the use of the stylus on the near-vertical

screen a bit clumsy at first, but considering the poor quality of the pointing devices on other appliances, it's not a bad solution.

The 3Com appliance gives you two ways to browse the Web. First is up to 13 channels that you select by turning the large "tuner" dial just below the screen. The channels, which include such Web standards as ESPN.com, AccuWeather, and CBS MarketWatch, are updated on a regular schedule and give you instant access to content that has been specially formatted for Audrey's 7.6-inch-diagonal screen.

You can also browse to any Web site by typing in an address. Unfortunately, cost constraints led 3Com to use a 640-by-480-pixel display, meaning that you have to scroll horizontally to see all of a standard 800-pixel-wide Web page. Audrey was supposed to use a new browser from Netscape Communications, but it wasn't finished in time, and 3Com went with a less capable version from Spyglass Inc. Fortunately, Audrey's software can be remotely upgraded, so a new browser will be installed automatically when it is ready.

The basic mail program is adequate for simple needs, but it lacks the ability to handle most common types of attachments. 3Com officials say this isn't really a problem because they assume that buyers will always have a PC available to handle complex mail needs. One interesting touch is the ability to use the stylus for handwritten "scribble mail" that can be viewed on any mail system.

Alone among current appliances, Audrey is network-ready with the addition of a \$59 USB adapter. This allows you to share an Internet connection with a PC—but only if you have standard Ethernet cabling, which is rare in homes. A wireless or phone-line network adapter would be a welcome addition. So would the ability to exchange calendar, address book, and Web bookmarks between Audrey

and a PC. Audrey has some interesting but unused expansion possibilities, including two USB ports and a CompactFlash memory slot.

Like all the appliances I have seen, Audrey is a work in progress. These products are moving away from their origins as cheap, stripped-down PCs and coming into their own as simple tools to get on the Internet. If the individual appliances still leave something to be desired, the idea remains a winner.



HELLO, AUDREY

MAKER 3Com www.3Com.com

PRICE \$499

STRENGTHS Ease of use, choice of service provider, and ability to synchronize with Palm handhelds.

WEAKNESSES Small screen, so-so browser, and high price.

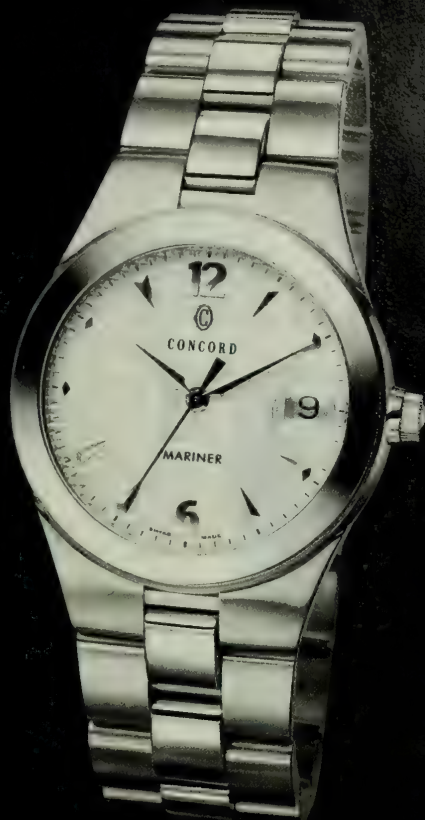
DATA: BUSINESS WEEK

BusinessWeek online

FOR A COLLECTION OF
AST COLUMNS and
online-only reviews of
chnology products, go
Technology & You at
www.businessweek.com/chnology/

A close-up photograph of a person's hand on a motorcycle handlebar. The hand is wearing a silver-toned wristwatch with a blue dial and a brown leather strap. The hand is gripping a black handlebar grip. Above the hand is a large, oval-shaped rearview mirror with a chrome frame. The mirror's reflection shows the back of the rider's head and shoulders. In the background, a round speedometer is visible on the motorcycle's dashboard. The text "be late" is overlaid in a white, lowercase, sans-serif font across the center of the image.

be late



INTRODUCING THE
NEW CONCORD MARINER®

A LUXURY SPORT WATCH THAT APPROACHES
STYLE WITH SUBTLE SOPHISTICATION, MARINER
IS SMOOTH ON THE WRIST, YET RUGGEDLY
CRAFTED IN BRUSHED AND POLISHED STAINLESS
STEEL. THE TEXTURED WHITE OR DEEP BLUE DIAL
IS PROTECTED BY A SAPPHIRE CRYSTAL WITH DATE
MAGNIFIER. WATER RESISTANT TO 30 METERS,
THE NEW CONCORD MARINER IS ALSO OFFERED
IN STAINLESS STEEL AND 18K GOLD, FOR BOTH
MEN AND WOMEN.

CALL 1 888 812 6626 FOR MORE INFORMATION.



CONCORD

Time is a luxury.

NEIMAN MARCUS

BY JEFFREY E. GARTEN

AS BUSINESS GOES GLOBAL, ANTITRUST SHOULD, TOO



THORNY:
Big merger deals have worldwide impact—and face a thicket of local regulations. It's time to coordinate across borders

Jeffrey E. Garten is dean of the Yale School of Management and author of *The Mind of the CEO* (Basic Books, forthcoming in January, 2001). A former investment banker, he was Under Secretary of Commerce for International Trade in the first Clinton Administration (jeffrey.garten@yale.edu).

The newly proposed mergers between Chevron and Texaco, as well as between General Electric and Honeywell International—not to mention the imminent deal between America Online and Time Warner—are but the latest evidence of a massive restructuring of global markets by megamerger. Now that the deals are becoming bigger and more complex, it's time to enhance coordination of antitrust policy across borders.

Indeed, mergers and acquisitions around the world have been soaring—reaching \$3.4 trillion in 1999. While only one-third of these transactions directly involve companies from different countries, most mergers have broad international impact. The trends will continue as trade barriers drop; as sectors such as telecommunications, transportation, and finance undergo more deregulation; and as the Internet makes it easier to build new corporate alliances.

Big mergers, such as Boeing and McDonnell Douglas, and Exxon and Mobil, have already strained the capacity of officials on both sides of the Atlantic to conduct careful investigations of anticompetitive practices. The number of mergers before the U.S. Justice Dept. has doubled since 1980, yet the antitrust staff is 20% smaller. The European Union's caseload has increased 500% in the same period. Efficiencies could arise by harmonizing procedures among key countries.

In addition, companies must now jump regulatory hurdles in many of the 60 countries that have antitrust laws—costing money, diverting CEO attention, and making shareholders jittery. Washington and Brussels have different thresholds for triggering antitrust investigations, different information requirements, and different deadlines for approval or veto. Superimpose other countries' antitrust procedures, and it can become a nightmare for business.

In September, for example, Jacques Bougie, CEO of Alcan Aluminium Ltd., said that in trying to achieve a deal with Pechiney and Alusuisse—never consummated—his company had to file for approval in 16 countries and eight languages, submit well over 400 boxes of documents, and send more than 1 million pages of e-mail.

There are also difficult conceptual issues to resolve in the new, high-tech economy—not only within countries but also among them. How should national regulators deal with a corporate playing field that is global and therefore extends well beyond their legal jurisdictions? How should they deal with monopolies that can arise so quickly in technology-based industries?

While transatlantic coordination on antitrust has been improving, it nevertheless rests precariously on individuals in the U.S. and Europe who currently share compatible goals. This could easily change with new governments. Even if Washington and Brussels remain in synch, there is still a need to broaden the circle of cooperation to include Japan and big emerging markets such as South Korea and Brazil.

Two important studies describe what a global antitrust program might encompass. Taken together, the Final Report of the International Competition Policy Advisory Committee to the Attorney General (February, 2000) and the forthcoming *Antitrust Goes Global* by the Brookings Institution (November, 2000) advocate going beyond the negotiation of bilateral antitrust agreements, which have slowly been taking place.

They suggest going to a broader multilateral effort geared to streamlining the antitrust process, reducing administrative burdens on companies, and focusing on more transparent investigations. They advocate the establishment of regional antitrust authorities in Latin America and Asia to reduce needless fragmentation, as well as more technical assistance to officials in emerging markets. Down the road, they envision antitrust reviews conducted by more than one government working as a team.

"SOFT HARMONIZATION." Finding common ground won't be easy. Robert Pitofsky, chairman of the Federal Trade Commission, and Joel I. Klein, former assistant attorney general for antitrust, favor "soft harmonization" of regulations among countries, starting with a new global forum for discussion with no binding rules. American business leaders such as Raymond V. Gilmartin, chairman and CEO of Merck & Co. agree.

EU Competition Commissioner Mario Monti and former Commissioner Leon Brittan, however, want any antitrust initiative to come under the jurisdiction of the World Trade Organization, with its more formal legal structure and dispute-settlement procedures. Last year, Jürgen E. Schrempp, chairman of DaimlerChrysler, told me that there was already too much international bureaucracy and that we didn't need more of it to deal with antitrust.

Antitrust issues are taking center stage in the shaping of global industries and the delicate balancing of public and private interests in the world economy. The next President and his Attorney General should seize the moment with an international plan.



Appliance dealer enters Whirlpool® partner portal.



Order is placed through customized price list.



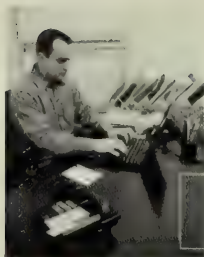
Dealer tracks status of shipment online.

IBM designed and built Whirlpool's partner portal, allowing appliance dealers to manage orders and inventory online.

In the first 3 months, the portal generated \$100 million in revenue.



Whirlpool Corporation is an **IBM** e-business



2:09 PM > Customer places online order from personalized shopping list.



2:45 PM > Staples' preapproval process allows customer's order to be processed in minutes.



4:00 PM > Customer receives e-mail that order is fulfilled and on its way for next-day delivery.

Staples® uses IBM software and servers to process online ordering and payment from their large corporate customer site.

Today, their B2B customers enjoy a more efficient purchasing channel.

b
2
binder

Business-to-business e-commerce isn't just about putting your catalog and prices online. It's become a worldwide electronic *watering hole* for today's business transactions.

YOU'VE SEEN THE NUMBERS:

B2B e-commerce is 5 times greater than consumer Web purchases, and according to Gartner, the forecasts for B2B activity in 2004 are as high as \$7 trillion (it could go higher). Yet B2B e-commerce isn't just about customer payments, partner payments or online inventory queries. As companies transform themselves into e-businesses, they're beginning to manage procurement, supply chains and partner networks online.

The results are staggering: costs are slashed; geographic boundaries are transcended; efficiencies are dramatically improved; and value is added at every step.

"MY DATABASE WILL CONTACT YOUR DATABASE."

It's clear that there are enormous advantages in using the Internet to deepen and secure relationships with any and all of your customers and suppliers. Advantages like being more accessible, providing better service and locking in key relationships. To do this, you'll need to design a system that is open, so you can easily integrate with any of your partners' applications regardless of their platform. As a result, those businesses that are the most flexible and have the quickest response time will succeed.

JOE BUSINESS. MEET MR. E-MARKETPLACE.

The greatest value opportunity is e-marketplaces. They are the ultimate realization of e-business. Suppliers, buyers and marketmakers are coalescing around these

worldwide trading hubs where hundreds, even thousands, of industry players are gathering to do business. Suppliers are finding customers. Buyers are realizing enormous savings online.

Also consider: 18 months from now, there are expected to be 2 billion wireless devices connected to the Internet. Increasingly, both your customers and employees will require access to the information they need, anytime, anyplace.

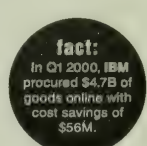
MAKING IT HAPPEN.

IBM has learned by doing, and this has helped us deploy open Internet trading platforms that span all 35 of the world's major computing environments. Many are built on powerful IBM WebSphere™ software, for massive scalability, speed and reliability.

With application software leaders like i2 and Ariba, IBM has over 6,000 dedicated B2B e-commerce and e-marketplace salespeople. Also, IBM embraces Linux and delivers a comprehensive tool set for development of e-business applications across all servers.

And the 130,000 people of IBM Global Services can provide the strategic insight to help you navigate the complexities of B2B e-commerce as well as provide the infrastructure to host your site.

If you need some help getting started, call a trained e-business specialist at **800.ibm.7080 (ext. b2b)** or visit **ibm.com/b2b**, where you will find tailored e-business solutions and case histories about the companies that have spearheaded the B2B e-commerce revolution.



HERE ARE SOME SAMPLE SOLUTIONS FROM IBM.

Developing your e-commerce strategy	Web Selling Solution Planning Services > A comprehensive planning session led by IBM B2B e-commerce consultants, designed to identify a strategic action plan for a focused e-commerce initiative based on your needs. e-commerce Executive Assessment > A business case assessment for small and mid-sized companies, conducted by accredited IBM Business Partners. Includes a strategic proposal, competitive Web site analysis and prototype e-commerce site.
Establishing a basic Web presence, so that you can start transacting with customers and partners online	IBM Small Business WebConnections® Platinum Package > Start selling and taking orders over the Web. A subscription service including shared Web and e-mail access for up to 100 employees. Starting at \$249 a month.* IBM Start Now for e-commerce > IBM's Start Now solutions combine the software, hardware and services to help you quickly implement e-business solutions that will improve customer service, e-commerce and collaboration. With financing, from \$1,250 per month.*
Establishing a Web-based network with your partners and suppliers to streamline buying and selling	IBM Web Selling and Procurement Service Offerings > Allow you to navigate the complexities of linking customers, vendors and suppliers to your business in order to manage inventory and payments online.
Trying to extend your reach to customers and suppliers through wireless applications and services	IBM Wireless Solutions > Services and WebSphere Everyplace Suite software that enable you to extend your e-business applications to wireless devices, with the end-to-end security and scalability that are necessary in the rapidly expanding wireless world.
Creating an e-marketplace or a Web-based trading network for all interested buyers and sellers	IBM E-Marketplace Solutions > Start with a consulting engagement to help develop your strategy and then add a software platform that allows you to rapidly create and deploy an e-marketplace. Seamlessly link buyers and suppliers over the Internet.

To find a tailored solution that fits your needs, or for a free B2B e-commerce **white paper** developed for IBM by *Forbes* Partnership Programs, visit **ibm.com/b2b**, or to talk to a trained e-business specialist, call **800.ibm.7080 (ext. b2b)**.

@B2B SOLUTIONS

IBM

All numbers reported are from industry and customer sources. *Free based on a 2-year subscription to basic service for up to 100 PCs and excludes activation fee and phone charges. Requires 2-year subscription. Not combinable with other offers. Valid only in the U.S.A. Success case is offered and administered in the U.S. and Canada. IBM and the IBM logo are trademarks of International Business Machines Corporation. © 2000 IBM Corp.

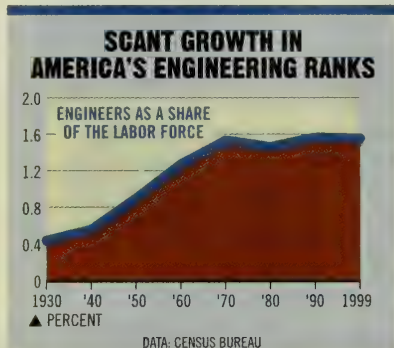
BY GENE KORETZ

THE ECONOMY'S ACHILLES' HEEL?

Too few scientists and engineers

Notwithstanding the U.S. economy's current productivity surge, a leading theorist on the impact of technology on growth is concerned that the pickup may not last. In a new study, Stanford University economist Paul M. Romer warns that the U.S. is falling behind in developing the skilled human capital necessary for research and development.

Because the social returns of innova-



tion—the benefits to society—are far larger than the returns realized by individual companies, economists have long recognized that government policy has a key role in promoting technological change. In the initial postwar decades, says Romer, the focus was on raising education levels and creating new disciplines such as computer science, and the U.S. is now reaping immense payoffs from those early investments.

In recent decades, however, the accent has been on spurring corporate R&D spending via tax credits and direct subsidies. And despite big increases in outlays, notes Romer, the shares of the labor force represented by engineers and scientists, which rose sharply between 1940 and 1970, have hardly grown since then. "Higher R&D spending," he says, "has boosted researchers' salaries rather than the supply of researchers."

Faulting the U.S.'s higher education system, Romer points out that colleges provide relatively little information on career choices and starting salaries to prospective science students. Only 13% of college grads wind up with degrees in science or engineering—far fewer than those intending to when they first enrolled. Indeed, greater shares of young people have such degrees in Korea,

Britain, Germany, Japan, and Taiwan, even though many more U.S. high school grads go on to college.

U.S. colleges, claims Romer, are structured in ways that impede a supply response to rising private demand for scientists. While humanities and social science departments tend to give high grades to maintain enrollments, for example, science and engineering faculties tend to favor small teaching loads. And graduate science education is often skewed toward preparing people for academe rather than industry.

Meanwhile, foreigners have been helping to fill the gap via direct immigration and special temporary visas—accounting for major shares of corporate engineering and science workforces. As other nations join the technology race and compete for skilled workers, however, Romer expects the supply of foreign researchers to wane.

The long-term answer, he believes, is more government focus on boosting industry's domestic supply of researchers. One of his ideas is giving colleges grants to train more students for science and engineering degrees. Another is creating a new class of "portable" graduate fellowships, which students could use in research areas and universities they choose—thus fostering a rapid supply response to shifting market demand.

The stakes, says Romer, are enormous. If the U.S. can add just 0.5% to annual economic growth over the next 50 years through the huge payoff from innovation, he says, it could eliminate the projected Social Security deficit and leave ample resources for other uses.

YES, WORKERS ARE GRUMPIER

Job satisfaction is falling sharply

Unemployment is at a 30-year low, real incomes have risen almost across the board, and consumer confidence remains high. Yet a new Conference Board survey finds that the share of workers satisfied with their jobs has dropped significantly over the past five years—from 59% to 51%. "It appears that today's fast-paced working climate is triggering more malaise than we've imagined," says an official.

Although the decline occurred in all age groups, it was most pronounced among baby boomers—those 45 to 54, whose job satisfaction reading of 46.5% is now the lowest across the age spectrum. The happiest workers are Generation

Xers and those 65 and older, with satisfaction levels around 55%.

From an earnings perspective, the largest decline in work satisfaction was posted by the survey's top income group, those with household incomes above \$50,000. While these folks are still the happiest of the lot, their contentment is down from 66.5% in 1995 to 55.1%.

The gaps in job satisfaction across geographical regions are also noteworthy. Some 60% of those employed in the Rocky Mountain area say they're happy with their work situations, the most in any region, while the lowest rating of 45.6% is found among workers in New York, New Jersey, and Pennsylvania.

Employees are also less content with such aspects of their jobs as wages, sick leave, health plans, job training, promotion policies, and bonus plans—with the latter two receiving the lowest satisfaction votes of 22.2% and 20.5%, respectively. The only areas recording slight gains are job security (50.2%) and pension plans (40.8%).

THE U.S. LOSES A TRADING EDGE

Its wage costs get less competitive

Aided by shifts in exchange rates and continuing wage restraint, the U.S.'s trading partners are making rapid inroads into its competitive advantage. Measured in dollars, the Labor Dept. reports that hourly compensation of production workers in Japan fell from 39% to 9% above the U.S. level between 1995 and 1999. In Europe as a whole, wages fell from 28% above the U.S. level to just 6% over the same period. And in the newly industrialized Asian nations hourly compensation slipped from 37% to 32% of the U.S. average.

There's little sign that these trends are losing any steam.

Indeed, employer costs for U.S. companies have accelerated, and the euro is down against the dollar by some 20% since the end of last year. Thus, improvement in the U.S. trade balance may prove harder to come by than many economy watchers have been anticipating.



BY JAMES C. COOPER & KATHLEEN MADIGAN

TAKING THE PULSE OF THE SLOWDOWN

Is it enough to keep rising labor costs from posing an inflation threat?

U.S. ECONOMY

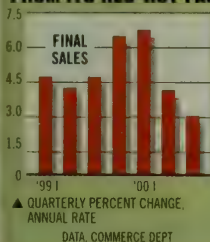
Policymakers at the Federal Reserve got an early holiday gift on Oct. 27 when the Commerce Dept. released the third-quarter gross domestic product report. The data indicate that the economy is heading toward the Fed's desired soft landing—that is, a period of growth slow enough to assure that inflation remains contained.

Last quarter's slowdown was impressive. Real GDP grew at an annual rate of 2.7%, less than half of its 5.6% pace in the second quarter. Domestic demand rose 2.7%, the slowest pace in three years (chart).

What's behind the slowing?

Two crucial supports have held up domestic demand over the last few years: strong labor markets and accommodative financial conditions. Job markets still appear tight. But thanks to past Fed tightening, money is not flowing as easily to households and businesses as it once did. That's the new factor in the outlook, but the

DEMAND IS COOLING OFF FROM ITS RED-HOT PACE



extent of its drag on growth remains to be seen.

Bear in mind a one-quarter respite isn't long enough to address the Fed's chief concern that domestic demand is growing far faster than supply. That's especially true given that tight job markets are pushing up labor costs. Compensation in the third quarter, measured by the employment cost index, rose at its fastest four-quarter pace in 10 years. One potential problem for the Fed next year could be that slower economic growth will also cool off productivity growth, even as labor costs continue to rise (page 54).

In addition, the GDP mix suggests that the slowdown to a sub-3% growth rate is exaggerated. The government and housing sectors subtracted a full percentage point from third-quarter GDP growth. Those rags won't be repeated this quarter, given the sizable amount of election-year pork making its way through Congress and the sharp rebound in housing demand in September. Unless the Fed believes the economy has cooled off for the long haul, policymakers will not remove the threat of higher interest rates.

THE FED CAN TAKE HEART

that tighter financial conditions are starting to slow the two main components of domestic demand: consumer spending and

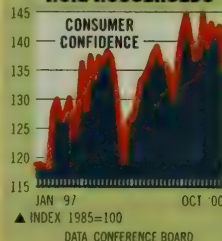
business investment. Given the flattening out of stock prices this year, the wealth effect for consumers is diminishing. Similarly, capital spending is feeling the squeeze from costlier equity financing, tighter credit-market conditions, and pickier banks.

Consumers will be the key to the soft landing, and signs are evident that households are not spending as rapidly as they had been. Real consumer spending rose 4.5% last quarter, a bounceback from the 3.1% pace of the second quarter. But taking both quarters together, outlays have grown at a 3.8% annual rate, far less than the 6.8% gallop of the previous two quarters.

Looking ahead, spending gains are sure to slow more in line with the increase in household incomes. In the past year, outlays have grown 5.3%, some two percentage points faster than the 3.2% pace of income, reflecting the added spending power of the wealth effect. Now that stock prices have stopped rising at double-digit rates, that gap will narrow.

Also, consumers were less optimistic about their economic prospects in October. The Conference Board's index of consumer confidence plunged from 142.5 in September to 135.2, the lowest reading in a year (chart). The Board said that a cooling economy "and apprehension regarding soaring oil prices and volatility in the financial markets" triggered the decline. Those factors have not gone away,

OIL AND STOCK PRICES ROIL HOUSEHOLDS



but with the price of oil below its October peak and with stock prices firming, they are less worrisome now.

Consumers are still confident enough to keep buying homes. Sales of new single-family homes jumped 9.2% in September, to an annual rate of 946,000. That cleared out some of the inventory of unsold homes and suggests that residential construction will probably rise this quarter after falling at a 9% pace in the third quarter. But with the wealth effect dissipating, the rebound is unlikely to be as strong as past increases.

AT THE SAME TIME, businesses are expected to become more selective about what they spend their money on, now that financing is more expensive. Real investment in business equipment grew at an annual rate of 8.5% in the third quarter, about half of the

17.9% gain in the previous quarter. But a 10% contraction in outlays for transportation equipment accounted for much of that slowdown. Outlays for information-processing gear climbed 19.6%, not much of a slowdown from the 27.7% rise in the second quarter.

Businesses are not going to take an ax to their capital budgets. They must continue to lift productivity in order to stay competitive. But investment will slow over the next year because of tighter financial conditions, including access to equity capital, bond-market credit, and bank financing. Plus, businesses will be less able to tap into internally generated funds because profits will continue to be under pressure from slowing revenues and rising labor costs.

One area of business spending that is almost certain to be a drag on future growth is inventory accumulation. Stockpiles grew at a faster clip in the third quarter than their already quick pace of the second. With demand cooling, businesses in the future won't need to lay in so much merchandise or supplies. That's one reason the purchasing managers' index of industrial activity declined to 48.3% in October, from 49.9% in September.

THE KEY QUESTION about the slowdown and Fed policy is this: Is growth slowing enough to assure that rising labor costs do not present an inflation threat next year? On that one, the jury is still out. Through the

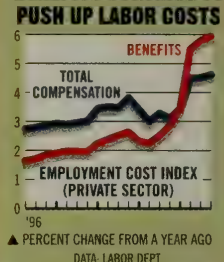
third quarter, the growth rate of worker compensation continued to head upward.

In the third quarter, the employment cost index for private-sector employees—a measure of what companies shell out for wages, salaries, and benefits—rose 4.6% from the year before. That's the fastest four-quarter clip since 1990. Unless the economy slows enough to loosen up the labor markets, then workers' pay and benefits are very likely to grow even faster in 2001.

Although yearly wage growth is up about a percentage point from this time last year, to 4.1%, the culprit in the overall acceleration is benefits, some 27% of compensation (chart). The cost of bennies, ranging from health care to paid leave and retirement plans, rose 6% during the past year. That pace is more than double the 2.8% pace posted this time last year. Higher health-insurance premiums have been a big contributor to the speedup.

Given the trend in labor costs, any slowdown in productivity will be sure to raise unit labor costs next year. At that point, the economy—and the Fed—would face a double whammy: upward pressure on inflation and downward pressure on profits.

BENEFITS CONTINUE TO PUSH UP LABOR COSTS



CANADA

HOW A FISCAL BOOST COULD PLAY OUT NEXT YEAR

In an attempt to enhance its political future, the government of Canadian Prime Minister Jean Chrétien is preparing to boost the economy's prospects. On Oct. 18, Finance Minister Paul Martin modified the Liberal Party government's February budget proposal to include "the largest tax cut in Canadian history." Then, on Oct. 23, Chrétien called elections for Nov. 27.

New tax measures for both households and businesses, including capital-gains relief and sizable cuts in the middle-income bracket, amount to C\$100 billion (\$66 billion) over five years. New spending programs will total C\$50 billion (\$33 billion). Both figures are

nearly double the February proposals and would be paid for with expected budget surpluses.

Economists estimate that the measures, which are front-loaded, will add a full percentage point to economic growth over the next year. Canadian growth has moderated, from a booming 5.8% pace in the second half of 1999 to 5% in the first half of 2000, and analysts now expect growth of about 4% in 2001.

A potential problem is that the proposed fiscal boost will add strong stimulus to the economy almost immediately, at a time when growth is already powered by brawny domestic demand and an energy-related windfall from exports of

pricier natural gas. The risk: an overheated economy that could force the Bank of Canada (BOC) to raise interest rates.

Besides energy, inflation thus far remains tame. The September consumer price index rose 2.7% from the year before, and the core rate, excluding energy and food, was up only 1.3%, near the bottom of the BOC's 1%-to-3% target range. But with the jobless rate below 7%, labor markets are already tight. In September, growth in permanent-employee wages accelerated to a 4% rate per year, faster than productivity growth.

The fiscal proposals could yield one key plus. Since the BOC is likely to keep policy tight, the Canadian dollar should be well supported, especially if economic expansion matches or exceeds U.S. growth.



GORE VIDAL
ABSOLUT DEFINITION

me in a series of 20 portraits celebrating ABSOLUT VODKA's 20th anniversary.

40% ALC/VOL (80 PROOF), 50% ALC/VOL (100 PROOF), 100% GRAIN NEUTRAL SPIRITS. ABSOLUT COUNTRY OF SWEDEN VODKA & LOGO, ABSOLUT, ABSOLUT BOTTLE DESIGN, ABSOLUT COUNTRY OF SWEDEN VODKA & LOGO ARE TRADEMARKS OWNED BY V&S VIN & SPRIT AB. ©2000 V&S VIN & SPRIT AB. IMPORTED BY THE HOUSE OF SEAGRAM, NEW YORK, NY. PHOTOGRAPH BY ANNE LEIBOVITZ. ENJOY OUR COUNTRY RESPONSIBLY.

A NEW NET P

Cover Story



BERTELSMANN'S
deal with Napster could
kick-start a bold plan
for the media
and entertainment giant

POWERHOUSE?

ODD COUPLE

A smiling Middelhoff embraces Fanning—with whom he had been waging a bitter war over copyright

BY JACK EWING

Thomas Middelhoff doesn't look up as his Gulfstream jet gains altitude over France's Côte d'Azur. He ignores views of the shimmering Mediterranean and the mist-shrouded Alpes-Maritimes. Instead, the chairman and CEO of Bertelsmann, the world's third-largest media company, is hunched over a pile of newspaper clippings, devouring the day's news from the entertainment and online world. And it has already been a long day. After waking at 5 a.m. in the rural German town of Gütersloh and taking a swim in his indoor pool, Middelhoff has hopped a plane for Cannes to give a pep talk to top executives of BMG Entertainment, Bertelsmann's music division. Then it's back to the airport in a Mercedes whose chauffeur seems to be on loan from Formula One.

Twelve days later, Middelhoff is stepping out of a black stretch limo at New York's Essex House hotel. Waiting outside is the Internet's No. 1 bad boy, 20-year-old Shawn Fanning, the founder of Napster Inc., the 18-month-old Silicon Valley startup that has turned the music industry on its head by creating software that allows people to trade music for free. The lanky German gets out of his limo, walks over to Fanning, rubs his close-cropped head, and hugs him like an old friend. Thirty minutes later, the pair walk into a press conference, where Middelhoff announces a deal that could help transform his once-sleepy publishing house into a powerhouse for the Internet Age. The irrepressible 47-year-old Middelhoff wants to convert Napster from a renegade, cash-starved outfit into the very center of online media distribution and e-commerce.

The deal is as bold, visionary, and complicated as anything to hit the industry in



The Deal

TERMS

Bertelsmann lends Napster \$50 million with an option for an equity stake. Napster uses the money to develop technology designed to get users to pay for music they download from the Net. Bertelsmann withdraws suit against Napster and lobbies other music companies to do the same.

IMPACT

Napster turns from renegade to royalty generator. File-sharing becomes new business model for media companies.

RISKS

Rival music companies refuse to withdraw suit against Napster, and court puts Napster out of business. DATA BUSINESSWEEK

years. Even as he seeks to make Napster a partner, Middelhoff is still suing Fanning's company along with the rest of the industry for facilitating massive copyright infringement. What's more, the industry seems to be winning the suit, and could be closing in for the kill.

But with 38 million users of Napster's service, Middelhoff says it is folly to call them all criminal. For the cyberworld of the future, "We have to develop business models that are legal, and somebody has to take the lead," says Middelhoff. For starters, the audacious German is saying that a profitable business can be built on peer-to-peer file-sharing, the Napster technology that allows people to swap files online ad infinitum.

If Napster complies with this new plan, Middelhoff conceivably will rescue the concept of profitable intellectual property in the Information Age. The dark nightmare of the media industry has been that file-sharing would spread like wildfire in the networked world. First, file-sharers would download music without paying—as they have with Napster. But they wouldn't stop there. Soon any media product that could be digitized—novels, textbooks, magazines, maybe even movies—would lose all copyright protection and be swiped en masse by the denizens of the Net.

Middelhoff's answer: Recruit the thief to protect the jewels. So he is proposing to remake Napster in a fairly basic way.

The Building Blocks of Bertelsmann

THE NEW STRATEGY

Bertelsmann wants to turn Napster into a platform for downloading and selling all its media products, including books and films as well as music

AUTHORS & BOOKS

Toni Morrison,
John Grisham,
Danielle Steele,
John Irving, Pat Conroy.

Random House,
Bantam Dell, Doubleday,
Book-of-the-Month Club

MUSIC & ARTISTS

Arista Records,
RCA, Windham Hill

Whitney Houston,
Annie Lennox,
Barry White,
Eros Ramazzotti,
Santana, Puff Daddy

MAGAZINES & NEWSPAPERS

Nearly 100 worldwide,
including *Stern*, *Geo*,
Family Circle,
Fitness, *McCall's*,
Parents

INTERNET

bol.com, bn.com
(joint venture)
for online books
and music,

CDNow,
Lycos Europe,
Pixelpark

TELEVISION

RTL Group,
Europe's
biggest broadcaster
(joint venture
with Pearson PLC,
Audiofina)

To succeed, Middelhoff must get the four other major music companies to play nice with Napster



He is lending Napster a modest \$50 million to stave off a cash crunch, and may take an equity stake later. Napster will use the money to develop technology and services designed to get users paying for music rather than stealing it. If Napster delivers, Bertelsmann will settle its copyright infringement suit against the upstart company and urge other media companies to do the same. What's more, Bertelsmann wants to cooperate with rivals and turn Napster into a platform for downloading the whole spectrum of media products, including books, films, and magazines from all companies.

Many of the details of this shocker, though, remain unclear. Paramount is the technological challenge: Napster now has to develop a way to track its users and ensure they are paying. Bertelsmann envisions a sort of huge club where members

pay a monthly fee of, say, \$4.95 for downloads. That could be an enormous marketing opportunity, but only if the technology works smoothly to prevent violations and protect copyright.

What drives him is a near-religious belief in the dominance of the digital world for all media, plus an enormous desire to make his mark as an innovator in this new industry. He wants to make his company No. 1 in the global music business and in media e-commerce, and that means scouring the earth for the deals that will make rivals stand up and take notice. In the Internet world, being first with a new technology is a huge advantage. "We have to find the second AOL," says Middelhoff.

But the Napster deal could just as easily turn out to be a disaster as a

triumph, and Middelhoff's brush with greatness could turn into humiliation. To succeed, Middelhoff must get the heads of the four other major record labels—Universal Music, Sony, Warner Music, and EMI—and the music-publishing industry to reverse course and play nice with Napster, their No. 1 enemy.

Yet Middelhoff has been laying the groundwork for a truce with Napster at least since early July. That's when he joined the New Economy elite at investment banker Herb Allen's annual schmooze-fest in Sun Valley, Idaho. The idea of linking up with Napster hadn't yet crystallized, but Middelhoff talked to his peers in the media business about how they should respond to the upstart service. In September, Middelhoff began negotiations with Napster, but he kept them a secret until the last minute. He has since been working the phones and has told company insiders that most industry execs are positive.

An inveterate networker, Middelhoff can draw on some long-standing personal connections to further his cause. One of Hollywood's newest music moguls is a close friend of Middelhoff's: Jean-Marie Messier, whose Vivendi is about to acquire control of Seagram's Universal movie and music groups. Middelhoff sits on Vivendi's board. Middelhoff is also close to AOL CEO Stephen M. Case, who may soon control Warner Music.

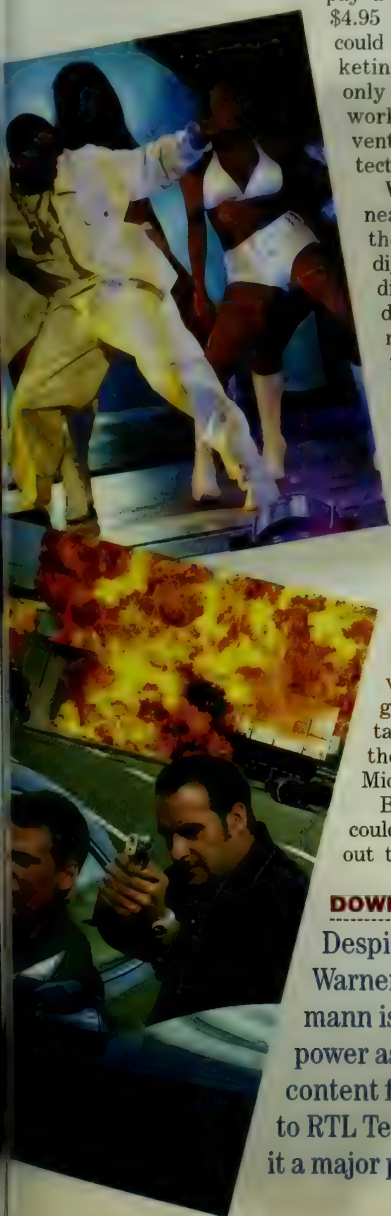
TOO CHEAP? Still, Middelhoff concedes it won't be easy to convince the others. "We have a lot of emotion between Napster and the music industry," he says. Off the record, rival executives expressed surprise at Middelhoff's move—and even voiced skepticism that Middelhoff can pull it off. Some music-business executives think the low prices a revamped Napster would charge would infuriate recording artists, who would fear for their royalty checks. Meanwhile, rival systems are developing. Time Warner on Nov. 1 announced its new music-streaming service. And AOL plans to launch an online music subscription service by early next year.

Another stumbling block: It's unclear how far Napster is willing to go to appease the music industry titans. Napster has always said it is reluctant to change its software, which allows users to download music and listen to it whenever they want. But the record companies want to impose encryption software that would limit users' ability to listen. "This partnership will preserve the integrity of the Napster experience," insists Napster CEO Hank Barry.

Finally, even if Napster maintains the software's simplicity, no one knows how many of Napster's 38 million users will pay to download music, or what price they will pay. Surveys show Napster users are willing to pay something—and are not as young as many might think. But no one knows how customers will react to the news of Napster's very corporate deal.

Daunting stuff. If Bertelsmann can't persuade the other music companies to drop the suit, Napster could be shut down by the court and conceivably be held liable for billions in damages for copyright infringement. "Today's announcement does not bring an end to the court case," says Hilary B. Rosen, president and CEO of the Recording Industry Association of America.

The Napster deal is the boldest step yet in Middelhoff's crusade to revamp Bertelsmann. On the face of it, this traditional media company, which started off as a Bible publisher in 1835, is doing just fine without the Net. The company's overall profit rose an enviable 45% this year, to \$671 million on sales of \$16.5 billion. Strong performances by the recorded music business led by musicians ranging from Whitney Houston to Puff Daddy, and a stable of 100 magazines, including *Parents*, *Family Circle*, and *McCall's*, did



DOWNLOAD THIS

Despite AOL's Time Warner deal, Bertelsmann is betting on its power as a provider of content from Puff Daddy to RTL Television to make it a major player on the Web

the trick. But some of Bertelsmann's historically strongest divisions, such as the book clubs, are losing money. Middelhoff is also convinced that media companies will soon sell most of their wares over the Internet. If Bertelsmann doesn't prepare for that transition, he fears, the venerable company will enter into long-term decline.

What's more, the timing is good for the Germans, who have a war chest to spend. Owned mostly by a German foundation, Bertelsmann has no publicly traded shares, though it would probably fetch a \$70 billion market capitalization if it went public. And Middelhoff has plenty of buying power: some \$7 billion, largely thanks to an early bet on AOL. He got Bertelsmann to buy a 5% stake in 1994 for \$50 million. Middelhoff could use that hoard to scoop up any number of media and Internet companies, whose values have been slashed by the dot-com shakeout.

But can Middelhoff deliver? He idolizes AOL CEO Stephen

M. Case as a prophet of the Internet. But when Case was ready to merge with a media

company, he chose Time Warner. Bertelsmann's last big acquisition was in 1998, when it bought Random House and became the world's largest publisher of English-language books.

STILL PLUGGING. In the last year, Bertelsmann circled EMI Group, the London-based music and publishing business. But no deal materialized. And as far as the Net is concerned, Hollywood is full of talk about Bertelsmann's stumbles. Back in the spring, Bertelsmann Music Group put out a 10-page press release heralding its entry into the music subscription/download business. In fact, it only started in October, well after Universal Music Group and Sony Corp. both started licensing their music for downloads. BMG says it just took awhile to put up the music group's huge list. And despite denials by both sides, infighting delayed the rollout of getmusic.com, jointly owned by Bertelsmann and Universal music. Middelhoff added to his collection in September, when he bought control of CDNow.com, a troubled online music retailer.

The Napster deal, by contrast, shows Bertelsmann can move fast. Middelhoff credits his chief of e-commerce, Andreas Schmidt, who worked on virtually nothing else for weeks, for landing the Napster deal. But Middelhoff also took part, phoning counterparts at Napster in the middle of the night when a new idea hit him or spontaneously flying to New York to try to push the deal forward.

Middelhoff's sense of urgency is unmistakable. He isn't seeing much of his five children these days, or his renovated farm and its population of several dozen sheep, goats, and horses. Since taking over as CEO in 1998, he's given seed money to a host of Internet startups, such as Berlin-based Pixelpark, which helps corporations develop a Web presence and now has a stock market value of \$1.2 billion. Middelhoff also launched bol.com, an online seller of books and music and holds a stake in barnesandnoble.com.

Middelhoff has ordered that all of Bertelsmann's content be converted to digital form, down to the dust-jacket blurbs on John Grisham legal potboilers. In his vision, customers will download the latest novel from Toni Morrison, a Bertelsmann author, into an electronic book distributed by its partner Gemstar/TV Guide International. BMG will zap Carlos Santana's latest song to fans who pay a subscription fee for the privilege. Europeans will use broadband-Internet connections to follow the real-life soap opera on *Big Brother*, in which volunteers spend weeks living inside a closed compound, cameras watching their every move. Already, RTL Group—a Bertelsmann joint venture with Pearson PLC and Luxembourg-based Audiofina—operates Europe's most popular television Web site.

To be sure, his properties are dwarfed by an AOL-Time Warner combine. And Bertelsmann's Internet business contributed just 2.5% of sales in the fiscal year ended June 30. But Middelhoff is girding his staff for a Net breakthrough. He has banned paper interoffice memos, accepting only e-mails. He personally answers about 130 a day. He ordered PCs for every employee to use at home. He has forbidden neckties at management board meetings.

Yet Middelhoff's innovations go only so far. Bertelsmann operates according to idiosyncratic management principles established by the company's postwar patriarch, Reinhard Mohn, now 79. The central credo is decentralization. Managers of more than 300 Bertelsmann profit centers get vast management independence as long as they hit profit targets.

Middelhoff is now trying to import some American energy to Gütersloh, where cows graze practically up to the wall of the low-rise Bertelsmann headquarters. Sometimes he wishes

THE MAN BEHIND PROJECT THUNDERBALL

The grande latte can really wonders. Bertelsmann's negotiations with Napster Inc. began early September at a California office. The legal setting should be as no surprise, considering the two were parties to a bitter legal dispute over Napster's alleged facilitation of copyright infringement. But they began to approach a rapprochement when Andreas Schmidt, CEO of Bertelsmann eCommerce Group, and Hank Barry, CEO of Napster, retreated to a less formal locale: a Starbucks in Palo Alto, Calif. "We had a coffee and a donut and found we share a common vision," Schmidt recalls, then launched Project Thunderball, the code name for the deal to bring Napster in from the cold.

The Starbucks meeting was tactical Schmidt. Direct and informal, the 39-year-old hardly seems the usual European businessman. A high school dropout, Schmidt built his first career with Germany's border police. Yet after making the switch to journalism, he has risen quickly

Dueling Net Strategies

BERTELSMANN

Sells books, music, magazines, and TV shows over other people's networks or Internet portals, such as AOL and Lycos. Uses partners to sell books and music directly to consumers via bol.com in Europe and Asia and barnesandnoble.com in the U.S.

AOL-TIME WARNER

Produces own entertainment and information through *Time*, *Sports Illustrated*, CNN, and Warner Bros. studio. Will distribute through Time Warner Cable Systems and AOL.



DISNEY

Produces own entertainment information through its studios, theme parks, ABC, and ESPN. Owns majority control of Go network portal. Has dramatically increased sales of Disney consumer products over Internet.





CHAMELEON Schmidt: From border cop to journalist to Bertelsmann digital mogul

damaged his hearing and made him unfit for border duty. He joined Bertelsmann unit Gruner + Jahr in 1993, where he founded several magazines and launched 20 Internet sites. That brought him to the attention of Bertelsmann CEO Thomas Middelhoff, who made Schmidt president and CEO of AOL Europe, a joint venture with America Online Inc., in 1998. Schmidt's experience as a startup specialist, along with a colloquial command of English, came in handy in the sensitive negotiations with Napster. "Andreas really bridged the gap," Middelhoff says.

With Napster, Schmidt is executing Bertelsmann's grand plan. Middelhoff wants to make Napster a platform for selling all of the company's content, including Random House books and magazines like *Inc.* But Schmidt must find still more ways to push Bertelsmann products on any kind of digital device available, from electronic books to Palm Pilots to mobile phones. He's certain to use Bertelsmann's massive financial clout to acquire more Internet upstarts. Which means he could become one of Starbucks' best customers.

By Jack Ewing in Frankfurt

mann's top ranks. His task: ensure the world's third-largest company rules the Net, rather than being vaporized by it. "We have to not ourselves as a digital company, a media company," Schmidt says. Napster deal, Schmidt's brains is a perfect case in point. The ty attracted millions of music But it also threatened the very

existence of BMG and other music companies. By agreeing to finance Napster as it coaxes users into paying for music, Bertelsmann is trying to turn a threat into an opportunity.

Nobody knows whether it will work. But at least Schmidt can already claim to have pulled off some big transformations. He turned to journalism after an accident with a practice hand grenade

had been born in freewheeling Silicon Valley rather than tight Düsseldorf. "Deep in my heart, I'm really American," he says. Middelhoff spends close to half his time at Bertelsmann's New York headquarters in the heart of Times Square.

Middelhoff figures he started shedding his German identity on Nov. 2, 1994. That was the day he met Steve Case. Back then, Middelhoff was Bertelsmann's head of corporate development. He arrived for a meeting with Case, thinking he could give the young American a lecture on the media business. He left blown away by Case's vision of an online media empire. Eventually, Bertelsmann's management board agreed to buy 5% of AOL for \$50 million. This prescient call boosted Middelhoff's ascension to the CEO slot by demonstrating to patriarch Mohn the power of the new medium. It showed "he could] provide the leadership necessary to bring Bertelsmann into the Internet Century," recalls Case.

Joining the AOL board, Middelhoff got an apprenticeship in running a company at Net speed. "In the old days, he was a little bit stiff," says Arnold Bahlmann, Bertelsmann's executive vice-president for corporate development. "The AOL thing changed him a lot." One example came in 1998, when underling Schmidt assumed management of AOL Europe. During a meeting about AOL Europe that included Middelhoff, Case, and AOL President Robert W. Pittman, the brash Schmidt sprung a plan to spend an eye-popping \$2 billion on expansion over 2½ years. Schmidt didn't bother to clue in Middelhoff beforehand. Many CEOs would have been enraged. Middelhoff, Schmidt says, just laughed and went on to back much of the plan.

NEW STRATEGY. Analysts interpreted the AOL-Time Warner merger as a serious setback for Bertelsmann, but Middelhoff refuses to see it that way. He's certain that "preferred provider" agreements will protect Bertelsmann's access to

the world's largest online service, even though the company is now unwinding its AOL stake.

But the breakup with AOL was a blow. He decided Bertelsmann would focus on media, not the business of providing Internet access. That puts Bertelsmann in marked opposition to the rest of the media industry, which figures it needs "pipe"—via cable,

NEWS CORP.

es own entertainment information through its radio and network, sports, and HarperCollins company. Controls distribution compa- Asia, Europe, and America.

VIACOM

Brands properties on Internet, including MTVi, Nickelodeon.com, and the spun-off CBS MarketWatch. Viacom's CBS invests directly in Internet properties, including the sweepstakes site iWon.com.

VIACOM

VIVENDI UNIVERSAL

The world's largest music outfit, Universal owns music site Jimmy & Doug's Farmclub.com and half-interest in retailer GetMusic.com. Its pending merger with Vivendi gives it access to wireless distribution.

VIVENDI

wireless, or broadcast—to guarantee premium placement of a company's content, online and off.

In any event, Middelhoff faces plenty of challenges in the online ventures he already has, as well as more traditional areas. His bol.com is gaining on Amazon.com Inc. in countries where they

Cover Story

compete, but still trails. Barnesandnoble.com, a joint venture with Barnes & Noble Inc. in the U.S., is struggling.

As Middelhoff charges forward, there's one thing he won't have to worry about. Stockholders. A few months ago, people thought that was a handicap. Now, Wall Street analysts are

changing their tune. "If he can take care of his employees, do his business, and raise cash from his bankers, why go through the grief?" says Tom Wolzien, media analyst at Sanford C. Bernstein & Co. in New York.

To be exact, there is one shareholder Middelhoff still needs to worry about. But patriarch Mohn, who with other members of his family, still owns a 21.4% stake, has urged Middelhoff to push forward a transformation every bit as dramatic as the one Mohn led after World War II. The Napster play shows that Middelhoff has gotten the message.

With Spencer Ante and Tom Lowry in New York, Ronald Grover in Los Angeles, Catherine Yang in Washington, and bureau reports

COMMENTARY

By Spencer Ante

NAPSTER: TUNE IN, TURN ON, PAY UP

By forging an alliance with Napster, Bertelsmann CEO Thomas Middelhoff is boldly going where no record exec has gone before. His \$50 million loan to Napster to build a new fee-based service gives peer-to-peer file sharing the media industry's *Good House-keeping* seal of approval.

But there are some catches. Many analysts have focused on Middelhoff's diplomatic challenge of persuading other record companies to develop an industry-supported file-sharing system. But Napster and Bertelsmann face at least two other high hurdles.

The first is technological. Napster must create a new membership-based service that pays artists, music publishers, and record companies. That means building a system that blocks pirated content. In court, Napster said its technology can't distinguish between infringing and noninfringing use of files. Napster's lawyers wisely stuck to this argument because they knew that the courts would be reluctant to shut down an entire technology that had "substantial noninfringing uses."

OUT WITH THE PIRATES. But if Napster wants to get legit, it must crack this problem. In fact, computer programmers say Napster could filter out the great majority of infringing files from its music directory. "If Napster wanted to clean up their service, we could help them with that," says Bruce Ward, chief technology officer



of NetPD, a startup in Cambridge, England, whose software identifies pirated songs based on sound patterns.

There's another way to toss pirates. Napster's servers currently record every music file's "MD5 hash"—a sort of digital fingerprint that uniquely identifies an MP3 music file. These markers could be used to track recordings, spot illegal downloads, and remove pilfered files. There's one caveat, however. Due to differences in recording software and the degree of compression, different digital recordings of the same song could produce different fingerprints. While that makes tracking violators more difficult, the technology would detect most violations.

Napster's other big challenge is to create a profitable business model. Not all of its 38 million users—especially the young info-radicals—will pay a cover charge to enter the Napster club. "Shame on you Napster," wrote

GETTING LEGIT

Critics charge that Napster, founded by Shawn Fanning, has "sold out"

one Napster fan on its message board after the Bertelsmann deal. "Everyone was behind you, but you sold out to cover your ass."

But many people are willing to pay, especially if Napster maintains its all-you-can-eat menu and improves its reliability and searching features. Webnoize, an online-music research firm, said its October poll of Napster-using college students found that 68% were willing to pay a \$15 monthly fee for the service, up from 59% in April. "Napster is becoming as valuable to them as their ISP," says Webnoize senior analyst Matt Bailey. That percentage could grow if Napster charges the lower

\$4.95-a-month fee that Napster CEO Hank Barry recently suggested. Furthermore, Napster's user base is getting older and is therefore more likely to pay.

These are knotty problems. But none is unsolvable. Bertelsmann and Napster must keep everyone focused on the benefits of peace: For consumers, greater choice and lower prices. And for the music industry, increased sales and a lower cost of doing business. Plenty of reason to call a truce.

Ante has covered Napster since its inception.

Some people never worry about a lounge being available for them. **Are you one of them?**



Wouldn't it be nice if your status preceded you, no matter where you fly? Our alliance recognizes top-tier frequent flyer privileges on eight of the world's finest airlines, including access to over 340 lounges. Welcome to **oneworld**™.



American Airlines

Aer Lingus 

BRITISH AIRWAYS 

 **CATHAY PACIFIC**

FINNAIR 

IBERIA 

LANCHILE

 **QANTAS**

For premium cabin and selected top-tier frequent flyer customers. Some privileges vary between airlines. Each oneworld alliance airline reserves the right to change its frequent flyer program rules, regulations, travel awards and special offers and to end their frequent flyer program in accordance with its relevant frequent flyer program rules. All oneworld benefits are only available to passengers on scheduled flights that are both operated and marketed by a oneworld member airline. (Marketed means there must be a oneworld member airline flight number on your ticket.) American Airlines, Aer Lingus, British Airways, Cathay Pacific, Finnair, Iberia, LanChile and Qantas are all trademarks of their respective companies.

www.oneworldalliance.com

STILL PUMPED UP?

Maybe not. That celebrated growth in productivity could be peaking

Back in 1994, when the Federal Reserve last attempted to bring the economy in for a trouble-free soft landing, central bank Chairman Alan Greenspan had a hunch. He began to suspect productivity growth was about to take off, though many of his Fed colleagues were skeptical. "I hope that one of these days I will be able to finally say I told you so," he joked to his fellow monetary mandarins. As everyone knows, the Fed chief proved right, and the New Economy was born.

Now, as Greenspan tries to engineer an unprecedented second soft landing, he's again banking on stronger productivity to keep inflation at bay and the expansion on track. As recently as Oct. 19, he argued that productivity growth was still picking up steam. Behind his optimism: a belief that companies have yet to tap fully the efficiency gains from the huge wave of technology spending of the last several years. He's banking that companies and their workers will continue to get more adept at using the computers and other equipment they have snapped up.

"STAGFLATION"? But this time, his luck may be running out. The supercharged, ever-accelerating productivity growth that has powered the economy over the last five years may finally be in danger of cresting. At least, that was the message from a bushel of bad news that seemed to come together on Oct. 27. First, the National Association for Business Economics (NABE) said its mem-

ber companies are facing their most intense squeeze on profit margins in nine years. The culprit: Productivity is just not keeping up with rising costs for energy, labor, and finance. Then, the Bureau of Economic Analysis (BEA) reported that capital spending—the driving force behind the productivity boom—slowed sharply in the third quarter. And finally, the Census Bureau indicated that further weakness in investment lay ahead when it reported that new orders for efficiency-enhancing capital equipment fell for the third straight month in September.

The upshot: The economy may be in for a harder landing than Greenspan is bargaining for. Indeed, statistics due out on Nov. 2 were expected to show that productivity grew at about a 3% annual rate in the third quarter, vs. 5.6% in the second, as economic growth slowed sharply over that same period.

The big question for business leaders, investors, and the Fed is what happens to productivity growth from here. While that 3% is still impressive—and few experts expect a steep, sudden slowdown—any fundamental shift in the rate of productivity growth could pose problems. If productivity ebbs, for example, even a modest slowdown in the economy to a 3%-to-4% growth rate might not keep inflation in check.

Why not? With the unemployment rate at a 30-year low of 3.9% and hourly compensation rising at more than a 5% annual rate, productivity has to continue chugging along just to keep inflation under wraps. Otherwise, the inexorable march upward in labor costs will lead to the sort of wage-driven inflation that has proven the nemesis of so many expansions in the past.



"It's a stagflation scenario," says Allen Sinai, chief economist at consultants Primark Decision Economics Inc.

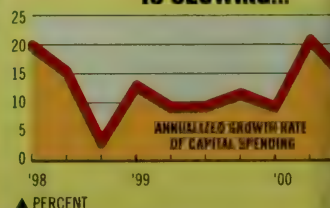
Of course, some degree of productivity slowdown is to be expected as the economy cools off. When it suddenly ramps up, as in late 1999 and early this year, productivity zooms higher. The reason: Companies are slow to add workers to meet increased demand. Instead, they work existing employees harder. And when economic growth sags, productivity falls back with it.

But more important for the economy is so-called structural productivity growth. That's the number arrived at

A CLOUD OVER PRODUCTIVITY GROWTH?

DATA PROVIDED BY ECONOMIC ANALYSIS, FEDERAL RESERVE, BUREAU OF LABOR STATISTICS, ECONOMIC CONSULTANTS, L.L. BERNARDI & ASSOCIATES INTERNATIONAL

CAPITAL SPENDING IS SLOWING...





after stripping out the cyclical ups and downs. Thanks to the investment boom of the past five years, most Fed officials and private forecasters believe that the structural, or trend rate of productivity, has nearly tripled from the start of the 1990s to about 3% per year. Add annual labor force growth of about 1%, and the economy can grow some 4% per year without generating inflation—nearly twice its old speed limit.

Much of the gain in structural productivity in the latter half of the 1990s came in the high-tech industry, especially computers and semiconductors. And while productivity in that sector

is still rising rapidly, there are signs that growth is easing. Data culled from the industrial production and labor force statistics by former Fed official Lyle Gramley suggest that high-tech productivity growth may have peaked in May.

Indeed, even chip giant Intel Corp., long a bellwether for the semiconductor and PC industries, could see its efficiency ebb this year. Based on current estimates of \$34 billion in 2000 revenues, Intel's sales per employee could clock in at around \$414,000, down slightly from \$419,000 in 1999. That reverses an upward trend in effect since 1997, during which employee revenue growth av-

eraged more than 3% per year. Blame softening prices for microprocessors: Intel's revenues this year should climb 16%, predicts Merrill Lynch & Co., one-third lower than its average growth rate since the mid-1990s.

HIGHER RATES. Another cause for concern: softening capital spending, especially in outlays for computers, software, and other efficiency-boosting equipment. Those purchases have been important in spreading the productivity miracle elsewhere throughout the economy. But the BEA said they grew at an annual rate of only 6.9% in the third quarter, vs 14.6% in the second quarter.

Some companies, like the telecommunications firms, are cutting back spending because investments are just not yielding the returns they expected. Morgan Stanley Dean Witter analyst Simon Flannery expects capital spending by five major carriers—AT&T, WorldCom, Qwest, SBC, and BellSouth—to slip slightly next year after rising 18% to \$52 billion in 2000. Semiconductor makers are also cutting back. Jay Deahna, also of Morgan Stanley, slashed his projection for chip sector capital spending growth next year in half to 10% to 15%.

Other companies are cutting back because higher interest rates and lower stock prices are boosting the cost of capital. Host Marriott Corp., the hotel chain, expects to cut its capital budget by 20% next year, in part because of its depressed shares. And rising energy prices also are taking their toll on corporate spending.

Not everyone is trimming. Pier 1 Imports, the home furnishing retailer based in Fort Worth, plans to spend 15% to 20% more on information technology next year. CEO Marvin J. Girouard says some will be invested in a new warehouse system to speed inventory turnover. That's the kind of efficiency-boosting IT spending Greenspan is betting will keep on coming.

But as in 1994, some other Fed officials are less sanguine. "I have to confess that (structural) productivity growth much above 3% to 3½% strikes me as pushing optimism pretty hard," Richmond Fed President J. Alfred Broadus said on Oct. 17. If he is right, this time around, both Alan Greenspan's record and the economy could emerge a bit worse for the wear.

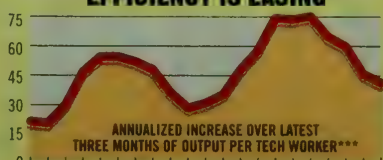
By Rich Miller in Washington with Andy Reinhardt in San Mateo, Wendy Zellner and Stephanie Anderson Forest in Dallas, and Steve Rosenbush in New York

PROFIT GROWTH IS WEAKENING...



* ADJUSTED TO REFLECT CURRENT UNIVERSE OF THE S&P 500
** 4Q 2000, 1Q THROUGH 3Q 2001, CONSENSUS FORECAST

...AND HIGH-TECH EFFICIENCY IS EASING



JAN. '99 SEPT. '00
▲ PERCENT
*** COMMUNICATIONS, COMPUTER EQUIPMENT, AND SEMICONDUCTOR INDUSTRIES

SMALL BUSINESS

THE LITTLE GUYS TAKE A BREATH

Expansion plans are put on hold as the economy slows

Even with the high anxiety afflicting the dot-com crowd lately, it's still tough to get a table for lunch at Chez Zee in Austin, Tex., one of the city's hottest bistros. So is owner Sharon Watkins feeling confident? Hardly. Fearful that a slowing economy could soon thin those long lines, she has postponed plans to shut down for a week to install a new kitchen floor. Instead, she's sticking with the old cement slab. She's also paying overtime instead of adding staff. "We're being much more conservative because we don't want to be caught overextended," says Watkins. "I've decided to focus on maximizing the dirt I've got."

As a bevy of uncertainties takes hold across the U.S., lots of small businesses are operating with similar newfound caution. Spiking oil prices, downbeat stock markets, and the possibility that a national economic slowdown—or worse—may be in the offing are all making a growing number of small businesses jittery. And when they get worried, watch out. Accounting for more than 40% of gross domestic product—and with far less financial cushion than their bigger brethren—small businesses often feel an economic chill ahead of others.

UNCERTAIN ELECTIONS. So why the worry? Owners of small companies, ranging from software producers to printing shops, are feeling uneasy about everything from tightened bank lending to the uncertain outcome of national elections. Wanda Rohm, owner of the Presto Printing shop in San Antonio, Tex., is typical. She says her business is doing well. Still, she's setting aside cash for the future. Says Rohm, "I want to be ready because I just can't foresee this [economy] continuing."

To be sure, many small-business people say their prospects are just fine, even if slightly dimmed. "Many companies are focusing on their costs and expense factors and still maintaining a strong bottom line," says Whitney Johns Martin, chief executive of Capital



Across America, a Nashville venture-capital fund specializing in women-owned businesses.

That's one reason a lot of small businesses are shelving expansion plans. The National Federation of Independent Business, in a national survey released on Oct. 16, reports that only 62% of companies it tracks made capital outlays in the past six months. That's the lowest share since February, when 71% had been shelling out money for capital expenses. And 34% of those companies said they were planning such capital expenditures in the coming three to six months, down from 40% in February. "We're facing a slowdown," says NFIB Chief Economist William C. Dunkelberg.

ROHM:
Setting
aside cash

Moreover, some small-business people are finding it tougher to get capital. Banks have been tightening up on lending requirements

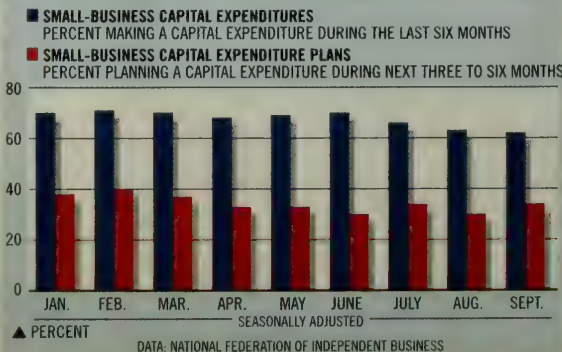
as they run into rising delinquencies. Loan officers surveyed by the Federal Reserve have reported a "firming" of business lending practices to both small and large businesses, though small outfits depend far more on banks than their bigger cousins. More than half the banks questioned have hiked the premiums charged on riskier loans since last spring. That, and higher interest rates engineered by the Fed, are driving up costs for some small businesses and shutting off the spigot for others.

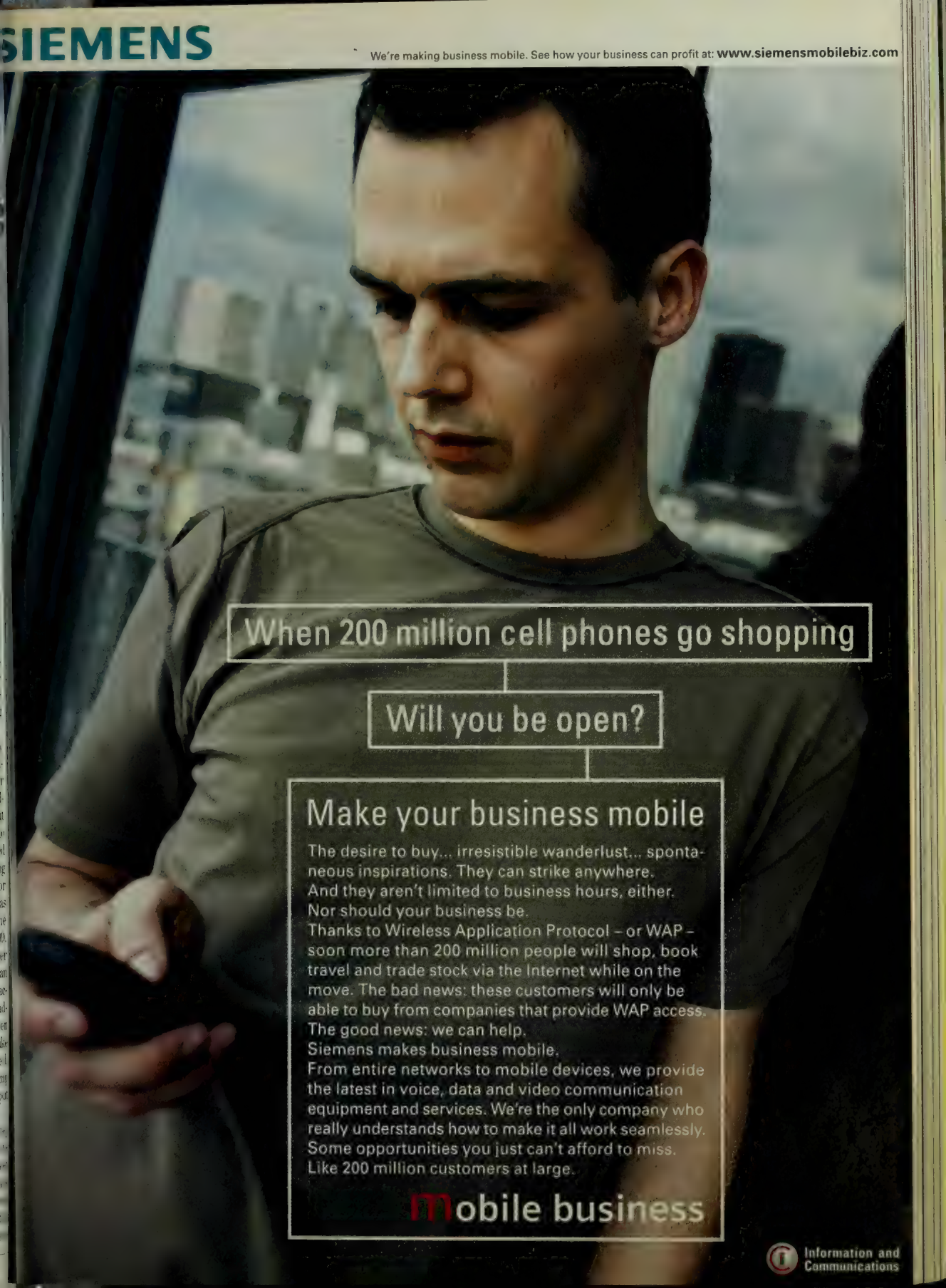
Tight credit, for instance, recently made strong headwinds for Holly Marine Towing Inc., a tugboat operator based in Chicago. When Holly Headland, the company's president, went out in September to borrow \$2 million to build four new barges, she was asked for elaborate business plans, including predictions of revenues and income for the coming five years. The scrutiny was far tougher than the last time she

sought to borrow, in late 1999. Lenders then asked for fewer questions and offered her a loan at the prime rate; now she's facing a point above prime. Headland, whose business has been growing, says she'll have to take the terms she's been offered. "I'm going to have to jump through the hoops that they put up," she says.

As some bankers see it, they are administering tough love to businesses that haven't seen hints of lean times for years. "This generation has never lived through a downturn, and this could provide a lesson in eco-

SMALL-BUSINESS WORRIES?





When 200 million cell phones go shopping

Will you be open?

Make your business mobile

The desire to buy... irresistible wanderlust... spontaneous inspirations. They can strike anywhere. And they aren't limited to business hours, either. Nor should your business be.

Thanks to Wireless Application Protocol – or WAP – soon more than 200 million people will shop, book travel and trade stock via the Internet while on the move. The bad news: these customers will only be able to buy from companies that provide WAP access. The good news: we can help.

Siemens makes business mobile.

From entire networks to mobile devices, we provide the latest in voice, data and video communication equipment and services. We're the only company who really understands how to make it all work seamlessly. Some opportunities you just can't afford to miss. Like 200 million customers at large.

mobile business



Information and
Communications

conomic ups and downs," says Eddie Safady, chairman of the independent Liberty Bank in Austin, Tex. He's demanding more collateral and giving each loan a tough review, arguing that the approach will actually help his small-business clients to plan better. Says Safady: "Sometimes a wet blanket in the face is good."

E-COMMERCE RETRENCHMENT. Such pull-backs by lenders have their own ripple effect. Hydro-Environmental Technologies Inc., an Acton (Mass.) company, has been seeing softness in the business it runs doing environmental assessments for banks planning to make property loans. So President Hayden S. Solomon is hold-

ing back on hiring and spending. With interest rates up, he adds, "I'll repair my old trucks rather than buy new ones."

Not surprisingly, the retrenchment is most intense among e-commerce outfits, where poor cash flow, scant earnings, and draconian downsizings are most pronounced. "We are definitely seeing a slowness in the market," says Michael Meyer, co-founder of the New York Internet consulting firm Snickelways Interactive Inc. "People are not spending as quickly on technology." Indeed, while small-business investments in technology appear to be up an average of 7% this year, that's more restrained than last year's 9% rise, ac-

cording to preliminary results of a survey of 650 companies by International Data Corp., a Framingham (Mass.) market-research firm.

For most small companies, the byword is caution—though not to the point of paralysis. "We're back to realistic expectations," says Capital Across America's Martin. Big Business, beware: Martin has lots of company. That's why now isn't such a bad time for much larger companies to lower their sights as well.

By Joseph Weber, with Ann Therese Palmer, in Chicago, Lori Hawkins in Austin, and Hilary Rosenberg in New York

AUTOS

GM WANTS TO REINVENT THE SMALL CAR

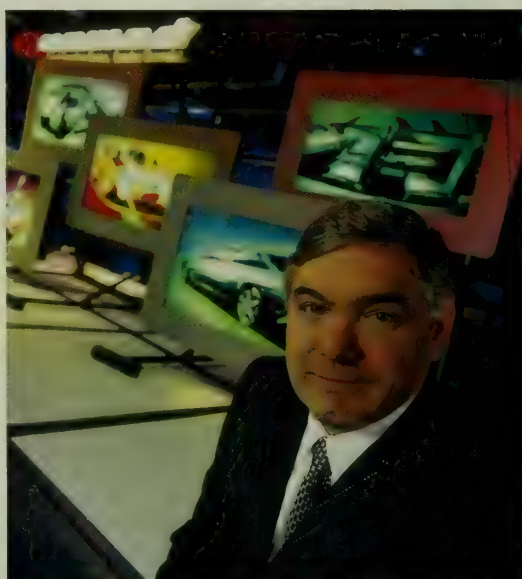
To regain market share, the new focus is on entry-level models

General Motors Corp. has made plenty of promises in the past several years. More often than not, though, the world's largest auto maker has disappointed: Missing market share targets became so common in the 1990s that GM executives all but swore them off.

Now GM wants industry watchers to believe those days are over. In an Oct. 31 speech at a Las Vegas trade show, Ronald L. Zarrella, president of GM North America, made a bold new claim. "We will have so many new cars that I expect market share to go up," he said. Most surprising, Zarrella predicted that GM would gain share in one of the industry's coldest and least profitable segments: entry-level vehicles. "It's an area where we've been getting killed," he conceded in an interview with *BUSINESS WEEK*. But over the next several years he thinks GM can make some headway.

So how is GM planning to rev the entry-car engine? It will try to lure younger buyers by rolling out seven vehicles between 2002 and 2004. Costing roughly \$20,000 or less, they'll range from compact sedans to midsize pickups.

Some of those models will be re-



ON A LIMB: Zarrella plans seven launches by 2004

designs of older cars. The slumping Saturn S-series and Chevrolet Cavalier compacts will be completely reconfigured in favor of more refined cars with better performance and improved interiors. And Chevy will pump up the size of its low-end S-10 pickup, turning the inexpensive compact into a midsize. But the lineup won't be entirely made up of revamps. Pontiac will add the desperately hip-sounding Vibe, a small sport wagon. And Chevrolet will launch

a vehicle that crosses a small car with a sport utility vehicle.

For now, GM's plans have won cautious praise. Says Merrill Lynch & Co. analyst John A. Casesa: "It all sounds good on paper, but it depends on the execution." Moreover, he doesn't expect the execution to be cheap. Producing such a varied lineup will cost at least \$2 billion, Casesa estimates.

To cover that tab, GM will jointly develop some of its new models with other carmakers who will introduce similar vehicles of their own. It will split the expenses for its new midsize pickup with Isuzu, for example, while Suzuki will help pay for the Chevrolet crossover sport utility. In both cases GM will be able to share costs for tooling, parts, and engineering and spread them over the sales volume of vehicles sold by both companies. Also, the Cavalier will share many parts with the Opel Astra developed by GM Europe.

EATING DUST. Will that be enough for GM to improve its recent record? In the past year, it has brought out two cars that have struggled to appeal to the growing youth market. The Saturn L Series midsize sedan, launched a year ago with plans to sell 200,000 cars a year, has sold fewer than 75,000. Meanwhile, only 6,700 Pontiac Aztek SUV have sold in three months.

GM can't blame the market for the poor performance. Competitors such as Volkswagen and Honda Motor Co. continue to win over young buyers. And Ford Motor Co.'s Focus compact was the best-selling car in the world in the first half of this year. Zarrella readily concedes that GM will never return to its one-time dominance when it had 50% of the U.S. auto market. But if these cars don't hit, even GM's current narrow lead—it holds 28% to Ford's 24%—could dwindle.

By David Welch in Las Vegas



A TEXAS INSTRUMENTS TECHNOLOGY

PROJECT YOUR PASSION WITH BLAZING DIGITAL LIGHT.

Bright ideas deserve a projected image with the brightness to match. And thanks to Digital Light Processing™ technology, Texas Instruments is pioneering the new era in digital projection. With DLP™ imaging technology, you can project the highest level of brightness with unsurpassed levels of color and contrast. So now you can make brilliant presentations even in a well-lit room. Our innovative DLP™ technology enables leading manufacturers to create the world's lightest and brightest projectors. In fact, DLP™ technology is behind a new category of ultralight, microportable projectors that are half the size and weight of competing technologies. From microportable and large-screen projectors to high-definition home entertainment and digital cinema, look to the leader in digital projection technology. Look to TI DLP™ technology. To find out more about DLP™ processors and the products using this technology, visit our Web site or call 1-888-DLP-BY-TI.

www.dlp.com

Digital Light Processing, DLP and the DLP logo are trademarks of Texas Instruments. Texas Instruments is not responsible for the content of this advertisement. ©2004 Texas Instruments. 0000-0000-0000-0000

DIGITAL LIGHT PROCESSING: DEMAND VISUAL EXCELLENCE

 **TEXAS
INSTRUMENTS**

COMMENTARY

By Amy Barrett and Louis Lavelle

IT'S GETTING LONELY AT THE TOP. TOO LONELY

Retirement just isn't what it used to be for some onetime stars of Corporate America. Just ask Henry Schacht, who successfully ran Lucent Technologies Inc. from 1995 to 1997. Or Paul A. Allaire, Xerox Corp.'s much-celebrated chief executive officer of the '90s. They've joined an exclusive—but recently fast-growing—club: CEOs who have been called back to duty after their successors were shown the door. The problem? There were no internal candidates ready to step into the top job.

So is Corporate America facing a CEO shortage? In some senses, it is. Major U.S. companies appear to be ousting their leaders more quickly than ever before. Worse, many seem at a loss as to how to fill those empty corporate thrones. And that is only likely to increase the already fierce competition for proven executives. "It's at a crisis level," says Patrick S. Pittard, chairman of executive search firm Heidrick & Struggles International Inc., of the talent shortage. "And it will only get worse."

NO PATIENCE. In the past year alone, Procter & Gamble's Durk I. Jager, Gillette's Michael C. Hawley, and Coca-Cola's M. Douglas Ivester have all been pushed out. And on Nov. 1 came another casualty: Robert E. Knowling Jr., chief of high-speed Net-service provider Covad Communications Co., resigned in the wake of a larger than expected loss. According to Chicago-based outplacement firm Challenger, Gray & Christmas Inc., 129 CEOs of companies large and small left office in October alone, up from 60 a year earlier.

What's going on? For starters, with Wall Street investors and company boards increasingly impatient for results, CEOs are getting bounced more quickly than ever. Imagine a CEO today blowing a product introduction the way Roberto C. Goizueta did back in 1985 with New Coke—and lasting more than another decade at the helm.

At the same time, corporate boards, particularly those that have hit rough waters, are more bent than ever on



landing a marquee-name CEO to calm—some would say placate—Wall Street. That narrows the candidates and puts huge pressure on the incoming stars to get results. Too often, that leads to earnings projections that can't be met.

Last, rapid technological change, as well as global consolidation in industries from banking to aerospace, means companies need CEOs skilled in running sprawling enterprises. That calls for an ability to manage complexity that many upcoming leaders don't learn at

individual businesses. "The scale [of these companies] is something many executives haven't been exposed to," says Dennis C. Carey, vice-chairman at executive recruiter SpencerStuart.

The result: more companies chasing a select group of brand-name executives. And the competition is likely to drive up already hefty CEO salaries. "We'll see proxy shock for years to come," says Heidrick & Struggles' Pittard.

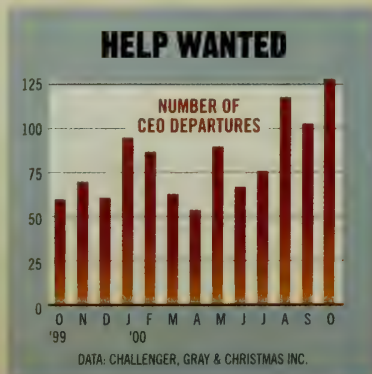
OLD REMEDY. That's why companies may have to cast a wider net for CEO talent. Jeffrey A. Sonnenfeld, president of the nonprofit research group The Chief Executive Leadership Institute, says more boards will turn to executives from other industries. Companies will also have to be more flexible on age, hiring either older execs or younger, less tested managers for the top job. Recruiters say Coca-Cola's recent hiring of 74-year old former President Donald R. Keough as

an adviser is a sign that companies are ignoring age in favor of talent.

Of course, much of this scramble for talent could be avoided. According to a survey by the National Association of Corporate Directors, a startling 45% of boards at companies with sales in excess of \$500 million have no meaningful process for grooming potential CEOs. Corporate governance pros agree companies have to do a better job of drilling down into the organization to spot and nurture future stars early in their careers. "My advice to other boards...is to do your succession planning on a continuing basis," says George H. Heilmeyer, a director at Compaq Computer Corp.

The computer maker selected insider Michael D. Capellas to lead the company last year and has so far been rewarded with strong sales growth. That success stands in sharp contrast to the churn now taking place in much of the rest of Corporate America.

Barrett covers corporate strategies from Philadelphia; Lavelle covers management from New York.



Advanced Solutions

NEC INTERNET SOLUTIONS
SOFTWARE
APPLICATIONS

MANAGING INFORMATION NETWORKS FOR KNOWLEDGE AND SECURITY.

NEC knowledge management software can give your entire organization a single point of access to information throughout your enterprise and across the Internet. All while maintaining the highest levels of security. As the second largest producer of new U.S. patents, NEC can offer you breakthrough solutions in networks, computer systems and semiconductors. Take your business to new levels of success with NEC.

imagination solutions.

NEC

www.nec.com

COMMENTARY

By Jay Greene

THE NEW FEATURE MICROSOFT NEEDS MOST: SAFEGUARDS

On Oct. 14, a hacker created a rogue computer account at Microsoft. Within hours, a few more popped up. That was a Saturday. By the middle of the next week, someone had set up about 25 unauthorized accounts and was rummaging through Microsoft's internal computer network, trying to set up additional accounts with access to increasingly privileged corporate data. The company says the hacker did not steal or alter any products but might have peeked into highly proprietary source code for a future product.

Any corporate network can be hacked. But Microsoft's failure to defend its own fortress raises new doubts about security. For years, cybervandals have exploited holes in its software. This spring, the Love Bug paralyzed e-mail systems around the world, taking advantage of security gaps in the company's Outlook e-mail, contact management, and calendar software. This time, Microsoft has fallen prey to vulnerability of its own design. "Shame on Microsoft for letting this happen,"

hackers toppled a series of giant Web sites—Yahoo!, Buy.com, eBay, Amazon.com, and CNN—like so many dominoes. In these attacks, hackers exploited chinks in the Unix operating system. Those holes allowed them to send countless requests for information to the targeted Web

only after the virus spread. "With Microsoft, security is always applied as a Band-Aid," says Avi Rubin, principal researcher at AT&T Labs and co-author of *Web Security Sourcebook*.

PASS THE BUCK. The biggest problem is Microsoft's insistence on loading its software with more and more features. That sounds great, but nearly every new feature creates new vulnerabilities for hackers to exploit. The QAZ virus—allegedly the tool hackers used to crack the Microsoft network in October—takes advantage of file-sharing capabilities within Windows. Businesses want workers to collaborate on documents. But the ability to do that opens the door for QAZ to quickly spread across a computer network.

Microsoft's response, even now, is to pass the buck. It says that customers are more interested in the latest feature than the tightest security. "There are trade-offs," says Steve Lipner, manager of Microsoft's security response center. "But we've got to run a successful business."

Having said all that, the fact remains that Microsoft products are improving. Its Windows 2000 operating system, launched in February, includes scores of network security measures. "They are definitely making progress," says Tom Noonan, chairman of Internet Security Systems Inc.,

an Atlanta security monitoring and management company.

But if there is any lesson from the October Microsoft break-in, it's that computer security isn't absolute. Everyone must try harder. Perhaps that's the biggest reason of all for Microsoft to make security Job No. 1 in software design.

Seattle correspondent Greene covers Microsoft.



HACKERS The U.S.

software giant must become a model for other manufacturers—by making its products less vulnerable

says David J. Brumley, a Stanford University computer security officer who has helped the FBI track down hackers. "They are getting bit by their own bugs."

HARROWING. That's an intolerable situation for any company of Microsoft's stature. Its Windows operating system powers 9 of every 10 personal computers sold. Its Office word processing and spreadsheet software are nearly as widely used. As long as such products are vulnerable, the potential for havoc remains huge.

To be fair, Microsoft has no monopoly on hackable software. For two harrowing days last February,

sites, gumming up the works and bringing the sites to their knees.

Microsoft's software is a favorite target. Part of the reason is the security gaps in its software, which have long earned the ire of software experts outside the company. Take Microsoft's Outlook program. It has a nifty feature that makes it a snap to create an e-mail with a single mouse click from inside the address book program. But the Love Bug hackers exploited the feature when they created a program that shoots contaminated e-mail off to everyone in a target's address book. Microsoft issued a software patch to address the problem

BusinessWeek online

For more coverage, see our Security Net column at www.businessweek.com/today.htm

ANTIC OCEAN

FRANCE

The Tour de France,
92:33:08. Fast.

ALGERIA

Fly Like an Eagle.™



Delivery around the world.
Guaranteed fast.



Introducing
Global Express
Guaranteed.™

Guaranteed delivery to over 200 countries and territories in as little as 2 business days,* or your money back. International transportation and delivery provided by DHL Worldwide Express.® Now when it comes to shipping overseas, you'll know which team to ride with.



UNITED STATES
POSTAL SERVICE

Proud sponsor of the
U.S. Postal Service
Pro Cycling Team

EQUITIES

THE BUSHDAQ VS. THE GOREDEX

Wall Street tracks which stocks will gain from which candidate

ELECTION 2000

On Aug. 17, Vice-President Al Gore used his speech to the Democratic National Convention to criticize big tobacco companies and pharmaceutical manufacturers. The next day, shares of Philip Morris Cos. dropped 5% and the American Stock Exchange pharmaceutical index was nicked 2.1%.

For good reasons, ups and downs in this fall's White House race between Gore and George W. Bush have trig-

gered more ups and downs than usual in the stock market. For starters, the election is coming on the heels of a 10-year bull market. During that period, nearly half of American households—a record—have come to own equities. "More people are tuned into what moves stocks than in previous elections," says Charles Gabriel, senior political analyst at Prudential Securities Inc. "The new 'investor class' is asserting itself."

Consequently, as rhetoric from both sides has favored or targeted various

industries, Wall Street has reacted. Investors have bought and sold related companies on the perceived strength and weakness of each candidate.

Several investment firms have gone so far as to create indexes of stocks that they believe will benefit from either a Bush or a Gore win. Wall Street consultancy ISI Group and investment firms Lehman Bros. and Prudential Securities have each come up with portfolios of so-called Bush stocks and Gore stocks.

DRUG BOON? ISI's Bush index is weighted toward drugmakers, defense contractors, tobacco, Microsoft, and mutual funds. The rationale: Investors believe Bush is less likely than Gore to try to control drug prices, but would likely boost defense spending. They also think a more probusiness Bush would shelve the federal

tobacco lawsuit and shy away from a Microsoft breakup. And Bush would spur investment by privatizing Social Security and expanding IRAs—a boon to financial firms.

The Gore index put together by ISI favors a different crowd. It includes environmental consultants, Microsoft's competitors, government-sponsored entities such as Fannie Mae, and pharmacy benefits managers. ISI reasons Gore would increase environmental regulation and pursue a breakup of Microsoft. His Administration would abandon attempts by House GOP lawmakers to overhaul Fannie Mae and enlist benefits managers like Express Scripts Inc. to help control drug prices. The Gore index also includes short positions. The bets on which stocks will fall include drugmakers, tobacco companies, and HMOs, since Gore has vowed to crack down on each.

So how well have the indexes done? When Gore pulled ahead in Bush in late August through early September, his index outperformed Bush's by 6%. And when Bush gained an edge in early October following the debates, his index beat Gore's by 6%. Currently the indexes slightly favor the stock that would benefit under Bush.

That reflects most equity investors' belief that Bush would be more market-friendly than Gore says Kim Wallace, Lehman's chief political analyst. However, he adds, "the outcome is unlikely to be adverse for the market under either candidate." Reassuring as that may be, it doesn't stop investors from putting down their bets.

By Laura Cohn in Washington



HOW INVESTORS COULD FARE...



...IF GORE WINS



DRUGS A cap on drug prices would likely hurt pharmaceutical makers like Pfizer and Bristol-Myers Squibb. But it could help drug-benefit managers such as Express Scripts and Caremark Rx.



POLLUTION CONTROL Gore's policies could lead to more hazardous-waste-disposal programs. That would help the likes of Tetra Tech, an environmental services outfit, and Syntroleum, a synthetic fuel maker.



HMOs A tougher patients' bill of rights could limit cost-cutting at HMOs, lowering earnings of companies such as Aetna and UnitedHealth Group.



DEFENSE Gore has proposed modernizing equipment and investing in advanced weaponry. That should lift Loral Space & Communications and Lockheed Martin.

...IF BUSH WINS



TOBACCO A Republican winner could curb government action against cigarette makers such as Philip Morris and R.J. Reynolds.



TECHNOLOGY A less activist Justice Dept. might end the threat of a Microsoft breakup. Rivals such as VA Linux Systems and Red Hat Software could suffer.



FINANCIAL SERVICES Bush would encourage investment by privatizing Social Security and expanding IRS accounts. Mutual-fund companies and brokerage firms would reap the rewards.



DEFENSE Bush says he'll increase military spending, particularly for R&D and technology. That will help companies such as General Dynamics and Northrop Grumman.

DATA: ISI GROUP, PRUDENTIAL SECURITIES; BW



**Light is the source of life.
With Alcatel Optronics, light is also
the source of the Internet.**

With the Internet or telecommunications networks, you need to communicate instantly. Alcatel Optronics designs and produces components that transport information in the form of light via optical fibers. By providing ultra-fast and reliable data transport solutions, Alcatel Optronics, one of the world leaders in optical components, gives the Internet its real speed: that of light.

Alcatel, world leader in optical networking.



ARCHITECTS OF AN INTERNET WORLD

EDITED BY ALETA DAVIES

VIACOM VIEWS ANOTHER TARGET

VIACOM APPEARS INTENT ON gobbling up the cable-TV dial. The company that brings you MTV, VH-1, Nickelodeon, and National Network (formerly Nashville Network) is weighing an offer to buy BET Holdings, which operates cable channel Black Entertainment Television, say sources close to Viacom. BET, with 62.4 million homes, would make Viacom a media leader for the African American market, since its United Paramount Network already targets the group. When news of the talks broke on Oct. 31, the companies had no comment. But a Viacom offer, which is said to be in the \$3 billion range, fits into CEO Sumner

Redstone's goal to be the dominant player in cable programming. For BET's major investor and chairman, Robert Johnson, cash from the deal could boost his plans to launch a regional airline in the Washington, D.C., area (page 192).

DOCOMO IS CALLING ON AT&T

MOBILE WEB PIONEER NTT DoCoMo is in talks about taking a minority stake in AT&T Wireless. For DoCoMo, a 10% to 20% stake would help expand its reach beyond Japan. It would also help establish its technology as a global standard. AT&T could use DoCoMo's help in the mobile Web business, where it faces rivals such as Sprint PCS. The investment, valued at up to \$10 billion, would also help AT&T pay for the radio spectrum necessary for high-speed services.

THE YEAST IN FIRST UNION'S NUMBERS

A GLANCE AT FIRST UNION'S third-quarter results shows a bank that's turning around. Deposits are up, while bad loans have barely risen. Not so fast, says analyst Andrew Collins of ING Barings. The numbers were helped by the transfer of \$710 million in loans to the "held for sale" category, a controversial accounting move that averts the need to up loan-loss reserves.

The bank says the move is part of an overall restructuring and that just \$46 million of the \$710 million could be classified as nonperforming. CEO Ken Thompson is trying to boost First Union's credibility after several botched mergers.

DOT-COMS' LOSS, BIOTECH'S GAIN

LOOKS LIKE IT'S BACK TO basics for venture capitalists.

HEADLINER: WILLIAM P. SOVEY

A THREE-YEAR COFFEE BREAK

In late 1997, William P. Sovey turned over the chief executive's office at what was then Newell Co. to John J. McDonough. On Nov. 1, Sovey took it back.

Only eight days after reporting flat operating earnings for the third quarter and warning that its 2001 profits would be no higher than they were in 1997, Newell Rubbermaid Inc. announced that Sovey has come out of retirement to fill in as CEO until a permanent successor can be hired next year. McDonough's downfall? In 1999, he directed the \$5.1 billion takeover of Rubbermaid,

vowing to "Newellize" the household-ware business by wringing out costs. But the merger never lived up to its promise.

Sovey, 67, ran the Freeport (Ill.) consumer-products company from 1992 to 1997, when he became chairman. Analysts expect little change from the interim team. He, too, practices Newellization, the company's term for buying underperforming companies and boosting margins. Investors don't have high hopes, either. Newell's shares, down 33% this year, lost 6¢ more, to close at \$19.13.

By Michael Arndt



CLOSING BELL

ONE FELL SWOOP

WorldCom's long-depressed stock had been inching back up in the past 10 days, but it was knocked to its knees again on Nov. 1. It fell more than 21% in a day, to 18%, after WorldCom lowered its earnings estimate for the second time in six months. WorldCom said it was largely because of an accelerated decline in long-distance revenues. Analysts also didn't much like its plan to issue two tracking stocks—one for its data business and the other for consumer long distance—early next year.



For the second quarter in a row, money put into venture-backed companies fell, by 6%, to \$16.1 billion, while the number of deals dropped by 16%. Researcher VentureOne says that's largely a result of a falloff in funds backing dot-com deals in the business and consumer sectors.

In contrast, traditional high tech, from Web infrastructure to software and semiconductors, saw upticks in money raised and number of deals, says VentureOne. Plus, health care is coming back. A record \$1.6 billion went into biotech and medical-devices and -services newcomers, up 32% from the previous quarter.

CAN AETNA CURE ITS HMO?

DESPITE THE GROWING PROFITS of its HMO rivals, Aetna is still struggling to boost its health-care business. Rising medical costs were largely re-

sponsible for a 14% drop in third-quarter earnings. With the planned December sale of its asset-management unit to Dutch giant ING, investors want assurances about the nation's largest HMO. Dr. John W. Rowe, the new head of its health-care unit, insists the problems are fixable and that Aetna will be profitable next year. Meanwhile, Aetna faces fourth-quarter charges of at least \$500 million, or \$3.50 a share, from costs associated with the ING deal and exiting its unprofitable Medicare operations.

ET CETERA...

- Berkshire Hathaway will buy the Lloyd's of London underwriting unit of CGNU.
- Revlon will close three plants and fire 1,115 employees—13% of its workforce.
- GM's U.S. auto sales rose 7% in October, while Ford fell 6.3%.



There's no better way to fly.

Flying means more to us than getting you from point A to point B comfortably and hassle-free. For us, flying is a passion. A passion that has made us what we are today: Airline of the year 2000*. And with over 100 European destinations, there really is no better way to fly. For reservations, call your travel agent, call Lufthansa at 800 645-3880 or visit www.lufthansa-usa.com

*Selected by Air Transport World Magazine.

Fly on Lufthansa or our Star Alliance partner United Airlines and you can accrue or redeem miles in either Lufthansa Miles & More or United Mileage Plus, in accordance with the terms and conditions of the programs. Lufthansa Miles & More members earn 2,500 bonus miles when booking their flight via our website for travel through March 31, 2001.



Lufthansa

A STAR ALLIANCE MEMBER 

Speak with more intelligence.



MARCEL MARCEAU

In forty percent of the world's new mobile phones, ST microchips give voice to those speaking. Even those not speaking.



Whether it's teleconferencing, checking e-mail, or just chatting, STMicroelectronics is part of the conversation. Our microchips run an astonishing 4 out of 10 mobile phones delivered in the world today. And we're working with leading mobile phone makers to create new appliances that *everyone* will be talking about.



We put more intelligence into everything.

STMicroelectronics (formerly SGS-THOMSON) • www.st.com • A world leader in semiconductors for consumer products, automotive, telecommunications, computer peripherals, industrial automation and control systems • For opportunities: <http://jobs.st.com>

STMicroelectronics

EDITED BY PAULA DWYER

HIGH TECH'S HONEYMOON ON THE HILL MAY BE ABOUT TO END

The 106th Congress may have deadlocked over a patients' bill of rights, Medicare reform, and a prescription-drug benefit for the elderly, but for high tech, it was a banner session. Silicon Valley won a five-year extension of tax breaks for research and development, relief from Y2K lawsuits, a green light for electronic signatures, fewer curbs on computer exports, a landmark trade deal with China, and more visas for highly skilled foreign workers. "We got everything we wanted," says Novell CEO Eric E. Schmidt.

But Schmidt and his fellow New Economy titans had better not get complacent. The tech-related issues that Washington will grapple with next year—from protecting privacy and intellectual property on the Internet to e-taxes and access to high-speed data pipes—are knottier and more divisive than those that dominated debate this year. Regardless of which party wins the White House or controls Congress, the political climate won't be as favorable. On top of that, the business environment next year could worsen. If, as many economists predict, growth slows and inflation creeps upward, the tech industry could find its political clout dissipating. "Next year is going to be very tricky," frets Edward J. Black, president and CEO of the Computer & Communications Industry Assn.

RACKS SHOWING. Case in point: online privacy. Lawmakers will be considering which kinds of personal data to protect, how to give consumers access to digital dossiers that Web companies keep on them, and whether individuals must give their consent before personal data can be shared.

This year, business closed ranks and fended off passage of privacy measures, arguing that they could stifle e-commerce in the bud. But as consumer unease over privacy invasions builds, cracks are showing in that once-solid phalanx. Hewlett-Packard, Intel, and America Online now say they back mod-

est protections. More companies likely will jump on board, while others will dig in their heels against any legislation.

Similar splits will emerge as pressure builds for the Federal Communications Commission to rule on whether cable operators must give competing Internet service providers access to their broadband pipes. It remains to be seen if file-sharing outfits like Napster have averted a legislative showdown with the recording industry now that Napster has agreed to pay royalties to Bertelsmann (page 46) and other record companies.

Business will be even more divided over e-taxes. A three-year moratorium on taxing ISP fees and Internet sales expires next October. Governors, backed by developers and retailers, are willing to accept a ban on access taxes in return for requiring e-tailers to collect sales taxes once states adopt a simplified tax system.

ISPs such as AOL and Microsoft Corp. argue that even a reformed tax code will still be too complicated for online merchants. But "with the economy slowing, states are more nervous about losing tax revenues," says Harris N. Miller, president of the Information Technology Assn. "It will be tough to work out a deal."

Tech's appeal as the engine of growth is losing some of its luster as dot-coms run out of money, driving down stock prices. Still, industry political contributions are soaring (page 171). Computer-related companies and their execs

have given \$24 million to candidates and parties through Sept. 30, almost three times their rate for the entire '96 cycle, according to the nonpartisan Center for Responsive Politics.

That puts high tech on a par with entertainment and oil and gas interests. But lobbyists for those industries would be the first to warn their tech brethren that it will take more than money to make their policy wishes for 2001 come true.

By Amy Borrus, with Howard Gleckman and Catherine Yang



BUSH: Tough issues ahead?

CAPITAL WRAPUP

ART DOES PAY

► Political fund-raisers are finding innovative new ways to raise cash (BW—Oct. 9), and it's paying off. In October, the Democratic National Committee raised \$2.5 million with an online auction of art and the services of entertainers. Venture capitalist Alan J. Patricof paid \$140,000 for a Joel Shapiro sculpture. Hotel mogul Jonathan Tisch paid \$60,000 for a guitar designed by architect Frank Gehry. And DNC Treasurer Andrew Tobias spent \$5,000 for Tony Randall's services as a butler.

NO BARS TO VOTING

► The NAACP is pulling out all the stops in its drive to get out the vote. Its boldest move: registering 300,000 new voters in jails and prisons. Convicted felons can't vote, but those jailed for other crimes, as well as folks awaiting trial, may still cast ballots. It's not clear that all of these newly registered voters will be able to get to the polls, but the effort is scaring some candidates, such as Alabama sheriffs, who are elected.

PAINKILLERS VS. A TAX CUT

► Congress' big \$240 billion tax cut bill is being jeopardized by an obscure measure that would restrict the ability of doctors to prescribe morphine and other powerful pain medications to terminally ill patients. The provision was quietly slipped into the revenue bill by Senator Don Nickles (R-Okla.), partly as an attack on an Oregon law allowing assisted suicides. But Senator Ron Wyden (D-Ore.) has blocked Senate consideration of the entire tax package in an effort to kill the drug provision.

JAPAN

HIGH TECH ROARS AGAIN

Reforms in Japan bring profits back, but more changes are needed

When Koji Nishigaki took over as president and CEO of NEC Corp. in March, 1999, few were willing to place long-term bets on the high-tech manufacturer. Like most leading Japanese makers of chips and computers, NEC was an ailing giant, staggering under years of sickly profits, poor management, and over-diversification. Nishigaki didn't waste time: He immediately began revamping management, slashing jobs, and unloading unprofitable units.

Today, NEC is reaping the rewards. For the six months ended Sept. 30, sales were up 9%, to \$23 billion, on an operating profit of \$690 million, compared with a loss of \$73 million for the same period last year. NEC also revised its yearly operating profit projection upward by 20%. "It's an enormous job to restructure," says Nishigaki. "But it's helping us recover."

BIG JUMPS. A similar sweet song is being sung at the headquarters of Hitachi, Toshiba, and Fujitsu, integrated electronics companies that manufacture and sell a wide range of products and services—from chips and computers to telecommunications gear and information systems. Thanks to robust demand for chips that power cell phones and other

gadgets, all are boasting big jumps in operating profits. And all but Fujitsu have revised upward their forecasts for fiscal 2000, which ends next March.

A high-tech comeback? Not quite yet. Investors, spooked by rising oil prices, a weak euro, and the specter of a global slowdown, have hammered the stock prices of Japan's electronics giants despite their solid earnings. Foreign investors, who own close to 30% of the shares in each of the companies, want to see more drastic restructuring and improved overseas investments. Not least among their concerns is that NEC and its rivals still depend on the fickle semiconductor market for 20% to 40% of their profits. Another slump in the chip market, along the lines witnessed in 1998-99, would certainly affect earnings.

But there's more to this recovery than a bounce in the chip market. Japanese consumers can't seem to get enough of the latest in portable, digital electronic gadgets. Digital cameras, notebook PCs, and handheld devices, all crammed with components made by the likes of NEC, Toshiba, Sanyo, and others, are flying off the shelves.

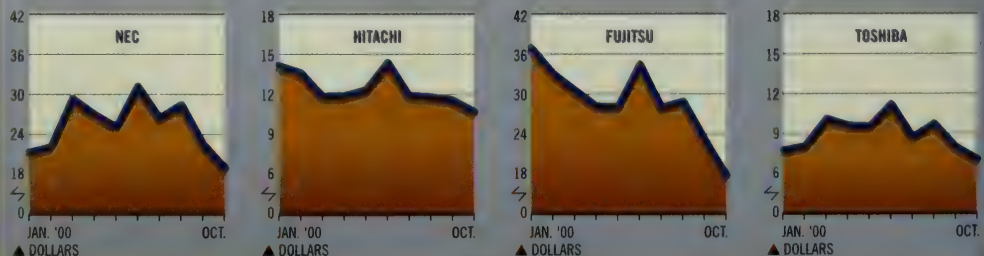
It's not just consumers who are shelling out the yen. Japan Inc. is spending heavily on new technology, which last year accounted for a record high 20% of private-sector investment. The trend promises to pick up this year



as companies shift to Web-based supply networks, serviced by the likes of Fujitsu and Hitachi. NEC and Fujitsu especially are benefiting from a surge in spending on telecom equipment and infrastructure. The shopping spree will only accelerate next year when Japan starts rolling out the world's most advanced, high-speed wireless cell-phone system. The government meanwhile plans to invest \$6.5 billion in information technology this fiscal year, 20% of it to be spent connecting offices and homes to a national fiber-optic network.

More important are the changes taking place within the companies them-

EARNINGS UP, STOCK PRICES DOWN



DATA: BLOOMBERG FINANCIAL MARKETS



sions. Tadashi Okamura, who became Toshiba's new president in June, plans to overhaul the company's chip operations, spin off money-losers, and redirect capital spending to such growth sectors as cell phones and notebook PCs.

Investors, however, are proving tough to please. The stock price of all these companies has declined since early this year (chart), paralleling the 20% drop in the TOPIX, or Tokyo Stock Price Index. On Oct. 31, Hitachi's share price fell to \$10.88, its lowest level this year, even though it announced that operating profit jumped 152% in the first half.

What gives? According to Steve Myers, industry analyst for Jardine Fleming in Tokyo, investors are more concerned about a global downturn than company specifics. He says they are all asking one question: "Is the U.S. economy headed for a recession?"

Contributing to the uncertainty is concern over memory-chip prices. Starting in 1998, when the industry went through a major slump, companies like NEC, Hitachi, and

Mitsubishi Electric suffered heavy losses that pushed them to the wall. "The market isn't being fooled," says business consultant Till Vestring, of Bain & Co. Japan. "Everyone is expecting these companies will be hit when this semiconductor cycle winds down."

SLOWDOWN? It's also not clear that the new company leaders are all true reformers. Since the beginning of Japan's recession, many executives have taken initial steps, then failed to improve shareholder value by boosting innovation and productivity or by beefing up corporate governance. That doesn't appear to be the case with Nishigaki, who impressed investors by meeting with them on Oct. 26 to explain NEC's interim results and announce a new corporate strategy. But executives at the other companies may put on the brakes now that they've hit their earnings targets.

That would bode ill for Japan's high-tech giants. Their future prosperity depends on transforming themselves from capital-intensive conglomerates into fleet-footed it companies. That means speeding up, not slowing down, on corporate reforms—especially given the prevailing uncertainty in the markets.

By Irene M. Kunii in Tokyo

A new generation of CEOs is dumping the old business model in favor of downsizing, cost-cutting, and spinning off superfluous units

TOKYO ELECTRONICS: CONSUMERS ARE SNAPPING UP THE LATEST GADGETS

elves. A new generation of pragmatic CEOs is abandoning the old business model, which stressed growth and job creation through diversification, with little regard for shareholder value. The new CEOs are downsizing, cost-cutting, and spinning off or merging superfluous divisions. As a result, according to Jardine Fleming Securities estimates, NEC's operating profit margin will rise from 2.2% in fiscal 1999 to 4.7% this year, Fujitsu's from 2.9% to 5.5%. "By Japanese standards," says Kevin Hebnitz, strategist for Credit Suisse Asset Management in Tokyo, "their restructuring has been impressive."

NEC's Nishigaki gets the highest marks. Over the past year, he has cut 300 jobs and is on track to attain his 2002 goal of eliminating a total of 15,000 jobs, or about 10% of the global workforce. He pulled the company out of the

money-losing consumer-PC market in the U.S. and agreed to consolidate memory-chip and optical communication operations with rival Hitachi. Nishigaki is shifting NEC's core business to Internet services, based on the company's Big Globe service provider, Japan's second largest. In July he unveiled a \$5.6 billion fund that will be used to buy stakes in small U.S. technology companies.

Nishigaki's counterparts at Fujitsu, Hitachi, and Toshiba aren't far behind. Fujitsu President and CEO Naoyuki Akikusa has shut down chip plants in Britain and Japan, and recently announced a halt to development of IBM-compatible mainframes by Amdahl Corp., Fujitsu's U.S. subsidiary. For his part, Hitachi President Etsuhiko Shoyama reorganized the sprawling conglomerate into 10 core divisions, giving each the autonomy to make investment deci-

AUTOS

WHAT'S THAT KNOCKING UNDER MERCEDES' HOOD?

Big losses at its minicar division—and growing competition

DaimlerChrysler's performance continues to disappoint. The \$512 million third-quarter loss generated by Chrysler is a drag on the entire company, slamming the stock and raising new questions about the wisdom of the monster merger that created the \$151 billion company two years ago.

The only thing the world's fourth-largest auto group seems to have going for it is the sterling Mercedes-Benz division, which chalked up a 15% sales jump in the third quarter. Mercedes appears within reach of selling more than one million cars and boosting profits by more than 10% in 2000. Affluent Americans and Europeans are snapping up the C-Class sedans, the sports utilities, and the road-hugging SLK convertible. "Mercedes-Benz is doing extremely well by any comparison in the world," DaimlerChrysler's embattled chairman, Jürgen E. Schrempp, told analysts in a teleconference on Oct. 26.

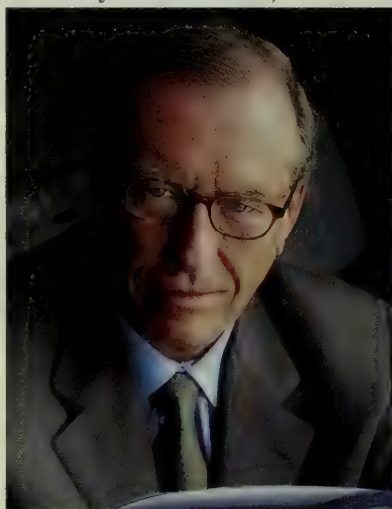
Impressive. But a close look at the numbers shows cause for concern even in Mercedes' performance. It's nothing approaching a Chrysler-level disaster. But margin pressures are building, and DaimlerChrysler will have to spend billions to keep its Mercedes division in mint condition.

Start with the margins. At 7%, Mercedes' margin is better than the industry average of 4% to 5%. But it looks thin next to the 11% that rival BMW has managed since it dumped Rover. And Mercedes' margins have narrowed more than half a percentage point in the past year, due to spending on five new or face-lifted models to be launched next year and persistent losses at the Smart minicar division. "In such a context, the higher expenditures are what you'd expect," says Jürgen Hubbert, head of Mercedes and Smart cars. As a result, operating profit in the third quarter, excluding exceptional items, rose 5%, to \$624 million, well behind the 15% sales increase.

But more worrisome was DaimlerChrysler's guarded outlook for next year. Chief Financial Officer Manfred

Gentz says Mercedes hopes to maintain margins. "Given the dollar's strength, and the full-year benefit of the C-Class, that was disappointing," says Deutsche Bank analyst Christian Breitsprecher.

The surge in fuel prices hasn't helped Mercedes either. Consumers are switching to models with fuel-efficient diesel engines, from which Mercedes makes less money. Franck Thomas, a Mercedes



executive in Paris, says diesel cars now account for 70% of sales on models offering both versions. Making matters worse, Europe's car market has begun to dip, and German car sales are down 11%. Still, Mercedes managed a 5% rise in its home market and a bigger gain in Europe.

Mercedes faces other challenges. Ford, Volkswagen, and Toyota are de-

veloping luxury models targeting the segment now dominated by Mercedes. In mid-2001, Ford is launching the X-type "Baby Jaguar," in the same category as the \$20,000 C-Class. Volkswagen will produce a D1 sedan next year to rival the S-Class, which starts at \$46,000. "It's a sign of the ever-growing competition that all the carmakers face today," says D. Garel Rhys, professor of motor industry economics at Cardiff University in Wales.

COST-SHARING. Mercedes, keenly aware of the threat, has an ambitious product rollout program to fend off competition. "We're working on the Maybach [limousine], we're working on the SLR [sports car], we're working on three new models for next year, and we're working on more which we're not revealing," Schrempp says.

A bigger lineup and higher volumes don't always boost margins, however. The popularity of the C-Class, one of Mercedes' smaller cars, actually hurt profitability.

The product mix may tilt further toward low-margin cars again next year, as two of the three new models are C-Class

SCHREMPP FIX

The Daimler chairman says new Mercedes models will fend off rivals to its hit C-Class sedan

variants. Meanwhile, analysts expect the Smart minicar division to lose about \$340 million this year fueling investor discontent with Schrempp's expansion into small cars. "We're a long way from seeing the rewards," says Merrill Lynch & Co.

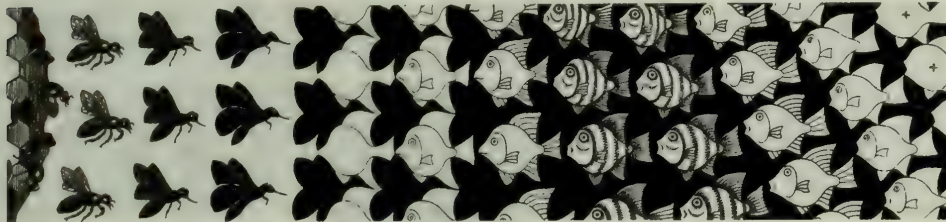
analyst Stephen Reitman.

Schrempp insists the strategy will pay off. The Smart unit and Mitsubishi Motors Corp., DaimlerChrysler's partner in Japan, will share the costs of developing the main components of a four-seater Smart to be launched in 2004. And although Schrempp stands firm that Mercedes and Chrysler must never use the same platforms, there's room to lower costs by pooling some technology and components, such as manual transmissions. Schrempp plans to proceed carefully to ensure none of the brands lose their distinction, "and definitely not Mercedes-Benz." It would be pity to dent the world-renowned brand as the giant company maneuvers down a hazard-filled road.

By Christine Tierney in Frankfurt with Anna Bauden in Paris



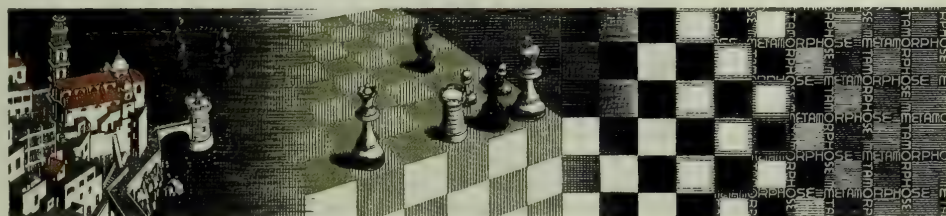
The problem



with most integration solutions



is they don't evolve.



Consider us Darwin.

SeeBeyond's infinite scalability has evolutionized the industry. We've processed a record-breaking 10 billion transactions in one day. Integrated thousands of disparate platforms. Handled 1300 customers globally, including Nike, Barnes&Noble.com and PETsMART. Won Product of the Year from *eAI Journal*. And partnered with the top three independent systems integrators. So rise to the top of the foodchain. Call us at 1-877-676-2877, or go to seebeyond.com.



EDITED BY ROSE BRADY

IS NATO ABOUT TO MAKE A BAD MOVE IN THE BALTICS?

For nearly a decade since the end of the cold war, the U.S. and its European allies have essentially written off Russia as a serious military threat. Even though the former superpower remains a nuclear player, it can't afford to maintain its once-formidable arsenal, and its conventional forces are in serious disarray. Even President Vladimir V. Putin has called for sharply scaling back to 800,000 troops from today's level of 1.2 million and reducing strategic nuclear weapons to 1,500 from the current 6,000 in exchange for similar cuts from the U.S.

But now, the U.S. is in danger of provoking a far more truculent defense stance from Russia. One hot-button issue is the awaited decision by the U.S. on a missile defense system that Russia adamantly opposes. An equally important but less-discussed point of tension is the planned expansion by NATO to Russia's borders by 2002. Both Presidential contenders, Al Gore and George W. Bush, support moving the NATO umbrella eastward to include the Baltic states of Lithuania, Latvia, and Estonia.

Such a move would go beyond last year's NATO admission of Poland, Hungary, and the Czech Republic, since it would mark the first time that a former Soviet republic would join the Western defense alliance. Conventional wisdom in Washington is that Russia probably can't and won't do anything to counter the NATO plans. After all, Soviet leader Mikhail Gorbachev didn't intervene as the Berlin Wall fell. His successor, Boris N. Yeltsin, allowed former Soviet satellites to join NATO, although he protested.

HAWK BAIT. Putin, however, is expressing increasingly vocal opposition to NATO expansion into the Baltics. In an Oct. 26 interview with French journalists, the Russian leader declared: "The reasons that brought NATO to life [a half-century ago] are no longer there. Yet NATO exists. It not only exists but is expanding. Moreover, it is expanding in the direction

of our own borders....Of course, this causes us concern."

Even more important, the plans by NATO and the Baltics are strengthening the political hand of hawkish defense officials to Putin's right. Key members of the defense Establishment such as Defense Minister Igor Sergeev are resisting efforts to pare Russia's strategic nuclear forces to free up resources for the conventional military. Instead, they want Russia to maintain a big nuclear stick to guard against a resurgent NATO. "NATO expansion pushes Russia toward more reliance on [strategic] nuclear forces," says Russian defense analyst Sergei Karaganov. He argues that incorporating the Baltics into NATO needlessly antagonizes Russia and is a "stupid" move for the West.

FORTRESS BELARUS? To be sure, no one expects Russia to go to war to prevent the Baltics from joining NATO. But there are nonetheless new signs of military activity on the ground. Even though NATO's decision is two years away the Baltic states are already moving to integrate their militaries into the alliance—establishing a common air-defense system compatible with the alliance's and tailoring their weapons ammo, and uniforms to meet NATO standards.

In response, Moscow is stepping up an alliance with next-door Belarus, which also has a border with Lithuania. For the first time in six years, Russian bombers and nuclear-missile carriers recently landed in Belarus on a training mission. And Belarus President Alexander Lukashenko wants Putin to deploy a joint force of 300,000 troops near the border with Poland.

If such developments continue, the stage will be set for a period of tension at NATO's frontier. It may not amount to a new cold war, but it could end up to be far from what the Baltics—and NATO—intended.

By Paul Starobin in Moscow, with Stan Crock in Washington and Alexander Mikhalechuk in Minsk



NATO trains in Estonia

GLOBAL WRAPUP

HYUNDAI'S LATEST WOES

► Hyundai Group founder Chung Ju Yung and his family face pressure from creditor banks and the government to sell personal assets to rescue the *chaebol's* heavily indebted construction arm. Hyundai Engineering & Construction Co. South Korea's largest construction company has been battling liquidity problems for months, turning to creditors for extra funds while promising to raise capital through restructuring.

Now, government-backed creditors are threatening to place the company

under court receivership unless the Chung family takes drastic steps to slash \$4.7 billion in debt. The company defaulted on \$20 million in maturing debts on Oct. 30 as creditors refused to lend a helping hand, and it only narrowly avoided insolvency by settling the sum the following day. With \$870 million in debts maturing in the next two months, Hyundai—and the Chung family—could soon face a new crisis.

MIDEAST HACKER WARS

► The Israel Defense Force is scrambling to fight hackers who have at-

tacked its Web site since violence recently erupted between Israel and the Palestinians. The IDF has asked AT&T for a backup Web server after a deluge of traffic from Lebanon, Egypt, and neighboring countries nearly closed down its site, which has been operating on a server of NetVision Ltd., Israel's largest Internet Service Provider. The Web sites of the Israeli Foreign Ministry and the Knesset were also closed down. But the conflict isn't one way: Israeli hackers have been blamed for putting an Israeli flag on the Web site of the Islamic group Hezbollah.

IS YOUR CONNECTION WITH XEROX GETTING A LITTLE FRAYED?



(Maybe you need a better connection.)

Is your connection to your current document output company not x-actly perfect? Then perhaps it's time to disconnect from them and connect to Savin.

After all, at Savin we not only connect you to the award-winning, multi-functional digital imaging systems today's networked offices require, we also connect you to smart, highly-trained Savin professionals. Men and women dedicated to making Savin the fastest, most responsive name in the business. And who are willing to do whatever it takes to give you the service and satisfaction you deserve.

To find out more about Savin's full line of black & white and full-color digital imaging systems, as well as our unshakable commitment to service, contact us at 1-800-234-1900 or www.savin.com. You'll be happy you made the connection.



savin

WE'VE GOT WHAT IT TAKES TO WIN YOU OVERSM

SAVIN CORPORATION, 333 LUDLOW ST., STAMFORD, CT 06904



BLACKBERRY WIRELESS EMAIL

BERRY DIFFERENT.

There's plenty of buzz out there. Everyone's rushing to promise wireless connectivity via everything from your phone to your organizer to your toaster! But let's face it. Those products were never built to handle the requirements of your corporate email system. BlackBerry™ is different. It's a wireless email solution that was specifically engineered to work with your business email. BlackBerry is designed to let you easily manage your existing email account on the go. It gives you the industry's most advanced wireless handhelds and the only completely integrated, end-to-end solution. No wonder BlackBerry is quickly becoming the corporate standard for wireless email. For business, it's simply better.

BlackBerry
has chosen to do one very difficult thing – business email – extremely well.”

BUSINESSWEEK



WWW.BLACKBERRY.NET

INFO@BLACKBERRY.NET


BLACKBERRY
WIRELESS EMAIL SOLUTION

Special Report



AMERICAN ICON: This 1930 photo of Ford's Rouge plant sold for \$407,500 in 1999

A FORD REDESIGN

Instead of abandoning the factory Henry built in 1917, Bill Ford aims to turn the Rouge into a Web-savvy, eco-friendly powerhouse

By Joann Muller

From the window of his office on the 12th floor of Ford Motor Co.'s headquarters in Dearborn, Mich., 43-year-old Chairman William Clay Ford Jr. has a clear view of the industrial legacy left by his great-grandfather, Henry Ford. It is the sprawling Ford Rouge Center, a manufacturing marvel that stands as an icon of America's industrial prowess in the 20th century.

Constructed from 1917 to 1925 on an arm of the Rouge River, there has never been anything like it in the world: Iron ore, coal, and other raw materials went in one end, and finished automobiles came out the other. During its heyday in the mid-1930s, the Rouge employed more than 100,000 people, cranking out a new car every 49 seconds. When workers changed shifts, the streets surrounding the Rouge were as crowded as Times Square on New Year's Eve.

But the Rouge has been in decline for decades. Many of the original 29 factories in the 1,100-acre complex are gone, the work handed off to outside suppliers running state-of-the-

art plants. Miles of railroad tracks that snaked through the Rouge have long since been abandoned. The steel division was sold off in 1989, and with it the docks where tons of iron ore were unloaded before being melted into steel. The old power plant, which once produced enough electricity to light up the city of Detroit, is idle following a devastating 1999 explosion. Today, Ford employs just 7,000 workers at the remaining Rouge factories and produces only one vehicle, the Ford Mustang.



1928 FORD MODEL A

Yet gazing out at those distant smokestacks, Bill Ford sees opportunity—a chance to build his own legacy at the company his great-grandfather founded. If tax breaks come through, Ford plans to announce on Nov. 14 that it will redevelop the site as part of Bill Ford's vision to balance lean manufacturing with environmental sensitivity. He calls it "sustainable manufacturing," an allusion to the concept of sustainable development, which means production techniques that minimize long-term environmental damage. A brand-new assembly plant will incorporate flexibility and Web-based technology with numerous environmental experiments,

**A LONG
AND
WINDING
ROAD**



**1921:
HENRY FORD
WITH A MODEL T,
BUILT BEFORE THE
ROUGE AUTO
PLANT OPENED.
ABOUT 1 MILLION
MODEL T'S WERE
PRODUCED THAT
YEAR**



**1937:
HENRY FORD
AND SON EDEL
REVIEW A MODEL
DEPICTING
RENOVATIONS
AT THE ROUGE**

Special Report



MORE GLASS, MORE GREEN: A computer rendering of the enclosed bridge that will link the assembly plant and paint shop

including the country's largest "living roof"—blanketed with plants for energy-efficient insulation—and the use of vegetation to rid the soil of contaminants. Ford CEO Jacques A. Nasser promises that it will be "an industrial icon as revolutionary for the 21st century as the Rouge was for the 20th."

Saving the Rouge is also a social statement, a commitment to working America. From its first days, the Rouge was a ticket to the middle class for thousands of immigrants and poor Southern workers—many of them black—who were lured to Detroit by Henry Ford's promise of \$5-a-day wages. That was more than most men of any color could earn in a week back then. A job at Ford gave blacks one of their first entrées into the American mainstream. Among them was Roosevelt Ford (no relation to Henry), a black cotton farmer from Clinton, Miss., who began working at the Rouge in 1924.

Since then, four generations of his family have worked there, a total of 10 Fords in all. They have survived bloody labor battles, ugly racial strife, and often difficult working conditions. And each generation has achieved greater prosperity than the one before. Today, Maria Ford-Conliffe, one of Roosevelt's granddaughters, is a senior manager at the Rouge, with a six-figure annual salary and a reserved parking space in front of the factory. In an era of dot-com millionaires, when blue-collar industries are dis-

tinctly out of fashion, reinvesting in the Rouge will ensure that the next generation—including Maria's two nephews, both in their 20s and employed at the factory—has a chance to follow the family footsteps into middle-class prosperity.

If Bill Ford's vision succeeds, it could be nearly as dramatic as his great-grandfather's was in his day. "It probably would have been a lot cheaper not to do this," concedes James J. Padilla, Ford's group vice-president for global manufacturing. Other companies, he says, would probably "lock the gates, turn your back on what you've got, and go someplace else." But as far as Bill Ford was concerned, that wasn't an option: The Rouge represents Ford's heritage. "If there is a symbol of the Ford Motor Co., it's the Rouge," says Ford. "For us to walk away would have been an absolute crime. We've become such a throwaway society—we just can't keep moving on and building new sites."

Ford executives insist that sound business, not social or environmental philanthropy, is driving their decision to remake the Rouge. Sure, the effort helps nurture the auto maker's image as a responsible company—



FIRST AND SECOND GENERATIONS: Roosevelt Ford (right) with son Alvin Ford in 1974

an image that sorely needs a boost after the debacle over faulty Bridgestone/Firestone tires on Ford's Explorers. It also cements the company's strong relationship with the United Auto Workers (UAW). Ford worked closely on the Rouge redesign with union officials, who give full credit to Bill



DURING THE DEPRESSION, THOUSANDS OF BLACK FAMILIES HEADED FOR DETROIT, LURED BY FORD'S PROMISE OF HIGH WAGES. THEY EARNED MORE THAN MOST MEN OF ANY COLOR COULD AT THE TIME



MAY 27, 1937: THE UAW'S RICHARD FRANKENSTEIN IS BEATEN BY FORD-HIRED THUGS AT THE GATE OF THE ROUGE

REPUBLICAN



DEMOCRAT



INDEPENDENT



**Allen
Edmonds**
For All Walks of Life™

Allen-Edmonds shoes are a perfect candidate for any voter. They come in styles from business to casual. Not to mention the widest selection available, from size 5-18, widths AAAA to EEE. Plus, with our exclusive Recrafting™ process, they'll easily outlast any campaign promise. For a catalog and nearest dealer, call 1-800-235-2348.

Shoes from top to bottom: Park Avenue, Woodstock, Holbrook

www.allenedmonds.com Made in USA (MKT)

Special Report



ABOVE THE FRAY: Computer rendering of the assembly plant, with skylights above the mezzanine-level walkways

Ford. "To me, he has a vision that's very refreshing," says Jerry Sullivan, president of UAW Local 600, which represents the Rouge workers.

But in the end, Ford's \$2 billion investment in the Rouge at the turn of the 21st century is really a bet on the future of manufacturing in the U.S. It's a wager that U.S. auto companies can produce competitively at home despite the fierce winds of globalization, which have spurred a steady shift of auto jobs offshore—by Ford no less than other manufacturers.

Roosevelt Ford was among the tens of thousands of poor Southerners who headed north to Detroit in the early 1920s when they heard about the fat paychecks Henry Ford was offering. A skilled mechanic, he landed a job as a millwright in the steel foundry, a hot and miserable factory where most blacks were assigned. He brought along Carrie Bruce, his childhood sweetheart, and the two married and had 12 children. He made a good living, but with so many mouths to feed, times were tough—especially during the Depression, when he was laid off from the Rouge. Roosevelt, who died in 1983, made ends meet by fixing cars and digging ditches before business picked up again and the Rouge hired him back in the foundry. "I never remember a day that we went hungry," recalls his second-eldest son, Alvin Ford, now 68.



**1946
LINCOLN CONVERTIBLE**

A "living roof" of plants will provide insulation that will cut heat and air-conditioning costs

In 1992, the Rouge was near death. Ford was planning to kill off the aging Ford Mustang and close the assembly plant for good. But local UAW leaders persuaded former CEO Alexander Trotman, then head of Ford's North American operations to redesign the legendary coupe and keep the plant open.

Ford agreed to invest in modern equipment—but only if the UAW went along with more flexible work rules. The cooperation was a breakthrough in Ford's labor relations, leading to a culture of employee involvement that has since spread to other Ford plants.

Still, the Rouge was living on borrowed time. When the new Mustang came out in 1994, demand soared and the Rouge hummed along. But Mustang sales slowed as competing models hit showrooms. Shutdowns were common and job security flared as an issue again.

Then, in 1997, Ford and the UAW struck a deal that clinched the Rouge's survival. The auto maker vowed to update the engine, paint, and frame factories and raze the antiquated Mustang plant to make way for a modern assembly plant that would build mostly pickup

trucks and sport-utility vehicles. The union, in turn, would continue to work on boosting efficiency. As a truck plant, the Rouge's future would be more secure.

Alvin Ford remembers the days when Rouge workers an



**1941:
WORKERS AT
THE ROUGE
TEST A
PRATT & WHITNEY
AIRPLANE
ENGINE**



**1945:
HENRY FORD II
TALKS WITH
EMPLOYEES
THE YEAR
HE SUCCEEDED
HIS GRANDFATHER
AS PRESIDENT**



A fabulous surprise in every pack.



ADOBE®
ACROBAT®

ADOBE
ACROBAT
BUSINESS
TOOLS

ADOBE
ACROBAT®
MESSENGER™

ADOBE
PDF
FORMS

Buy the complete version of Adobe Acrobat and discover features you never knew existed.

Sure, Acrobat® Reader™ has solved many of the difficulties you had opening documents. It's definitely a handy tool. But Acrobat Reader is just a small part of an even more powerful program — Adobe Acrobat. With the full version of Adobe Acrobat you too can make your own Adobe PDF files, creating attachments that will open and print easily. Fonts, colors, graphics — everything you send will appear just as you intended. And its brilliance doesn't end there. With Adobe Acrobat you have the ability to add comments to Adobe PDF files while the originals remain intact. You can even password protect and add digital signatures to your files. So explore the many facets of Adobe Acrobat and other Adobe ePaper® Solutions at www.adobe.com/fullacrobat. And prepare to be amazed.



Inspiration becomes reality.™

Special Report



managers saw one another not as collaborators but as enemies. During the Depression, wages were good, but the work was miserable—"the insecurity of employment, the military style of command, and the abuse people were subjected to," as Wayne State University labor-history professor Steve Babson puts it. Congress gave employees the right to form unions in 1935, but Ford refused to go along. Tensions grew, and in 1937, labor and management waged the bloody Battle of the Overpass at the Rouge's gates. Union leader Walter Reuther and others were severely beaten in front of the national media. Although just a boy, Alvin remembers being told that his father was working in the plant at the time. Rouge officials locked the gates, trapping Roosevelt and others inside for several days. Roosevelt wasn't a union organizer, but he believed in the union, says Alvin. Finally, after five more years of strife, Ford recognized the UAW. Despite the ugly episode, Roosevelt's children say he hoped that they, too, would work at the Rouge.

In May, 1999, just months after Bill Ford became chairman, he dramatically raised the stakes for the Rouge by vowing to turn it into a model of sustainable manufacturing. The pronouncement surprised underlings, who had heard rumblings of a new approach to making cars but assumed that it would be years before anything hap-

pened. "This has really been an upside-down process," says Timothy J. O'Brien, Ford's director for environmental quality. "There was no specific plan, just an instinct from top management that we could do this." Bill Ford's mandate pushed the remake to a whole new level. He told executives to look beyond just modernization and instead examine what the company's long-term vision should be. What could the company do to make its factories more productive, more pleasant to work in, and better for society at large? Bill hired a renowned environmental architect, William A. McDonough, who pressed company officials to consider radical alternatives, such as using windmills to power the factory.

As factories go, the new assembly plant won't be particularly dazzling. "Our vision is not to have a lot of whiz-bang automation," says project manager Jay Richardson. Nonetheless, the plans are remarkable. With flexible equipment and new processes, Ford will be able to manufacture three vehicle platforms and as many as nine different models on a single assembly line. That flexibility will enable Ford to respond quickly to customer preferences without costly retooling, says Richardson. Initially, Ford will produce Ranger pickups at the Rouge, but suppliers say the plant may also build F-series pickups, Explorers, and a new small SUV.

Roosevelt Ford got his wish. His oldest son, Roosevelt Jr. (Sonny), was one of the first blacks admitted to the Henry Ford Trade School after an eight-hour admission test. It was a ticket to some of the highest-paying skilled trades jobs in the Rouge. Sonny went to work as a toolmaker. Alvin attended the school, too, becoming an electrician. Younger brothers Carl and Herbert started out in grueling assembly jobs but also earned apprenticeships in skilled trades—Carl became an electrician and Herbert a metal-model maker. In an era of widespread

racism, the three younger brothers managed to break through racial barriers and become supervisors in the 1960s, among the first blacks to hold such positions.

If Ford succeeds with all the new manufacturing tech-



SECOND GENERATION: Blast-furnace electrical supervisor Alvin Ford in 1968



1956 THUNDERBIRD



1964 MUSTANG

WATCH IT
BLOW THE PAPER TRAYS OFF
THE COMPETITION.



Xerox Phaser® 1235 Color Printer
12 ppm at 1200 dpi, \$3599*

Three times faster than any color laser printer.

Introducing the Xerox Phaser® 1235 color printer, the latest breakthrough in network printers from the combined expertise of Tektronix and Xerox. With amazing 1200-dpi color at 12 ppm, and black and white at 20 ppm, Xerox brings color printing up to the speed of today's business. And, since every model comes network-ready with fast Ethernet and a 366 MHz processor, your office can say goodbye to long lines at the printer. To see our full line of color and black and white network printers that leaves the competition in the dust, call 1-877-362-6567 ext. 1764 or visit us at www.xerox.com/officeprinting/speed1764.

DIGITAL
THE DOCUMENT COMPANY
XEROX

XEROX PRINTERS MAKE IT HAPPEN.

XEROX
NETWORK PRINTERS

Special Report



DETAILS: Inspectors at the Rouge look over a freshly minted Mustang

niques it plans for the Rouge, it would put the facility on par with the most advanced auto factories in the world—most of them Japanese. To boost efficiency, the Rouge will have 40% fewer workstations, and employees will have greater responsibility. “They’ll control their piece of the world,” which should bring higher quality, says Richardson. Employees will work in teams and use Web-enabled PCs on the shop floor to share their concerns instantly with suppliers or product engineers. Ford says the technology linkup will provide huge cost savings and cut down on lost production time. A team leader, for instance, could snap a digital photo of a poorly fitting part on the assembly line, zap it over the Web to the supplier, and get an engineering fix in minutes.

Web technology will keep the new Rouge lean in other ways, too. Team members can track just-in-time shipments of materials to the factory floor, leaving fewer parts cluttering the assembly area. Parts inventory will be cut in half, to just 12 hours’ worth, vs. one to two days at most auto factories.

Still, Ford execs insist that people, not machines, are the real focus of the new Rouge. Even today, the assembly plant is dark and claustrophobic. By contrast, the new Rouge will feature numerous skylights, restoring the natural lighting that Henry Ford had favored but that was later lost as the Rouge expanded. Overhead walkways will separate people from machinery, reducing the risk of injury. Conference rooms, cafeterias, and rest rooms will all be on a mezzanine level, more exposed to

build a brand-new technology-training center nearby.

The Rouge—and the auto industry as a whole—had ups and downs in the 1960s and 1970s, and Roosevelt’s four sons learned to cope with periodic layoffs. But a job at the Rouge was still among the best-paying around. In 1978, Alvin’s wife, Rose, met a woman who earned \$25,000 a year there—twice what Rose made as a telephone operator. With tuition



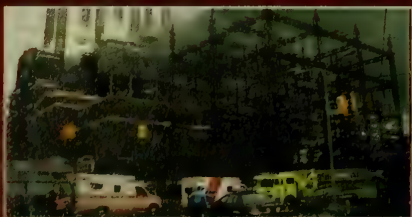
THIRD GENERATION: Human-resources manager Ford-Conliffe at her personal parking space

billings looming from their four children, Rose, at age 39, gave up her desk job and went to work as a welder at the Rouge frame plant. She worked seven days a week, often 12 hours a day. “I would wake up at night and my hands would feel like watermelons,” she says. “I made \$25,000 in six months,” she remembers. “But I was too tired to do anything” with it. Eventually, a pinched nerve landed her in traction for three days, and in 1989, she left the Rouge on disability pay.

What really sets the new Rouge apart from other industrial sites are its environmental features. The roof of the new assembly plant will be covered with sedum, a succulent groundcover, and other plants. This “living roof” can hold an hour’s worth of heavy rainfall, reducing harmful storm-water runoff. Better

yet, it will help keep the factory cool in summer and warm in winter, reducing energy use.

That’s not all. Ford hopes an experiment using mustard seed and other plants to rid the soil of harmful toxins will become an ecological alternative to hauling contaminated soil to



FEB. 1, 1999: EMERGENCY PERSONNEL ARRIVE AT THE ROUGE AFTER AN EXPLOSION ROCKED THE GENERATING STATION



FEB. 1, 1999: BILL FORD SPEAKS TO THE MEDIA OUTSIDE THE HOSPITAL WHERE INJURED WORKERS WERE BEING TREATED

ceiva™
internet-connected digital
PICTURE FRAME



HOW LONG THE IN-LAWS STAY IS UP TO YOU



In an instant, on any given morning, your mother-in-law could show up. Or your nephew. Or your best friend's baby. That's the beauty of Ceiva. It's the world's first digital picture frame that lets you share photos over the internet. It's easy to set up. Easy to use. You don't even need a computer to receive photos. And anyone you want can send pictures to your Ceiva frame from just about anywhere. Every day, your Ceiva frame automatically updates and displays your new photos. So while you may not know who's going to show up, your Ceiva frame comes with one thing your mother-in-law doesn't—a delete button. We won't tell.

SHARE **photos**
EVERYDAY

ceiva.com or 1.877.MY.FRAME

Available at **CIRCUIT CITY**  **Gateway**  **amazon.com** **ceiva.com**

©2000 Ceiva Logic, Inc. All rights reserved.
Ceiva is a trademark of Ceiva Logic, Inc. Patents pending.

Special Report



BUILDING THE FUTURE: Workers at the new plant will need computer skills, so Ford is building a training center nearby

landfills. The process, called phytoremediation, is a joint project with Michigan State University. Natural swales, or shallow green ditches, will also be used instead of giant underground culverts to manage storm water. That alone will save Ford \$35 million in construction costs.

More than just minimizing the harmful impact on the environment, Ford hopes to restore much of the natural balance to the marshy land on which the Rouge sits. The company is planting mulberry bushes and other indigenous plants throughout the gritty industrial site in hopes of luring back songbirds and other species.

Life at the Rouge is easier for Alvin and Rose's children. Son Kevin is a crane operator at now-independent Rouge Steel Co. Daughter Maria Ford-Conliffe is human-resources manager at the Rouge engine and fuel-tank plant. The first member of her family to graduate from college, Ford-Conliffe started out in Ford's finance and marketing departments. After earning two master's degrees, she moved to human resources, where she can help make jobs like her mother's safer.

Ford execs concede that it would have been less risky to start over on a "green-field site," as most other auto companies have done. General Motors Corp. recently shut its historic factories in Flint, Mich., which it's replacing with two facilities in a rural area near Lansing, Mich.

Still, the Rouge investment will hardly bankrupt the No.2 U.S. carmaker, which is flush with \$18 billion in cash. The en-

vironmental initiatives, plus the creation of a visitors' center and an employee shopping area, pushed up the cost of the entire project by only about 10%, or \$200 million, estimates project manager Richardson. Bill Ford says the \$2 billion budget "is totally containable in our business plan."

He also hopes that the new techniques being tried at the Rouge will reap long-term savings that can be applied to

Ford factories around the world. A handful of other companies have experimented with some of these ideas and made gains. In 1995, Herman Miller Inc. redesigned a furniture-making factory in Holland, Mich., using many of McDonough's environmental ideas. Since then, productivity has climbed, absenteeism has declined, and shipping schedules have improved, according to an outside study funded by the Energy Dept. Bill Ford hopes his company's effort will achieve similar results. If the Rouge project only "ends up being a very interesting environmental showpiece, then we will have truly missed the boat," he says.



FOURTH GENERATION: DaJuan Ford

Kevin's children, DaJuan and Kevin Jr., both in their 20s, now work in the Rouge's assembly operations. But they both dream of moving up to better positions, such as their aunt Maria's. DaJuan wants to design Ford cars someday, he says, and Kevin Jr. is thinking of applying for a skilled trades job, like his grandfather and great-uncles. Ford's decision to bet on the Rouge again means they have a chance to make their dreams come true.



2001 RANGER EDGE



**OCT. 25, 2000:
FOUR
GENERATIONS OF
THE FORD FAMILY
WITH CEO JACQUES
NASSER (CENTER)**

The end of

OUTSOURCE ANXIETY

HE KNEW HIS
SERVICES WERE
BULLETPROOF.

NOW THE SUNTONE™
SEAL TOLD THE REST
OF THE WORLD.

TRYING TO PROVE RELIABILITY IN THE SERVICE PROVIDER LANDSCAPE CAN DRIVE YOU CRAZY — UNTIL NOW.

SUNTONE CERTIFICATION IS AN OBJECTIVE WAY TO ASSURE CUSTOMERS THAT YOU'RE COMMITTED TO PROVIDING THE UPTIME THEY NEED. DEVELOPED BY SUN, TOGETHER WITH MANY OF TODAY'S BEST-OF-INTERNET COMPANIES, THE SUNTONE PROGRAM'S RIGOROUS EVALUATION LEAVES NO STONE UNTURNED. EVERY CATEGORY CRITICAL TO AN SP'S PERFORMANCE IS EVALUATED — FROM SERVICES TO INFRASTRUCTURE TO SOFTWARE TO OPERATIONS. THOSE WHO EARN SUNTONE CERTIFICATION HAVE PROVEN THEY CAN PROVIDE SERVICES ENABLING DIALTONE-LIKE RELIABILITY (IT'S LIKE GETTING AN ELEVEN ON A TEN SCALE). CUSTOMERS WANT YOU TO STOP THE OUTSOURCE INSANITY. THE ONLY SANE THING TO DO IS VISIT WWW.SUN.COM/SUNTONE-NOW AND FIND OUT HOW TO GET CERTIFIED.



SUNTONE™
CERTIFIED



Sun
microsystems

THE NETWORK IS THE COMPUTER™ WWW.SUN.COM/SUNTONE-NOW ©2000 SUN MICROSYSTEMS, INC. ALL RIGHTS RESERVED. SUN, SUN MICROSYSTEMS, THE SUN LOGO, THE DIALTONE COFFEE CUP LOGO, THE SUNTONE LOGO, SUNTONE, THE NETWORK IS THE COMPUTER, AND WE'RE THE DOT IN .COM ARE TRADEMARKS OR REGISTERED TRADEMARKS OF SUN MICROSYSTEMS, INC. IN THE U.S. AND OTHER COUNTRIES.

We're the dot in .com™





(A stranded parachutist makes a phone call.)

Tellme: Hello, you're connected to Tellme. Here are all the keywords you can say. News. Weather. Lottery...

Parachutist: Taxi.

Tellme: Looks like you're in Santa Ynez, California. Hang on, while you're connected to a cab company in that area.

Valley Cab: Valley Cab.

Parachutist: Hi, I need a ride to the airport. And...uh... can you bring a ladder?

Introducing Tellme. The voice-activated way to get the answers you want wherever you are. It's easy and it's free. Call 1-800-555-TELL. You won't believe your ears.

Tellme.
1-800-555-TELL

STEALING A MARCH ON THE NETWORKS

Affiliates are exploiting digital technology to deliver more than just TV programming



Jeffrey H. Smulyan knows hardball when he sees it. The 53-year-old chairman of Emmis Communications Corp. used to own the Seattle Mariners baseball team. And these days, Smulyan, whose company owns 15 television stations, is seeing plenty of hardball from the networks that deliver the sitcoms, sports events, and other programs for Emmis-owned stations. Lately, he and a growing number of network affiliates have been chafing as ABC, CBS, and the other networks have cut the compensation they have traditionally paid the stations to air their programs, have put some of their prime-time shows on sister cable or broadcast channels, and have otherwise made their 200-odd affiliates feel less than appreciated. "I don't think we've been on the same page as those guys for years," says Smulyan.

Now, it is something like payback time. For months many affiliates have been plotting the formation of their own

kind of networks. These aren't like the traditional networks—at least not yet. But as TV broadcasting faces a switch to digital signals from analog channels, starting in 2003, many of the local affiliates are considering offering some of the souped-up services long promised



for the Digital Age, such as Internet service, movies-on-demand, and scores of other services. Since local stations control the actual signal, they have direct access to people's homes. And because it is wireless, the data could be delivered more cheaply and with less bother than current Internet transmissions.

SIDE BUSINESS. Starting next year, some affiliates will begin tests to use their TV towers to beam data, music, movies-on-demand, and sports into consumers' PCs. It's a side business to their main mission of sending TV signals. And the opportunity arises just as they are prepared to meet federal requirements to broadcast in digital formats. Because television shows transmitted digitally use less of the allotted spectrum, there will be capacity left over for the stations to exploit as an extra revenue generator—and one they're none too eager to share with the networks with which they are affiliated. No one is sure if

BLAST EXECs
Lambert and
Luckett

power this triumphant

now available in a battery

Energizer **e²**

the battery with
a heart of titanium

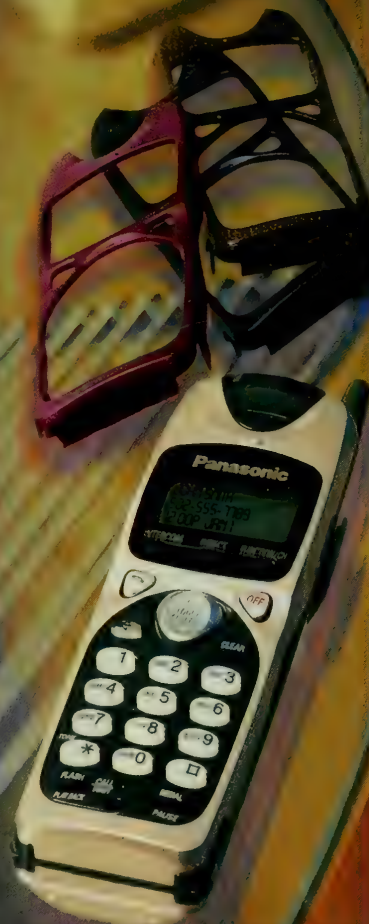
Energizer **e²** **TITANIUM**
TECHNOLOGY

www.energizer-e2.com

take power to the next level

Panasonic
GigaRange® Elite
2.4 GHz Cordless Phone

Have more
colorful
conversations.



The interchangeable FastTrack Plates™ available for the new GigaRange Elite cordless phone can add color to any conversation. Even those pesky dinnertime interruptions by magazine salesmen. And with a handset speakerphone you can use both hands to eat. Of course with Caller ID* on the handset, you don't even have to pick up.

Panasonic
just slightly ahead of our time

Media

there is a real business there yet, "but it is something that we can call our own," says Andrew S. Fisher, executive vice-president of Cox Broadcasting Co., which owns 15 TV stations, each of which are affiliated with one of the five largest broadcast networks.

To take advantage of this new environment, Cox, Emmis, and 17 other independent station groups became

founding members of iBlast Networks, a Beverly Hills (Calif.) company that early next year will begin testing delivery of data, shows, and music into customers' computers. (The four TV stations owned by The McGraw Hill Companies, which publishes *BUSINESS WEEK*, are also iBlast members.) In all, the 225 stations that make up iBlast can be seen in 143 markets, covering more than 90% of the country. Those stations have been spending as much as \$3 million apiece to upgrade their transmission facilities to deliver high-definition signals as required by Congress in 1996.

Broadcasters were given the HDTV broadcast spectrum by lawmakers because they wanted them to produce super-crisp programs that could be received by high-definition TV sets. But while affiliates are rushing to find revenues in their new digital TV signals, TV's biggest players are noticeably absent from the digital derby. That's because network execs still aren't sure how much of the new digital spectrum they'll need to create high-definition programs. NBC, for instance, will need much of the bandwidth signal for its planned broadcast of the 2002 Olympics in high definition. "We intend to give the consumer the best picture possible, first and foremost," says Brandon Borgess, NBC's senior vice-president for corporate development. "No one can figure out just

how much spectrum that's going to take."

The affiliates beg to differ. In most instances, they say, high-definition programs will take only about two-thirds of the 19.4 megabits per second of digital signals a digital tower sends out. That leaves enough space for them to send consumers the equivalent of 2,200 CDs of music a day or enough movies to fit on 60 DVDs. And while initially the infor-

mation will be sent out to computers outfitted with special chips, in time, broadcasters will be able to send those programs through set-top boxes to TV sets, effectively putting many of the affiliates in direct competition with the networks that today feed them shows. "There is a tremendous amount of pressure on content providers to get their content into people's homes, and we're just one more pipeline into those homes," says iBlast Chairman and CEO Michael Lambert.

A onetime Hollywood TV executive, Lambert himself owns a pair of WB network affiliates in Tennessee. He started iBlast last year with Oliver Luckett, a former technology executive with telephone company Qwest Communications. Ken Solomon, a former president of Universal Television, is iBlast's president.

No content providers have yet signed on, but Lambert says he has held discussions with

everyone from sports cable channel ESPN to Warner Bros., which he says could use left-over digital spectrum from iBlast partners to video-stream movies. In each case, says Lambert, iBlast would simply be the aggregator, allowing whoever joined to either sell advertising or charge subscriptions to consumers. But with member stations in virtually every market, iBlast can offer up a national market. "And the stations

PLAYERS IN THE DIGITAL DERBY

TV station groups are snubbing networks to offer new digital services

iBLAST NETWORKS



INVESTORS Cox Communications, Emmis Communications, Tribune, Washington Post

MEMBERS 225 stations, covering 90% of the country

BROADCASTERS DIGITAL COOPERATIVE



INVESTORS Granite Broadcasting, Paxson Communications, Clear Channel Television

MEMBERS 190 TV stations, covering 85% of the country

GEOCAST NETWORK SYSTEMS



INVESTORS Liberty Media, Kleiner Perkins Caufield, Hearst-Argyle Television, A.H. Belo, Thompson Multimedia

MEMBERS 58 TV stations, covering 40% of the country, as well as EchoStar Communications

DOTCAST



INVESTORS Intel Capital, Pacific Century CyberWorks, Tribune Ventures (will launch in analog first)

MEMBERS 100 public TV stations that cover 75% of the country

DATA: COMPANY REPORTS, BUSINESS WEEK

Panasonic
GigaRange® Elite

2.4 GHz Cordless Phone



**Suddenly,
even telemarketers
may seem interesting.**

The stylish new GigaRange Elite cordless phone from Panasonic can make even the duller conversation seem worthwhile. High tech features include: 2.4 Gigahertz broadcasting for long range; diversity antenna system for extra clarity; Digital Spread Spectrum Technology for secure conversations; built-in caller ID* and an all-digital answering machine. Now you'll be looking for excuses to chat. Get a GigaRange Elite phone and just wait for it to ring.



Internet Keyword: panasonic.gigarange panasonic.com/gigarange

1-800-211-PANA

*Requires subscription to fee-based phone company service.

Panasonic
just slightly ahead of our time

It saves your bacon and the bacon of those you love.

No more one-handed driving. No more moving violations. Our new cellphone earpiece sounds so good and feels so natural you'll never hold a



(Actual size.)

cellphone to your head again. We support these promises with a 30-day money-back guarantee. So order one for everyone you love, including yourself. \$49.95 (Plus Shipping.)

SYBERSAY 
For Cellphones.

1 877 659 4650 x110

www.sybersay.com

More than just a telescope...more than just a microscope...

Episcope™ (the complete vest-pocket optical system)
Still only \$59.95*

*But read this ad for an even better deal!

Remove the Episcope™ from its fitted leather case and it's a 30-power microscope. A twist of the wrist converts it to a 3x telescope, or a unique 3x telescope-loupe. Another twist, and you have a choice of magnifiers and loupes: 5x, 10x, and 15x powers.

The Episcope™, only 2" long, was developed in Wetzlar (Germany), the home of world-famous Leica cameras; it's now being made by one of Asia's finest lens makers. The optics are superb: brilliant luminosity, needle-sharp focus, absolute planarity, total chromatic correction, and fully anastigmatic.

The Episcope™ is the first choice of geologists, biologists, physicians, numismatists, philatelists, engineers, and just anybody who likes to see the infinite detail in his/her surroundings. It comes with a plastic "tripod" for extended observations at 15x or 30x magnifications.

*And here is the "even better deal": Buy two *Episcopes* for \$119.90 and we'll send you a third one, with our compliments—absolutely FREE!



• Even at its highest magnification of 30x, the Episcope™ resolves as distinctly as any laboratory microscope, yet it is only 2" long. An optical miracle!

You may order by toll-free phone, by mail, or by fax and pay by check or Visa/MasterCard. Please give order number #1062F825. Add \$4.95 for ship./ins. and sales tax for CA delivery. You have 30-day refund and one-year warranty. We do not refund postage. For customer service or wholesale information, please call (415) 643-2810.

since 1967
haverhills®

2360 Third St., San Francisco, CA 94107

Order by toll-free phone: (800) 797-7367 or (fastest!) by fax: (415) 643-2818
Visit our website at www.haverhills.com

Media

would simply take their cut," he says.

It's hardly a proven business model, but iBlast already has competitors. Rival Geocast Network Systems, started by onetime Silicon Valley venture capitalist H. Joseph Horowitz, has lined up 58 stations covering 40% of the country. It recently signed on satellite-TV company EchoStar to cover the rest. With electronics manufacturers Thompson Multimedia and Royal Phillips as partners, it intends to sell \$300 receivers to pull in its signals. A group of 12 station groups, calling itself the Broadcasters Digital Cooperative, started in March. Even the nation's public-TV stations are putting together their own group (table, page 94).

DEAF EAR. In doing so, most of the station groups have turned a deaf ear to

In recent years, network-affiliate relations have become chilly

network executives, who have pleaded for them to one day join up with a network-sponsored digital plan. For affiliates, turnabout seemed fair play. In recent years, network-affiliate relations have become chilly. With program costs rising sharply, the networks have pressured their affiliates to take lower levels of compensation in exchange for carrying the programs. Last year, the Fox TV network unilaterally took back prime-time ads that it had given to local affiliates. And in what may be a glimpse of the future, NBC earlier this year dropped its San Francisco affiliate, instead giving its shows to Granite Broadcasting Corp., which became one of the first TV affiliates to pay a network for programming.

With every company out for itself, it's little wonder that affiliates are looking for a new edge, even if it means going into competition against their own networks. "We kept hearing that they were going to come out with a plan, but they never gave us one," says Lisa Wiersma, vice-president for ventures at Tribune Broadcasting, which owns 22 TV stations and has allied with iBlast. For a change, the once-dependent affiliates find themselves a step ahead of their network brethren in the race to go digital.

By Ronald Grover in Los Angeles

Yvonne Condell, 69

Retired Educator,
AARP Volunteer



be yourself

Yvonne Condell doesn't make compromises. She makes choices. She chooses to be active in her community. And she chooses to make a difference volunteering with AARP. Because she knows age is just a number, and life is what you make it.

Today's AARP helps you make the most out of life, with the choices you want, and the voice you need — to keep being yourself.

**today's
AARP**

Your Choice. Your Voice. Your Attitude.

AARP
www.aarp.org

Health & Fitness | Personal Finance | A Voice on Issues | Life Answers | Travel & Entertainment | Community Service



EXECUTIVE SUITE

WHAT REALLY HAPPENED TO THE CLASS OF GE

Its execs are highly sought, but their track records elsewhere are mixed

When Gary C. Wendt was named CEO of troubled insurer Consec Inc. in June, Wall Street couldn't have been happier. The hope was that Wendt, a longtime General Electric Co. star who had built that company's finance unit into a powerhouse, could bring some of the GE magic to his new gig. Investors quickly reversed a one-year, 73% stock swoon. Four days after Wendt signed on, the stock had zoomed from 7% to 11% a share, though it has since fallen to 6%.

Wendt is only one example of a phenomenon well known to headhunters and board members searching for their top brass: In business there's no better pedigree than one from GE. From Lawrence A. Bossidy, longtime chief of AlliedSignal, to John M. Trani of Stanley Works and Owens Corning's Glen H. Hiner, GE grads populate the top office at big companies across America.

Now, with two of the three stars contending for GE's own CEO slot expected to leave after John F. Welch picks a successor, there may soon be more handsome résumés afloat. Analysts are speculating that one of the GE bridesmaids will be picked to run battered Lucent Technologies Inc. "Any great company has a purpose beyond

making money," says James C. Collins, co-author of *Built to Last: Successful Habits of Visionary Companies*. "Disney's is to make people happy, Hewlett-Packard's is to make tech contributions, and GE's is to make CEOs for the world."

But just how well do these guys really do when they leave the hallowed halls of GE? A look at the track record of Welch disciples shows it is mixed at best. Sure, there are great success stories. Since taking over SPX Corp. four years ago, for example, John B. Blystone, a former GE star, has radically remade the company into a GE-like conglomerate and posted a 647% stock climb. And no one personifies the GE management legend better than Welch golfing buddy Bossidy, who has his critics but nonetheless achieved a 956% gain for shareholders at AlliedSignal in eight years.

Still, stack up some of the best-known GE alums, most of whom ran GE units before leaving, against significant players in their industry, and several of them fall far behind. They do particularly poorly in the measure that GE has always dominated: total return to shareholders. Neither do they consistently outshine rivals at boosting earnings and revenue or expanding profit margins.

Since leaving his post as president and CEO of GE Medical Systems to become CEO of toolmaker Stanley Works in 1997, for example, Trani has not been able to tap into the home-repairs surge that has helped rival Black & Decker Corp. and retailer Home Depot Inc. As a result, Stanley's return to shareholders on his watch trails that of competitors, and sales growth has been slow. Trani declined to be interviewed, but Stanley Works maintains that it is rebuilding and that the fruit of its efforts will be forthcoming.

ENTOURAGE. When GE protégés stumble, it's often attributed to culture shock. A new executive who thrived in the confrontational, relentlessly competitive GE system tries to import it all at once. Says William Henderson, managing director of headhunter Russell Reynolds Associates Inc.: "The GE style is strong, loud, and sure. Sometimes you can come into an organization and terrorize it."

The first thing many GE transplants do when they arrive on new ground is focus on financial controls and people. And to get a handle on that, they often rapidly build their own team of ex-GEers. Owens Corning's Hiner and Stanley's Trani have both brought in former colleagues at high levels. Harry C.

*If information is power,
then inspiration must be the
power of our potential.
The power that moves us from
the systematic to the spontaneous.*

INSPIRATION IS THE NUMBER ONE CAUSE OF GREATNESS.



*From ideas to results.
At Compaq we believe technology
is no longer simply a
tool for information.
It's a tool for inspiration.
Redefining access.
From set time to any time.
From one place to a million places.
With the touch of a button,
we no longer fire up
just our computers,
but our imaginations.
We're moving beyond
the limitations of Information
Technology to a new technology.
Welcome to the new IT.
Inspiration Technology
from Compaq.*

COMPAQ
Inspiration Technology

Stonecipher, chief operating officer at Boeing Co., has a former GE exec, Stephen R. Mercer, running leadership development. The temptation is to recreate a group that understands GE shorthand, its style, and techniques. "The Boston Celtics, at the time that Bill Russell was playing, all knew where the other people were on the court without even looking because they played together so long," says SPX's Blystone. "That's what it's like at GE."

That court sense doesn't always transfer, however. Mark P. Bulriss found that out the hard way when he took over as CEO at Great Lakes Chemical Corp. Bulriss had spent 16 years at GE Plastics and five more working for Bossidy at AlliedSignal before he jumped to Great Lakes in 1998. Raring for the chance to be his own boss, he quickly cleaned house, replacing six Great Lakes veterans with colleagues from GE and Allied. Bulriss, now 48, confidently assured Wall Street that he would soon be delivering GE-like sales and earnings growth. But the past two years haven't exactly gone as planned. Prices of Great Lakes' major raw material—oil—are sky-high, but the bromine-based flame retardants it makes are going for a song. So while he has been able to improve productivity and boost earnings by 42% since taking over, Bulriss increased the top line by only 5%. His total returns, while outpacing other chemical outfits, slipped 24%.

Bulriss is the first to admit he made mistakes. Some of those GE hires didn't work out so well, for one. And he says he underestimated the value of the entrepreneurial spirit in many Great Lakes executives, as well as their relationship with customers and experience competing against larger rivals. Says Bulriss: "The intensity about prosecuting best practices [at GE] is excellent, you know how to make a commitment and hit it. But in no way, shape, or form does it guarantee success."

One of the hallmarks of the GE style is identifying the company's best people early and rotating them through a variety of jobs, rarely leaving them in one spot for more than two years. In 15 years at GE, Thomas C. Tiller worked on new-product introductions, in fast- and slow-growing businesses, in markets with long and short product-development cycles. That broad exposure teaches managers to quickly size up prob-



BOSSIDY:
Solid numbers



TRANI: *No picnic at Stanley*

*Through Oct. 19, '00

lems. But there are some things you just can't learn within the walls of GE. It wasn't until Tiller, now 39, became CEO of Polaris Industries Inc., a maker of snowmobiles, motorcycles, and all-terrain vehicles, that he had to position a \$1.3 billion company against such giants as Honda Motor Co. "GE competes at the end of the day on scale," he says. "They have infinite cash."

RIDING HARLEY. Not blessed with such riches at Polaris, Tiller has had to choose carefully what to copy. Instead of offering GE-like service contracts on his ATVs, he has started selling optional parts, such as winches and plows. He does strive to replicate GE's productivity and efficiency, but for sales growth, marketing, and dealer structure he's benchmarking competitor Harley-Davidson, which is closer to Polaris in products. "The people who use the GE concepts but apply them to the businesses they are in can be successful," says Tiller. "The people who try to photocopy GE fail."

For David M. Cote, photocopying GE is not even an option. Named to the No. 2 spot last November at TRW Inc., Cote joined a company buried in debt

Grading the GE Alumni Club

Hiring a disciple of Jack Welch is no guarantee that a company will outperform its peers on Wall Street

	CUMULATIVE TOTAL RETURN	ANNUAL SALES GROWTH	ANNUAL EARNINGS GROWTH	CUMULATIVE MARGIN GROWTH
LEADERS				
LAWRENCE A. BOSSIDY, CEO				
AlliedSignal, '91 to '99	+956.1%	+3.2%	+14.4%	+5.0%
Peer group average	+739.5	+11.0	+14.9	+2.4
WILLIAM A. ANDERS, CEO				
General Dynamics, '90 to '93	+175.5%	-28.3%	+0.1%	+4.2%
Peer group average	+88.8	-3.9	+44.6	+1.3
MARK P. BULRISS, CEO				
Great Lakes Chemical, '98 to date*	-24.1%	+5.2%	+42.3%	+4.1%
Peer group average	-33.6	-3.3	-13.4	-0.9
LAGGARDS				
JOHN M. TRANI, CEO				
Stanley Works, '97 to date*	-14.2%	+1.1%	+16.1%	+1.8%
Peer group average	+19.2	+3.4	+12.9	+1.3
GLEN H. HINER, CEO				
Owens Corning, '92 to date*	-94.7%	+8.6%	+8.6%	+23.8%
Peer group average	-42.5	+4.7	+1.8	+8.7
THOMAS C. TILLER, CEO				
Polaris Industries, '98 to date*	+21.6%	+12.2%	+11.9%	-0.4%
Peer group average	+103.1	+12.3	+6.0	-0.5

DATA: STANDARD & POOR'S COMPUSTAT

and out of favor with Wall Street. Since he has come on board, TRW has twice missed analysts' earnings estimates, an event almost unfathomable to GE investors, who have come to expect steady 15% quarterly improvements. Still, Cote says he is pushing hard to adapt many GE approaches. He's rethinking the company's process of reviewing managers and trying to tie it more closely to corporate strategy and operations goals. And he's doing reviews more often to better measure progress. If that sounds a lot like GE's vaunted Session C—in which Welch reviews staff and strategy several times a year—it is.

Try as they might to replicate GE's charmed results, however, the CEO alumni must play the hand they're dealt. So while Hiner has boosted Owens Corning sales and earnings nicely since taking over in 1992, no amount of smart management could counteract mounting asbestos lawsuits. Last month, Owens Corning filed for bankruptcy. "The word was never in my vocabulary," says a disappointed Hiner, who spent 35 years at GE. That's because failure is not part of Welch's CEO-training curriculum.

By Nanette Byrnes in New York

*A moment of inspiration
can happen anywhere. Anytime.
That's the whole reason for
products like the Compaq
Wireless LAN. Send an e-mail
while you're away from your desk.
Retrieve information
while you're in another office.
Wireless technology cuts you loose.
And once you're free,
it's hard telling where your
imagination might take you.*



INSPIRATION COMES WITH NO STRINGS ATTACHED.

*Something cool is happening.
We're moving beyond
the limitations of
Information Technology
to something more inspiring.
Welcome to the new IT.
Inspiration Technology
from Compaq.*

COMPAQ
Inspiration Technology

compaq.com

© 2000 Compaq Computer Corporation. COMPAQ and the Compaq logo Registered in U.S. Patent and Trademark Office. Inspiration Technology is a trademark of Compaq Information Technologies Group, L.P. in the U.S. and other countries.

A word cloud consisting of the word "CONCERT" repeated many times. The words are in a bold, sans-serif font. They are arranged in a large, abstract shape that is roughly rectangular but has irregular, jagged edges. The words are of various sizes, with some being significantly larger than others. The colors are a mix of black and dark grey. The background is a light, neutral color. The overall effect is a dense, textured composition of the single word.

CONCERT
CONCERT
CONCERT
CONCERT
CONCERT
CONCERT
CONCERT
CONCERT
CONCERT
CONCERT



simplified solutions to complex business needs through a range of IP-driven solutions, from easy-to-implement, cost-effective services, to comprehensive corporate IP infrastructures. Put simply, we are redefining business communications value and efficiency. For multinationals with complex global needs, to smaller companies with global aspirations. The communications revolution is underway, and together, we will make sure your company is on the winning side. **To find out more, visit www.att.com/ipservices or call 1-800-288-3199, dept. 12.** Discover how AT&T and Concert can take your business to the nth degree.



TECHNOLOGY

BUYING
GUIDE

DESKTOPS

Page 106

What if it breaks?
With so many PCs
b **SIMILAR** these



ays, the most
important things
to look for are
TECH SUPPORT
and warranties

NOTEBOOKS

Page 116

The industry
hasn't produced
the **PERFECT**
notebook yet, but
it's a lot closer.
Ultralights are
getting better and
better, and there
are lots of ma-
chines that do
almost everything,
boast **SUPER-
FAST** processors,
and weigh in at a
manageable five
pounds. In short:
Fewer trade-offs

HANDHELDS

Page 124

At best, the new
wireless gizmos
are downright
EXHILARATING.
But you need to
shop carefully
to find the one
that best suits
your needs



PHONES

Page 132

Some **6 MILLION**
Americans now
own Web phones,
and many find
them useful
for simple tasks.
They're still
plagued, though,
by tiny keyboards
that make typing
tough, **TEENSY**
displays, and online
features that are
often maddeningly
difficult to
use or even to
understand

NET SERVICES

Page 140

The wireless Web
is going way
BEYOND NEWS



and stock quotes,
and the latest
services are truly
VALUABLE for
people on the go

DESKTOPS

NOTEBOOKS

HANDHELDS

PHONES

NET SERVICES





THE NEW WIRELESS WONDERS

We've all seen them, sitting in the airport staring at the cell phone in their lap. While you're standing sullenly in the Starbucks line, they're on the Internet keeping their e-mail up to the minute. Or rejiggering their portfolio to compensate for the latest drop in the Nasdaq. Guess what. They're working, you're not.

On-the-go execs are going wireless, cutting the cord that ties them to the office or hotel-room desk. It's a brave new untethered world. Not to worry, though. In our annual computer buyer's guide, we'll help you sort through the hype to find everything from the best handhelds for fetching e-mail to the best phones for surfing the Web.

Not for you, you say? We know the excuses: The phones are glitchy, service is spotty, la de da. You might consider one anyway. They cost little more than Web-less phones, and basic data services are free at AT&T and Nextel Communications Inc. You you could fall in love with the anytime convenience of news and e-mail.

O.K., we occasionally succumb to the hype, too. For a wireless fad that didn't last, log on to Business Week Online to see our obit on Modo, a trendy city guide that mesmerized us. Turns out the six-week-wonder folded before the presses rolled.

Prefer something more traditional? We pecked our way across a dozen new laptops. And check out our unconventional recommendation for your next desktop. The unvarnished truth is, there's little to distinguish one PC from the next. But at some point they all crash. So we based our picks on PC makers' customer service. Here's another cord to cut: Since PC makers charge for service, we found some nifty low-cost options. Read on.

**Your guide
to the latest
gadgets,
from Web
phones
to palmtops**

BusinessWeek online

For more on Modo, staying connected on the road, and PDA phones, see www.businessweek.com.



WHAT IF IT BREAKS?

When buying a PC these days, look closely at tech support and warranties

It has happened to you. You've spent the past hour entering all your latest investments in a spreadsheet, or composing that delicate e-mail to your boss about the big customer who defected to the competition. Suddenly, your computer freezes. You get mad, look your PC right in the monitor, and scream those two little words you think every time the machine gets the best of you: Heal thyself!

Those were the words, right? Well, if your current PC doesn't listen, your next one just might. IBM, Hewlett-Packard, and other computer makers promise that they'll ship new desktop PCs sometime next year with technology that can detect problems before they happen. Not only that, they'll venture out onto the Web to retrieve a "digital cure" that will fix glitches even before you notice that anything's awry.

Sounds nice, but that won't help you if you're in the market for a new computer today. In case you haven't noticed, the rules of the game have changed since you bought your last PC. Now, you're shopping for a commodity, meaning you'll find a huge selection of models to choose from, all of which offer roughly the same bells and whistles. That means two things are most important: price, and how you're going to fix your PC

when it breaks. And when it breaks the time after that.

Bottom line? If you're shopping for a new computer, warranties and tech support should be at the top of the checklist. Sure, you need to compare the processor and hard-disk drives of the different systems. But where you'll see the real differences

year. Software support has all but vanished unless you are willing to pay through the nose. So assuming you plan to own your computer for more than a year, you're going to have to pay a live techie to help you out of a bind. Choosing the right customer-support plan could save you a pile of money.

ers repairs and tech support by phone and e-mail beyond the 90 days that you get free of charge. Gateway Inc., which offers lifetime hardware tech support, will extend its 90 days of software support: Two years run \$79, three years \$99.

NO FAVORS. Extending your warranty for software support is well worth the expense. Believe it or not, most crashes are not caused by the computer itself. "Ninety percent of our calls have to do with things other than hardware," says David W. Allen, vice-president for worldwide operations at Dell. Under the terms of their warranties, most makers will resolve major software problems for only the first month, after which they'll charge a fee or redirect you to a software publisher. Don't expect the publisher to offer you any favors for free: Even

DESKTOPS: BEST OF BREED

Here are some good bets from the companies that rank highest in customer satisfaction.

If you want a reasonably fast system with plenty of power, you'll need at least a 733 MHz processor, 128 MB RAM and a 20 GB hard drive. Consider, too, a flat panel display. Prices for good ones have finally fallen below \$700.

COMPANY	MODEL/PRICE	SPEED/MEMORY/STORAGE	THE SKINNY
APPLE COMPUTER	iMacDV+ \$1,299	450 MHz, 64 MB RAM, 20 GB drive	Best starter for MAC-inclined, with built-in wireless networking
DELL COMPUTER	Dimension L Series \$1,289	733 MHz, 128 MB RAM, 20 GB drive	Won't break speed records, but great value for the price
GATEWAY COMPUTER	Performance Deluxe \$1,528	866 MHz, 64 MB RAM, 20 GB drive	Very fast, headache-free machine with top-notch video and sound
IBM	NetVista X40i \$2,199	800 MHz, 128 MB RAM, 40 GB drive	Sleek, all-in-one machine works and looks smart

DATA: BUSINESSWEEK, COMPANY REPORTS

is in the price and coverage of customer service.

Fact is, vendors are much stingier than they used to be when it comes to warranties and tech support. Gone are the days of 1990, when intense retail competition forced PC makers to offer full warranties for three years or more. Most hardware coverage for repairs and technical-hotline support has shrunk to one

Among the top computer vendors, Dell, Gateway, and Apple offer some of the best deals. Dell Computer Corp. provides one year of on-site hardware repair and 30 days' software phone support for free, but you can get a two-year extension for \$99. Hardware support is free for the life of the system. Apple Computer Inc. charges \$249 for the three-year AppleCare plan, which cov-

Microsoft Corp., the last holdout among top software makers, is charging \$35 a call after two free calls for some of its products.

Beyond cost, you'll need to consider the quality of customer service. According to a September survey by *Consumer Reports*, only about half of tech-support users were highly satisfied with the results. One in four reported that they weren't

HOW THE WARRANTIES STACK UP

MANUFACTURER	FREE PHONE SUPPORT: HARDWARE/SOFTWARE	ADDITIONAL PHONE SUPPORT	REPAIRS UNDER BASIC WARRANTY
APPLE COMPUTER	90 days/ 90 days	\$49/call; 3 years for \$249	1 year; Apple pays shipping to service center
COMPAQ COMPUTER	1 year/ 90 days	\$149 for 3 years	1 year; Compaq pays shipping to service center
DELL COMPUTER	life of PC/ 30 days	software: \$99 for 2 years	1 year in-home service
GATEWAY COMPUTER	lifetime/ minimum 90 days	\$79 for 2 years, \$99 for as long as you own PC	1 year in-home service
HEWLETT- PACKARD	1 year/ 30 days	hardware: \$255 for 3 years, including repair	1 year; HP pays shipping to service center
IBM	30 days/ 30 days	\$35/call; \$89 for three calls	1 year; IBM pays shipping to service center

DATA: COMPANY REPORTS

able to resolve their problem, and one in three complained about being on hold too long. Among major manufacturers, Dell and Gateway rated highest in satisfaction—and both obtained the highest ranking on their ability to resolve problems.

Still, the overall quality of customer care has been improving, even among the smaller manufacturers. Take Micron Electronics Inc. If you called the clonemaker's support line five years ago, you would have found yourself listening to a full hour of Muzak. Now all you're subjected to is an annoying few minutes of classical piano. The technicians are knowledgeable and lenient when it comes to solving software problems after the 30-day warranty period has expired.

DON'T CALL. Still, PC manufacturers would much prefer to answer your questions on the Web than over the phone. Why? Answering a question by phone costs manufacturers 20 times as much as doing it by e-mail, estimates Jim Hobby, vice-president for consumer client care at Gateway. "The cheapest tech support call is no call at all," he quips. At Gateway, 90% of customer questions are answered over the phone, but judging from

the experience of other PC makers, much of that support will shift to the Web soon. IBM predicts that its tech support phone calls will drop from 4.8 million to 4.7 million this year, while e-mail questions will soar from 85 million to 155 million.

As for the next big trend in customer support—Web self-healing technology that automatically fixes your computer's glitches—a few companies are making headway. The Micron Millennia PC, for example, includes software from PC-Doctor Inc. that diagnoses technical problems. Once the problem is found, Millennia users can log on to Support.com Inc.'s Web site and connect with a service that restores damaged software.

Gateway, which also will begin offering diagnostic software from PC-Doctor this year, already has a phenomenal tool called GoBack. This private-labeled version of Adaptec's software (BW—Oct. 9) lets you restore your hard-disk drive to a previous state. Say, for example, at 4:08 p.m. you accidentally delete a file or import a virus. All you do is set the clock on Gateway GoBack

for 4:07, and it's as though nothing ever happened.

Sadly, the self-healing tools that are available today can't do much beyond fixing minor glitches like incompatible software files. More advanced tools are on the horizon. Soon to come are remote-maintenance services that allow technicians—with your permission—to reach through the Web into your system and search out the problem. If you can't wait for your PC maker to offer remote maintenance, consider checking out an in-

dependent tech-support company such as Expertcity Inc. that offers this technology. And don't worry, though its technicians take control of your computer and see open files on your screen, they can't snoop through your hard drive.

A number of other independent support sites have cropped up in the past few months, including PCsupport.com and All.com. They offer tools, such as toll-free phone hotlines, live e-mail chats with technicians, or electronic bulletin boards for swapping advice. Some of them are well worth the money if you expect to use them more than once or twice a year (page 110). Expect to pay anywhere from \$14.99 for a single call to \$169.99 for a year of phone support from an independent site.

Feeling overwhelmed by options? It's understandable. When you bought your PC, you probably only had two avenues—the maker's store—and neither was all that attractive. If not for the boom in support options should tell you something: Home computers are yet ready to heal themselves.

By Kevin
Ferguson in
Boston

iFeel
MouseMan

LOGITECH INC.

www.logitech.com

\$59.95

Experience every bump on the Information Superhighway with Logitech's iFeel

MouseMan. A tiny motor lets you feel various features as you navigate through Windows and the Web, producing distinct vibrations as your cursor travels over toolbars, menus, Web buttons, bookmarks, and hyperlinks. It's optical, too, so there's no drag from dirt and grime on a roller ball. \$59.95 at computer stores.

INSTRUMENTS FOR PROFESSIONALS™

THE PRINCIPLES OF AVIATION

Luxury. Class. Prestige. An invitation to travel. After a century of exploits, aviation still has the power to inspire dreams. In tune with this spirit, we have created watches and chronographs for women with an innately refined style. Yet our close links with aviation have taught us that aesthetic appeal is pointless if not combined with technical perfection. Our movements meet all the precision and reliability criteria required to obtain chronometer certification. And each detail of our watches is designed for intensive use. One simply does not become an aviation supplier by chance.



HAMRA
JEWELERS

QUALITY & SERVICE SINCE 1928

10050 N. Scottsdale Road,
Scottsdale, AZ
480-946-5110
www.hamra.com

FOR A CATALOG PLEASE CALL 800/641 73 43

www.breitling.com

THE ESSENCE OF BREITLING

WINGS LADY. The feminine face of the inimitable BREITLING style, in a watch offering a blend of utter elegance and high performance.



BREITLING
1884

HELP IS JUST AN E-MAIL AWAY

Computer support for hire is hit-or-miss, but it's a bargain

Until recently, you didn't have much choice. If your home computer crashed, you had to call the company's hot line for help. Either that, or enlist the aid of a savvy acquaintance. But with PC makers now asking you to pony up for tech support, a new industry has emerged—independent customer service providers on the Web. I found a few by searching under “tech support,” and decided to try them out.

I began with Expertcity.com, an auction-style site that allows free-lance propeller heads to bid on fixing your system. Within minutes of submitting my plea, a dozen techies offered to help. The idea: You have a brief text chat over the Internet, and the expert tells you how to fix the problem.

I chose a woman named Sudipta, who turned out to be located in Bangalore, India's Silicon Valley. She charged a flat fee of \$10; others wanted \$15 to \$20. I explained to her that someone else had been using my PC, and now the floppy drive was disabled (I had wrecked it myself, on purpose). She began by asking whether I knew how to remove the computer's case if I had to. Yikes. “I've never done that before,” I typed. She asked me a few questions about hardware. I volunteered that perhaps there was something wrong with the software. Indeed, that could be the case, she responded, if someone had fiddled with the basic input/output system settings, and she explained how to fix them. Bingo. The whole

process took less than 20 minutes.

I took the same problem to All.com Inc., which charges a flat \$19.95 a month for unlimited help. I was assigned an agent, a fellow named James, who told me how to force Windows to

process, has software that lets me restore my hard drive by literally turning back the hands of a clock on the screen. I reset the hands to 30 seconds 'til James, relaunched my browser, and continued my quest.

I landed on EXP.com—briefly. It wouldn't accept my credit card, and when I called customer service I got only voice mail. An hour and 20 minutes later, Exp.com's customer service

called to explain that they were experiencing a few problems with their Web site. By then, I was long gone.

I figured it was time to give Gateway a shot. I connected to the company's QuickAnswers Web site and started chatting with Troy. He asked me 12 simple questions, such as: “What was the last thing you were

doing before this happened?” He sent a troubleshooting guide to the side of my screen while the truth be known, was incomprehensible. I eventually found the solution, but again, I knew exactly what I had changed in the place.

I figured that was probably lame help for most people, so I chatted up the Gateway technical-support folks again. This time I explained Mitch, that I was still having problems. He sent me the same guide. Been there, done that, I complained, he sent a different one. It was four tips; one explained succinctly how to solve the problem. Elapsed time: about 25 minutes.

My recommendation? Any customer service is still a bit hit-or-miss. There's no music-on-hold or a chance of getting contradictory advice from a new guy when you call, and it can be a relatively cheap fix if your warranty has run out. And, with a little luck, you'll get your problem solved and a good word on a relationship with a very own nerd-for-hire.

By Kevin Ferguson
in Boston

After an odyssey across various sites, one finally delivers the right fix

“redetect” the floppy drive. He then told me to reboot the PC and contact him when I was running again.

Big problem. After rebooting the system not only couldn't I use my floppy drive, but I couldn't launch my Web browser. That made it difficult to tell James anything. Fortunately, my computer, a Gateway Performer-

HOW TO HOOK UP WITH A NERD

SERVICE/WEB ADDRESS	PRICES	SERVICES	THE SKINNY
ALL.COM www.all.com	\$19.95/computer/month, with 2-week free trial	Library of 1,000+ tutorials, 24-hour live tech chat, remote diagnostics	Rapid but sometimes flawed response to hardware and software problems, and Mac users are out of luck
EXP.COM www.exp.com	2¢ to \$2/minute, negotiable, most around 75¢	E-mail and phone support from self-styled experts, free discussion groups	Hit-or-miss, with many specific categories but few verifiable credentials
EXPERTCITY.COM www.expertcity.com	Negotiable. Users request bids and offers come back in minutes	Real-time chat with freelance experts, who can remotely take over users' computers	Desktop streaming tool can help pinpoint problems, but novelty wears off fast with wrong “expert”
PCSUPPORT.COM www.pcsupport.com	\$36.50/year, with 2-week free trial	24-hour tech chat, 4-hour response to e-mail, free library and software tools	Best bang for the buck, with fast response time, deep and useful knowledge base

DATA: BUSINESS WEEK, COMPANY REPORTS



your company is...

- ☐ at the forefront of internet technology
- ☐ trying to keep up
- ☐ still on DOS

Make the most of your mind

Why wait?

intel.com/jobs

intel

IF WEB SURFING IS ALL YOU'RE INTO...

An info appliance may be just what you're looking for

After a decade of sweating my way through balky PC setups, I've reached my limit. Chalk it up to creeping curmudgeonliness, but I have been aching to try out the new so-called information appliances that promise to make getting on the Net as easy as using a toaster. If nothing else, I figure I can give one of these gizmos to my parents so they'll stop calling me every time one of their computers acts up.

The good news: Information appliances generally work as advertised. True, they're no substitute for a PC if you want to do word-processing, home banking, or digital photography. But then, that's not their purpose: They're meant for no-muss, no-fuss e-mail and Web browsing. And the best of the lot, the new Audrey from 3Com Corp. (877-949-3266), goes further, adding clever tools for managing a family's calendar and address book, displaying snapshots, and playing audio clips off the Net.

My quest for the ultimate info appliance involved testing five products. The criteria were dead simple: I wanted to plug one cord into a power outlet, another into a phone jack, and get on the Net with the touch of a button. Once online, I sent e-mail and surfed news sources, online shops, my bank, and my brokerage. How did it go? Four of the five gizmos met my basic test with varying degrees of ease. But one, the NIC from New Internet Computer Co. (877 926-8642), didn't make the grade. It's a stripped-down PC disguised as an appliance, and it

needs serious improvement.

The clear winner was 3Com's Audrey, whose name was chosen to sound friendly and warm. That it is. With a snazzy design and a simple user interface, the compact Audrey is a beautiful piece

i-opener from Netpliance Inc. (800 467-3637) and the \$599 iPaq Home Internet Appliance from Compaq Computer Corp. (800 345-1518). The i-opener has a good user interface with an added twist: You can increase the size of



of engineering. It handles Web surfing and e-mail—including messages scribbled on the screen or spoken into the built-in microphone—and links to Palm computers, allowing parents and kids to easily coordinate their calendars and address books. Best of all, it felt as fast as my desktop PC. The only negatives: The 8-inch diagonal screen and the cheesy wireless keyboard are too small. Also, the \$499 price is a bit steep and does not include monthly Internet access charges.

Runners-up were the \$299

audio or video clips. The problem with both products was speed. The i-opener was bearably slow, but I thought I would lose my mind waiting for Web pages to load on the iPaq. Another drawback: Both require you to set up and pay for new, separate Net accounts that cost \$22 per month.

Sadly, I can't recommend the InfoGear iPhone (800 211-6500) for anything but quick-and-dirty e-mail. Suffering through Net service provided by Big Planet for \$249, plus \$22 per month for Net access, it's a large desk phone with a screen and a keyboard. Unfortunately, the black-and-white display made Web pages hard to read. The rest of the product (the browser tried were color), and the browser had trouble showing many of the sites I visited.

The dog in the bun was the \$329 NIC from New Internet Computer, a startup backed by Oracle Corp. Lawrence J. Ellison, NIC is a disaster, an appliance only a person could love. Its many pieces make setup much easier than a PC, and the user interface is crude and unfriendly. Worst of all, the performance is terrible. Even though I was told that about the NIC feels like it were rushed to market without the fit and finish

Netpliance's i-opener lets users increase the font size on its 10-inch screen—a boon for seniors

fonts on the 10-inch screen with the touch of a button, a boon for seniors. Meanwhile, Compaq deserves kudos for fine design and packaging. The iPaq not only had the sharpest screen but also did the best job of rendering Web pages, thanks to its Windows CE software. It couldn't, however, play Net

distinguish 3Com's info appliance. If only Audrey had a screen and a keyboard as good as Compaq's and, for, say, \$299, it could have away with the whole market. Until then, I'm still searching for something to get folks off my back.

By Andy Reinhardt
San Francisco

How does Digital Island guarantee e-Business without limits?

It's Keynoted.



While nobody can predict the limits of e-business, we can tell you what slows it down.



The symbol
of quality
e-commerce

Poor speed and reliability. As The Internet Performance Authority, we provide Digital Island with a full range of services. Helping them, help their customers. We measure everything from the time it takes to process a transaction to

how well a site performs against the competition. Today, over 1000 leading e-commerce companies count on us, because nobody else supplies the kind of measurement, diagnostic and consulting services we do. To find out what we can do for you, call us at 1-800-KEYNOTE. Or visit us at keynote.com. And see what it's like to do e-Business the way Digital Island does.

www.keynote.com

ARTISTIC APPLES

Macs retain the loyalty of graphics types, but gamers should think twice

Freelance graphic designer John O'Connell says he has never met a serious digital artist who didn't use a Macintosh. "I know it sounds, well, snobby, but it's true," says O'Connell, a 19-year-old sophomore at Emerson College in Boston. It's not that you can't use PCs to make great art. They just don't signal to your peers that you want to be a great artist, O'Connell says. That's why he carries his tangerine-colored iBook portable Mac with him most places. "I can take my art with me anywhere," he says.

O'Connell is hardly alone. Apple's Macs still hold an almost mystical appeal for some people, such as writers and teachers. That's especially true for artists who use graphics programs that still run better on Macs than on PCs. Tom Tortorici, a freelance graphic designer in Atlanta, says Photoshop and other popular products are "so powerful on the Mac it's like a religion to me." But those programs are getting better on PCs, making the PC-vs.-Mac choice less about function than about fashion. That's why Macs come shaped like giant gumdrops, such as the iMac, or see-through tissue boxes like the new G4 Cube.

EASE OF USE. That doesn't mean you have to be the artsy type to own a Mac. These machines are ideal for anyone who doesn't give a fig about how computers work. There is still no computer that's easier to set up and use. This is especially true of the iMac, in which the monitor and the microprocessor are one unit. With

an iMac, you literally lift it out of the box, plug it in, and you're ready to go. It won't beep at you, signaling you're missing a certain video card you need to play a game—an all too common glitch with PCs. That's because Apple makes the software that controls the computer, so it works better with other devices.

Choosing the right Mac is much easier than it used to be. Apple has trimmed a bewildering array of offerings into four simple lines. There are desktops and laptops—the iMac and iBook, respectively—for home users. There are Power Macs and PowerBooks for those who need more computing juice. And Apple recently added the G4 Cube, which is basically a Power Mac encased in a sleek plastic rectangle.

While they may look different, every Mac is largely the same inside. All run the same Apple operating system and include built-in video, sound, and Internet access. The difference: The more power you want, the more you'll have to pay. While the basic iMac with 64 megabytes of RAM and a 7-gigabyte hard drive is priced under \$800, a Power Mac with a 30-GB hard drive and 128 megabytes of RAM costs \$2,500. And upgrading it with a sharper screen, and better video and sound capabilities pushes the cost up to \$3,500 or more. So even

though prices have fallen in recent years, you'll still pay a premium for a Mac. An \$800 PC, for example, has a hard drive nearly twice the size of an iMac's and has a faster microprocessor.

Another downside is that there isn't as much software for the Mac as there is for the PC. Sure, you'll find all the basic stuff, such as Microsoft Office, but there's only one personal-finance program, Quicken, for the Mac. And the biggest shortfall remains in games. Only the most popular titles, such as *The Sims*, are translated for the Mac, and then often a year or so after they've been initially released.



Not Alone

Graphic artist O'Connell says a Mac signals seriousness to his peers. The desktop iMac also appeals to the technically challenged.

My advice: Don't consider a Mac if you enjoy taking the hottest new game or need special PC software to do your job. If you value ease of use, then a Mac is for you. Especially if you like the idea of turning a corner when you walk into a gift shop with a tangerine-colored top tucked under your arm.

By Charles H. Hogue
in Austin



If only e-Business security were this easy.

As Internet usage increases and e-Business ventures abound, so too does the risk to your company's data. Potential exposure is so great that experts believe computer crime losses this year will far exceed the \$12 billion lost last year. That's where we come in. ENTEX IT Service® is one of America's leading IT service providers. We can provide you with an Infrastructure Assessment for e-Business that can help you identify your infrastructure risks, mitigate them, and turn your strategic vision into reality. We've already done just that for half the ranked Fortune 100 companies, who also happen to be ENTEX clients.

With over 30,000 routers, servers and switches, plus 770,000 desktops under our management, ENTEX supports millions of e-Business transactions every day. Why take chances with your company's IT infrastructure? Get e-secure. Get ENTEX.



ENTEX
IT Service

A Siemens Company

Creating Value through People™

www.ENTEX.com

Call us at: **877-ENTEX4IT (877-368-3944)** or email: **ebiz@ENTEX.com**

ENTEX, ENTEX IT Service and Creating Value through People are either registered trademarks or trademarks of ENTEX IT Service, Inc.

TAKE IT WITH YOU

New laptops require fewer trade-offs

Time was, buying a notebook computer was all about compromise. You could have most of the features you wanted, but hauling the machine around the airport meant an almost mandatory trip to the chiropractor. Alternately, you could find a computer that was literally the size of a notebook, but the undersized keyboard would trip up anyone with chubby fingers. If you chose to tread the middle ground, it seemed that the closer you got to the dream of a fully functional featherweight, the more cash you'd lay out for the machine.

Today—well, the PC industry still isn't offering the perfect notebook yet. But it's a lot closer. Laptops now on the market can do virtually anything a desktop machine will, with far fewer compromises than even a year or two ago. There are still plenty of machines that do everything, but weigh in at a shoulder-busting eight pounds or more. There are also many that do almost

everything, have superfast microprocessors, and barely top five pounds. At the other end of the scale, the ultralights are getting better and better, and if you're willing to forgo a CD-ROM or DVD drive when you travel, you can easily get by with a machine that weighs less than four pounds.

SMALLER SPREAD. Sure, notebooks remain more expensive than similarly configured desktops. But sales of laptops and notebooks are growing at over 30% a year worldwide, compared to single-digit annual growth in desktops, according to researcher Dataquest Inc. That torrid pace has helped bring notebook prices down considerably. And if you start pricing desktops with flat-screen monitors—the same screens that most laptops feature these days—the difference shrinks dramatically. IBM, for example, offers its NetVista X40i desktop with an 800 megahertz Pentium III chip, 128 megabytes of random access memory and a 20 gigabyte hard drive for \$2,299. You can get a similarly configured laptop for





just a few hundred dollars more—a small price to pay for mobility.

Manufacturers realize that today's market for notebooks stretches all the way from corporate users who are willing to spend whatever it takes to consumers who simply want an inexpensive computer they can lug with them to the beach house. That means you now have a lot of choices—ranging from stripped-down machines that cost less than \$1,000 all the way up to workhorses that rival the fastest desktops for nearly \$5,000. That's just for Windows-based machines. Apple Computer Inc. offers laptops ranging in price from \$1,500 to \$4,000. (See page 114 for more on Apple.)

Believe it or not, some users actually need all the power and features offered in those high-end, heavyweight computers. These are folks who want the convenience of having a hard drive, a floppy, and a CD or DVD on-board at all times—in industry parlance, “three-spindle” machines. That means there's no hassle with hooking up external drives via cables or swapping drives in bays that serve a dual purpose.

Take Dane Oldridge, a 29-year-old video-production manager at Sportvision, a New York-based company that creates sports-related graphics for television and the Web. Oldridge uses his Sony Vaio PCG-F390 to add music, commentary, and text to three-dimensional replays of basketball and football games. At eight pounds, the \$3,500 notebook replaced a custom-built workstation the size of a small table, and Oldridge says it can handle nearly every task the larger computer did. It's not the lightest notebook on the market, but Oldridge feels the 15-inch screen, DVD

drive, and long battery life are worth the extra heft. “The weight's not as important to me as the functionality,” he says.

Also in the heavyweight category, take a look at Gateway Inc.'s \$3,874 model 9300xl deluxe which has an 800 MHz Pentium III micro-processor, a 20 GB hard drive, and a 15.7-inch screen—big enough to comfortably watch any movies you might pop into the computer's DVD drive. If you want an even bigger screen, you also can hook it up to your television, though it's probably easier to lay out \$150 or so for a dedicated DVD player for your TV. A

Sales of notebook computers are growing at over 30% a year, vs. single-digit growth in desktops. That has sent notebook prices down

newer Sony, the 6.6-pound Vaio PCG-XG39, features a crystal clear, 14.1-inch screen, an 850 MHz Pentium III chip, and an ultra-roomy 30 GB hard drive for \$3,099.

Packed with features but considerably lighter is the IBM ThinkPad T20. Siddharth Dasgupta, a researcher at California Institute of Technology and a part-time MBA student at the University of California at Los Angeles' Andersen School, had been a devotee of Dell Computer Corp. notebooks until he got his T20 through a school purchase program at Andersen. Today, in addition to using the \$3,799 IBM for his course work at UCLA, he also puts together PowerPoint presentations and runs

spreadsheets for Materials Research Source, a semiconductor startup he heads. And when he takes the ThinkPad home, he says, his 11-year-old daughter uses it to download MP3 files and create music CDs on an external drive. Best of all: The computer weighs less than five pounds but still manages to pack a 14.1-inch screen into a case just over an inch high. "The screen is great, and the computer is very slim," Dasgupta says.

Many users, though, balk at even five pounds dangling from their shoulders. For them, the weight saved is worth the hassle of hooking up the CD-ROM or DVD via a cable and not having the widest screen. Another key selling point for these frequent travelers: The smaller machines will fit comfortably on an airline seat-back

Larger screens are a big improvement. IBM offers a 14.1-incher on a ThinkPad that weighs just 4.7 pounds

tray, even in coach when the passenger in front of you reclines into your lap.

Among the lightest—and smallest—of these machines is Fujitsu Ltd.'s B2175, which weighs in at a mere 2.71 pounds. This diminutive PC demands some serious trade-offs that not every user is likely to accept. For example, it has only a 10.4-inch screen—among the smallest available on notebooks today—and a cramped keyboard that may slow down touch typists. On the other hand, the Fujitsu's

screen is sharp and bright, and it is touch-sensitive, making it easier to use for some graphics work and certain order-entry applications. It has a generous 15 GB hard drive. A 500 MHz Celeron processor makes it among the slowest of the new machines, but the price is a fairly modest \$2,399.

Slightly bigger is the Gateway Solo 3350, which features a 12.1-inch screen and a 600 MHz Pentium III processor for \$2,199. Seval Oz loves hers. The vice-president for finance at Urban-

Media Inc., an upstart e-commerce and voice-communication company in Palo Alto, Cal., Oz carries her Gateway with her throughout the day. When she goes from meeting to meeting. With the machine linked to a wireless network in UrbanMedia's office, she can tap into Internet commerce calls, send e-mail, and collaborate with colleagues in Palo Alto and at the company's sites in Georgia and other cities in California. "My laptop is really indispensable to me as a communications tool," she says. Weighing just 3.65 pounds, the Gateway doesn't hold her down on her frequent business trips, and the trade-off of not having a built-in CD-ROM or DVD isn't a problem for her: "It's vital for me to be able to carry my computer with me."

Another machine

THE LOWDOWN ON THE LATEST LAPTOPS

MODEL/ PRICE	CHIP/MEMORY/ HARD DRIVE	WEIGHT/ SCREEN SIZE	THE SKINNY
AFFORDABLE MOBILITY			
COMPAQ Presario 1700/\$1,999	600 MHz Pentium III, 64MB RAM, 10GB	5.6 lbs., 14.1"	A great desktop replacement for home or small office use. Better yet, it's lightweight for the price.
HEWLETT-PACKARD Pavilion N5150/\$1,849	600 MHz Pentium III, 64MB RAM, 10GB	7.2 lbs., 13.3"	Lots of machine for the price, but don't expect to move it too far: at more than 7 pounds, your shoulder will ache.
WINBOOK WinBook Si/\$1,999	800 MHz Pentium III, 64MB RAM, 6GB	7.1 lbs., 14.1"	Far from featherweight, but lots of processor for the price from mail order and Web retailer WinBook.
POWER TO SPARE			
IBM ThinkPad T20/\$3,799	750 MHz Pentium III, 128MB RAM, 20GB	4.7 lbs., 14.1"	Costs a lot, but offers great features in a compact package. One problem: annoying whine when a disk is in the DVD drive.
DELL LatitudeCPx/\$2,679	750 MHz Pentium III, 64MB RAM, 6GB	6.4 lbs., 14.1"	A big, feature-packed machine at a relatively low price. But the weight will slow you down as you sprint for flights.
SONY VAIO PCG XG39/\$3,099	850 MHz Pentium III, 128MB RAM, 30GB	6.6 lbs., 14.1"	Slick-looking machine with an exceptional screen and enormous hard-drive. Firewire connector makes video work a snap.
SHOULDER SAVERS			
TOSHIBA Portégé 3480/\$2,499	600 MHz Pentium III, 64MB RAM, 12GB	3.4 lbs., 11.3"	At less than an inch thick, the skinny on this machine is that it really is skinny. The small keyboard, though, might slow down pudgy fingers.
GATEWAY Solo 3350/\$2,199	600 MHz Pentium III, 64MB RAM, 6GB	3.65 lbs., 12.1"	This machine's relatively big screen and nearly full-sized keyboard are unusual in ultralights. But the standard hard drive is a bit small.
FUJITSU B2175/\$2,399	500 MHz Celeron, 128MB RAM, 15GB	2.71 lbs., 10.4"	At less than 3 pounds, this is a true featherweight. The keyboard is cramped, but the touch-screen is great for graphics applications.

DATA: BUSINESS WEEK

Do you still look for the prize in the cereal box?

Have you ever taken a sick day due to spring fever?

Does your first meeting seem longer on an empty stomach?



**FREE
BREAKFAST
BAR**

If the answer's yes, you're one of us. That's why at Hampton™, we offer a free breakfast bar every morning. Just to help you get through the day. At over 1,000 locations nationwide, you'll also get a 100% Satisfaction Guarantee. And now you can earn Hilton HHonors® hotel points and airline miles throughout your stay. All from around \$69 to \$99 a night. So come join us. Whether you're here for business or pleasure, we think you'll fit right in.

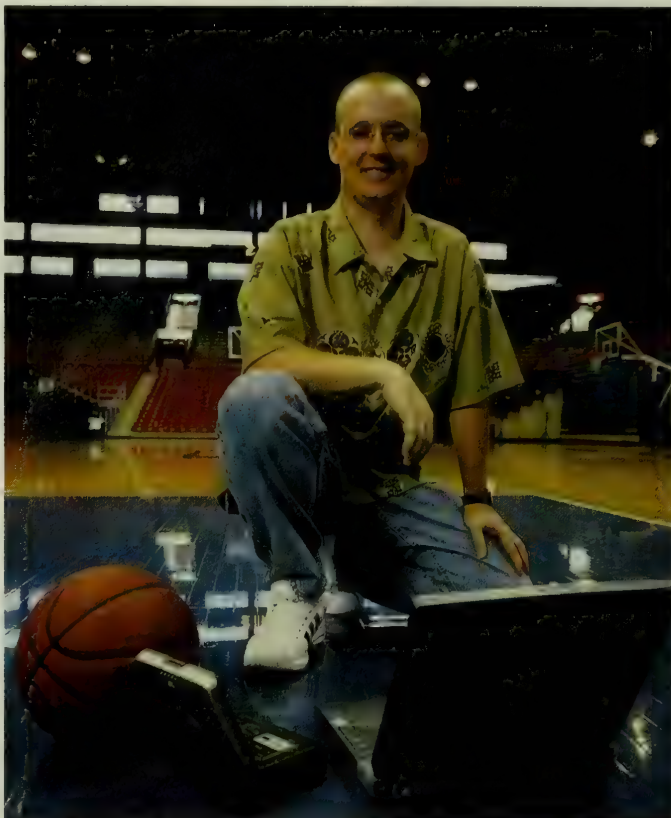
We're with you all the way.



calls for trade-offs—but is likely to prove popular with those who do a lot of sprinting in airports—is Toshiba Corp.'s Portege 3480. While the keyboard is an inch-and-a-half narrower than those found on most laptops, the computer is less than an inch thick, weighs just 3.4 pounds, and offers a relatively speedy 600 MHz Pentium III chip for \$2,499.

For home users who don't want to spend a fortune on a computer, there are plenty of options as well. At the high end—machines that push the \$2,000 price barrier—is Compaq Computer Corp.'s Presario 1700. At 5.6 pounds, this PC won't weigh you down as much as some that cost far more, and with a 600 MHz Pentium III, it won't slow down your applications, either. The 1700 comes with a relatively generous 14.1-inch screen and a standard 64 megabytes of RAM, which you might want to upgrade to 128 MB if you plan to run the newer Windows 2000 operating system.

A bit cheaper but also heavier is Hewlett-Packard Co.'s Pavilion Notebook N5150. At \$1,849 in stores such as Best Buy Co., this machine offers a 13.3-inch screen but weighs in at a hefty 7.2 pounds. WinBook Computer Corp., an Internet and phone-order retailer, puts a speedier 800 MHz Pentium III chip and a 14.1-inch screen in its si laptop but packs it into a 7.1-pound package. NASCAR driver Ernie Irvan bought a WinBook to take with him on the road while traveling with his family to races before he retired last year. "It worked out perfectly because the kids could play games, we



could do some statistics for the races, and you could watch movies and stuff on the big screen," Irvan says.

If \$2,000 still seems a tad rich for your mobile-computing needs, fear not. There are plenty of options in the \$1,200 area and even some that dip below \$1,000. This is the territory of smaller screens and slower Intel Celeron and Advanced Micro Devices Inc. processors. But most of these machines are plenty powerful to handle home-computing tasks.

One word of caution: Many of the cheapest laptops use older screen technology called dual-scan, which isn't quite as sharp as the TFT screens found on virtually all machines that cost

more than \$1,500. Take, for example, IBM's \$1,099 ThinkPad i Series 1200. This six-pound machine features a 500 MHz Mobile Celeron processor, 32 MB of RAM, and



company computer? You don't have to—with the Computer Safe from Eagle Creek. Lined with dense foam to protect your machine from bumps and spills, this little envelope is designed to be slipped inside your main bag. With handles and attachment rings, it looks good enough to carry on your own. It's available for \$25, in black, khaki, or Neptun blue, at travel outfitters or www.eaglecreek.com.

Slam Dunk

Oldridge uses his Sony to music, commentary, and to 3-D game replays. The eight-pound laptop replaced a custom-built workstation

a 12.1-inch dual-scan screen. That's good enough for most applications, though you might want to upgrade to the i Series 1250, which offers a screen and a more robust 640 MB of RAM for \$1,399.

Are any of these machines without compromise? Not really. No one has come up with a notebook computer that fits neatly into a briefcase, weighs less than a paperback book, has the features of a high-end desktop, and costs next to nothing—that's your desire—dream on. There are, however, machines that can handle virtually anything mobile professionals and home users might want to do. It's a matter of choosing the one and deciding how much cash you're willing to throw with to get close to the dream.

By
David Rocks
in New York

Computer Safe

EAGLE CREEK INC.
www.eaglecreek.com
\$25

Not ready to give up your favorite briefcase or backpack for that ugly black standard-issue laptop bag that came with your new



Every day, mobile phone users
send some 200 million messages.

With E-mails, voice mails and
fax mails too, life's getting
complicated. Ericsson's Mobile

grip

Ericsson one-mailbox messaging. Keeping your life together.

Internet messaging solution will
mark a new era of integrated
messaging, allowing network
operators to offer the facility to
send, receive and manage all
messages through a single
mailbox. And access it from any
device, anywhere in the world.

It's time to get a grip.

www.ericsson.com

The Mobile Internet Revolution.

It's an everyday thing.

ERICSSON 

Test Drive

CUTTING THE CORD AT LAST

Barreling down Fifth Avenue in the backseat of a taxi, I suddenly have to know the name of the American actress who starred opposite Jean-Paul Belmondo in Jean-Luc Godard's *Breathless*. I ask the driver, but he's from Uzbekistan and barely speaks English, let alone French. No luck there. Then I pull my laptop out of my bag, turn it on—*et voilà*: I'm surfing to IMDb.com, my favorite movie-info Web site. I get the answer (Jean Seberg), skim a couple of reviews online, and then see what other movies she played in. Before tucking my laptop back into my bag, I check my e-mail, look at the forecast on weather.com, and glance at a few stock prices on financial sites.

A wild fantasy of mobile Web surfing? Nope. And you can do it, too—although, as those ads on TV always warn, actual results may vary. Wireless Web access really does exist. We're talking the real thing, on a computer—not using one of those tiny-screened phones the cellular companies are hawking. But the kind of speed I got while careening through Silicon Alley is available only in New York, San Francisco, and a dozen other cities in the U.S. Other services offer much slower access in a lot more places—O.K. for e-mail and looking up an occasional Web page—but far from speedy. Wireless-data services “still have a long way to go,” says analyst Roberta Wiggins of Yankee Group Research Inc. “There are coverage challenges, reliability problems, and performance problems.”

On my Fifth Avenue trip, I was using a Ricochet modem made by Metricom Inc., a wireless-networking upstart backed by WorldCom Inc. and Microsoft Corp. co-founder Paul Allen. The service costs \$70 to \$80 per month for as much data as you can send or receive, and the modem itself will set you back between \$100 and \$300. It really is fast: 128 kbps, or more than twice the

speed of the best dial-up modems. For general Web surfing, most users will find little difference between Ricochet and their office network connections. And even the limited availability will soon ease: Metricom plans to be serving nearly 50 metro areas by the end of next year.

Most of the bigger cellular carriers also offer wireless data, but they're nowhere near as fast as Ricochet. Verizon Communications and AT&T use a system called cellular digital packet data (CDPD), which can reach speeds of 19.2 kbps by sending packets of data across the same frequencies as cell-phone networks. That's fine for e-mail and checking stock quotes but far too slow for full-fledged Web surfing. With Verizon's service, for example, some Web pages didn't load in their entirety. At the search engine

Google.com, the page was often missing the window where you enter your query. Without that, it's kind of hard to find anything.

As limited as they are, the services aren't cheap. In each case, a modem card for your PC costs between \$200 and \$700. A less appealing—i.e., somewhat cheaper—option is to hook up via a cable linked to your cell phone, if it's equipped for data transmissions. AT&T service will set you back \$50 per month, while Verizon costs from \$50 to \$55 monthly—both for as much data as you can send and receive. And neither is truly nationwide, so you'll want to make sure the system works where you expect to be using it before you sign up. Sprint Corp.

offers a similar service, with one key difference: It's charged per minute, which means you had better be careful how long you leave your computer hooked up. Otherwise you'll eat through even the most generous buckets of cellular minutes in a jiffy. And that would make it pretty expensive to find out who starred... um... what was that actress' name again?

By David Rocks in New York



The wireless Web really does exist. We're talking the real thing, on a computer

SPECIAL REPORT CONTINUES ON PAGE 1

INNOVATION in the Customer Economy



e**business**

conference and expo

December 12-14, 2000

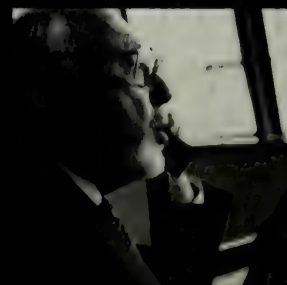
Jacob K. Javits Convention Center, NYC

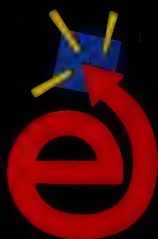
Register NOW!

Conference Produced by

BusinessWeek

INFORMATIONWEEK





eBusiness

conference and expo

DEC 12-14, 2000

Jacob K. Javits Convention Center
New York City

What's Inside

Tools and Technologies.....	3
Program-at-a-Glance.....	4
Business Benefits Track.....	6
Technology Solutions Track.....	8
Mobile Commerce Track.....	10
Real World Case Studies Track I.....	12
Real World Case Studies Track II.....	14
Monday Tutorials.....	16
Exhibitors.....	16
Keynote Speakers.....	17
Featured Speakers.....	17
Sponsors.....	18
Registration.....	19
Hotel and Travel Info.....	19

REGISTER NOW!

Online

www.ebusinessexpo.com

(Please use Customer Code BW)

By Fax

212-592-8233

By Phone

800-652-2578

By Mail

CMP Business Forums

3 Park Avenue, 30th Fl, NY, NY 10016

Winning E-business.

Winning E-businesses execute on every cylinder.

Their business models deliver enduring customer value. Their technical architecture deliver rock-solid performance and scalability. They're masters at implementation. They've learned the difference between realities and pipe dreams, opportunities and hype. And they rely on one event to support every business and technical decision they make: CMP's **eBusiness Conference and Expo** at the Jacob K. Javits Convention Center in New York City.

Sponsored by the E-business experts at **Business Week** and **InformationWeek**, this is your single source for enterprise E-business: strategic intelligence, leading-edge solutions, and practical expertise. From E-marketplaces to CRM, mobile commerce, high-availability infrastructure, you'll master it here!

- **Plot your strategies** with the world's leading experts in winning E-business models
- **Manage your transition**, leveraging all your advantages, clicks and mortar alike
- **Build your shortlist** from the world's best E-business products and services
- **Choose the right solution** with tough, independent guidance from world-class experts
- **Master accelerated implementation techniques** straight from the world's leading E-businesses
- **Discover advanced E-processes** that seamlessly integrate partners, suppliers, and legacy systems
- **Maximize performance, scalability, and usability** to squeeze more value out of every click!

If you're an E-business leader, you must know more, accomplish more, meet tougher goals than ever before. One event – only one event – helps with every challenge you face.

Don't miss eBusiness Conference and Expo

December 12-14, 2000 at the Jacob K. Javits Convention Center in New York City

Check out what's new at eBusiness Conference and Expo!



SERVING THE EARLY-STAGE INVESTING COMMUNITY

Forums & Events

AngelSociety Forum will be held in conjunction with eBusiness Conference and Expo and is the premier event that brings together early stage capital and important service providers with exceptional new ventures in an informative and educational venue. AngelSociety Forum will allow serious investors to interface with early-stage companies through formal presentations, exhibit booth interaction and private face-to-face exhibit meetings. A conference track, presented by industry-leading speakers and expert panels, will address early-stage financing issues and industry trends.

www.angelsociety.com

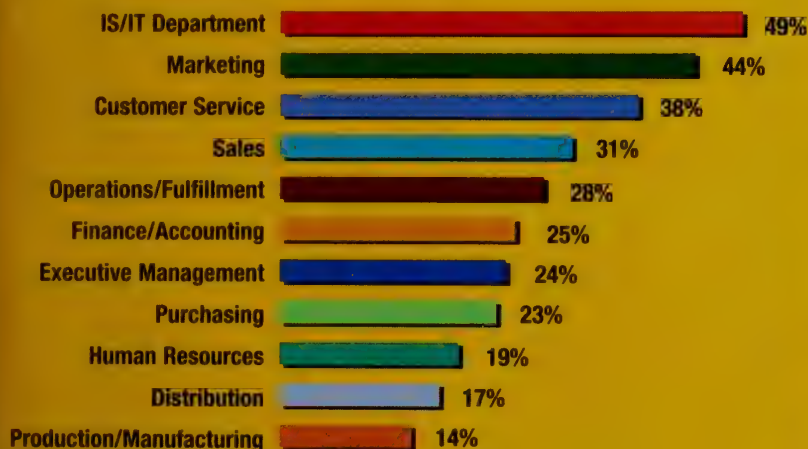
Come with your toughest E-business challenges.

Leave with real solutions you can start implementing immediately.

It's that simple. It's that powerful. Whatever your goals, **eBusiness Conference and Expo** can make a fundamental difference in how you do E-business – and the results you'll achieve. Build your personal **eBusiness Conference and Expo** from the industry's broadest, deepest assemblage of E-business expertise, designed to address your specific challenges.

Look Who's Driving E-business!

Corporate activities experiencing significant change in their business practices as a result of E-business opportunities.



Data: InformationWeek Research in consultation with UC Berkeley and IBM

Also New! Mobile Commerce is now co-located with **eBusiness Conference and Expo**

Explore the new phenomenon of wireless business solutions, anytime-anywhere! Get connected to cutting-edge wireless solutions providers and device manufacturers involved in the deployment of M-commerce applications in a variety of industries including finance, banking, retail and travel. Experience the future of the wireless economy!

mobile commerce

Conference and Expo

www.mccexpo.com

See the Mobile Commerce track on page 10 for details!

Get the tools, technologies and expertise you need...

- Access Services
- Application Servers
- Billing Systems/Online Bill Presentment
- Caching Solutions
- Consulting & Integration Services
- Content Management Solutions
- Customer Relationship Management
- Customer Service Software
- Data Warehousing/Mining Systems
- Database Integration Solutions
- Electronic Commerce Servers
- Email Services
- Enterprise Portals
- Extranets
- Firewalls
- Fulfillment Services
- High Availability Solutions
- Hosting Services
- Internet Service Provider Solutions
- Internetworking Equipment
- Intranet Solutions
- IP-Enabled EDI
- Java-Based Software
- Knowledge Management Systems
- Middleware
- Object-Based Technology (CORBA/DCOM)
- Outsourcing Solutions
- Payment Solutions
- Recommendation Engines
- Security Solutions
- Site Design & Usability Solutions
- Site Personalization & Profiling
- Store Building Software
- Streaming Media
- Trading Hubs/Supply Chain Marketplaces
- Traffic Measurement Solutions
- Training Solutions
- Transaction Servers
- Virtual Private Networks (VPNs)
- Web Advertising Brokers
- Web-Enabled Enterprise Resource Planning
- Web-Enabled Relationship Management
- Web Publishing/Document Management
- Wireless Internet Solutions
- XML Solutions

Business Benefits Track

Technology Solutions Track

	9:30am-3:30pm	MONDAY, DECEMBER	
	9:30am-3:30pm	MONDAY, DECEMBER	
	9:00-10:15am	TUESDAY, DECEMBER	
DAY ONE: From Here to E-business: Managing the Transition	10:30-11:45am	GENERAL SESSION What Business Are You Really In?	GENERAL SESSION What Business Are You Really In?
	1:30-2:30pm	Strategies for Crossing the E-business Chasm	Making the Most of E-marketplaces
	2:45-3:45pm	Creating an E-business Corporate Culture	Supply Chain E-process Automation
	4:00-5:00pm	E-business Branding and Competition: What Frictionless Commerce Means to Your Value Proposition	Securing Your Perimeter
	9:00-10:15am	WEDNESDAY, DECEMBER	
DAY TWO: Reinventing Business Models: The E-business Imperative	10:30-11:45am	GENERAL SESSION Lessons Learned from E-business Failures	GENERAL SESSION Lessons Learned from E-business Failures
	1:30-2:30pm	E-business Model University	Personalization: One-To-One Wonder Or Marketing Myth?
	2:45-3:45pm	Innovative E-business Models in Practice	Customer Information Profiles: Managing and Massaging Unprecedented Amounts of Data
	4:00-5:00pm	Dynamic Marketplace Models	Mobile E-commerce: Today's Building Blocks, Tomorrow's Opportunities
	9:00-10:15am	THURSDAY, DECEMBER	
DAY THREE: eValues: A New Equation of People, Ideas & Capital	10:30-11:45am	GENERAL SESSION: Start-up: Alternative Funding Sources and Company Launch Strategies presented by AngelSociety	GENERAL SESSION: Start-up: Alternative Funding Sources and Company Launch Strategies presented by AngelSociety
	1:30-2:30pm	Winning E-business: The Human Component	Getting Closer to Your Customer: Breakthrough Content Distribution Solutions
	2:45-3:45pm	Value Creation: What's the Right Exit Strategy?	Building More Efficient Web Sites
	4:00-5:00pm	Customer Management: InformationWeek/eBusiness Conference and Expo Joint Research	Customer Management: InformationWeek/eBusiness Conference and Expo Joint Research

Conference content is subject to change. Go to www.ebusinessexpo.com for details.

eBusiness Conference and Expo Program-at-a-Glance

Mobile Commerce Track **Real World Case Studies I** **Real World Case Studies II**

DAY TUTORIAL WORKSHOP 1 Enabling Web Storefronts

DAY TUTORIAL WORKSHOP 2 VPNs: The New Extranet Architecture

NOTE ADDRESS

GENERAL SESSION:

Wireless Web:
Who'll Be The Gatekeepers?

GENERAL SESSION

What Business Are You Really In?

GENERAL SESSION

What Business Are You Really In?

Shopping Without Wires:
Mobile Commerce 101

Wireless e-Commerce Now:
Making Sales Anywhere,
on Any Device

Deploying a Storage Area Network

Who'll Lead the M-commerce
Applications Pack?

Creating an E-commerce Ecosystem
with Secure Mobile Access

Scalability: Staying Ahead of the
Performance Curve, No Matter What

Wireless Advertising: What Form?
What Content? What Reaction?

How Lycos Network Chose a New
Web Platform and Server to Build its
Next Generation Internet Portal

Creating Smart Enterprises with
E-marketplaces

NOTE ADDRESS

GENERAL SESSION

E-commerce in the Real World

MetalSpectrum to Serve Manufacturers,
Distributors and Customers in the
Specialty Metals Business

GENERAL SESSION

Lessons Learned from E-business Failures

Running Your Business on the
Mobile Bandwagon

Focusing on the Consumer:
Capitalizing on the Digital Economy

bLiquid.com Creates a Specialized
Marketplace for Used Equipment Sales

E-commerce Payment and
Fraud: Practical Solutions

State-of-the-Art Intrusion
Detection and Reaction

Exploiting E-business Intelligence

Unlocking M-commerce:
Application Design Secrets

Internet Service Deployment
Platform Key to Unified
Communications Services

Bringing an E-business from
Concept to Reality

NOTE ADDRESS

GENERAL SESSION:

Shift from E-commerce to
M-commerce

**GENERAL SESSION: Start-up: Alternative
Funding Sources and Company Launch
Strategies presented by AngelSociety**

**GENERAL SESSION: Start-up: Alternative
Funding Sources and Company Launch
Strategies presented by AngelSociety**

More Bandwidth! More Power!
More Intelligence!

Leveraging the Internet to
Change Your Business Model:
The JD Williams Story

Service Level Assurance: Keeping
E-businesses Going at Full Speed

Why Can You Hear Me?"
Incorporating Voice into M-commerce

Enterprise Portals:
Maximizing Their Reach,
Manageability, and Business Value

Ensuring Effective Customer Care

Creating a Positive, Friendly
User Experience

Transactions Secured with
Biometric Technology

Building A Profitable E-business

For program information, REGISTER TODAY! www.ebusinessexpo.com Fax: 212-592-8233 Phone: 800-652-2578

Business Benefits Track

TUESDAY, DECEMBER 12TH

From Here to E-business: Managing the Transition

GENERAL SESSION: What Business Are You Really In?

10:30-11:45am

No matter how long you've been in business, or how successful you've been, E-business changes everything – and your future depends on how well you manage your transformation. Success begins with a rock-solid understanding of the core value you bring to your customers – but, as the world's best companies have repeatedly discovered, that's rarely as obvious as it sounds. In this session, you'll discover how to gain a more profound understanding of your core value as your customer sees it – and how to transform that knowledge into a winning long-term E-business strategy.

Strategies for Crossing the E-business Chasm

1:30-2:30pm

For a few rare incumbents, E-business merely requires an extension of the approaches that have worked in the past. For most, however, dramatic changes in both mindset and operations are required. This session shares the experiences of leading "bricks-and-mortar" companies who are successfully transforming themselves into E-businesses. Discover how they've learned to create great web-based customer experiences; built the extraordinarily diverse partnerships and alliances needed for E-business success; and begun to view customer relationships as ongoing conversations. Even more important, discover how they've driven the internal changes needed to accomplish all this – and how you can do it, too.

Creating an E-business Corporate Culture

2:45-3:45pm

What characteristics of corporate culture are most closely associated with E-business success, and how can

you rapidly evolve your corporate culture to adopt them? In this session, you'll discover the quantifiable, bottom-line advantages you can achieve by crafting an E-business-focused corporate culture – and learn how to "get there" from wherever you are now. We'll show you how to marshal all the tools available for shaping corporate culture; how to lead an E-business initiative by example; how to craft organizational structures with greater speed and flexibility; and how to leverage your E-business corporate culture in the battle to recruit and keep the best people.

E-business Branding and Competition: What Frictionless Commerce Means to Your Value Proposition

4:00-5:00pm

Your brand: in the age of E-business, it's proving more important than ever before. But what happens to your value proposition when consumers have information and power? How do you differentiate from the competition? What happens to the businesses that reap their profits FROM the friction-like financial institutions that rely on consumers' ignorance of the better deal around the block? In this session, you'll plot strategy with a leading expert. You'll discover the best (and worst) ways to leverage your bricks-and-mortar brand on the Web. You'll learn the strategies and tactics for preserving your brand and your value proposition as you morph into an E-business.

WEDNESDAY, DECEMBER 13TH

Reinventing Business Models: The E-business Imperative

GENERAL SESSION: Lessons Learned from E-business Failures

10:30-11:45am

The E-business community will remember the Year 2000 for spectacular collapses such as boo.com and toysmart.com. In this session, you'll go beneath the surface to discover exactly what went wrong at

these high-profile failures. Our panel of experts will dissect flawed business models, hidden assumptions, disastrous critical-path decisions, failures in execution, mismanagement, misunderstanding of the customer, and more. The goal: to identify specific actionable lessons for your E-business.

E-business Model University

1:30-2:30pm

Every E-business needs a clear model that defines what it's trying to accomplish – and there's no shortage of E-business models to choose from: brokerage and B2B exchange models, aggregators, agents, ad-based models, pure-play web commerce, clicks-and-mortar, affiliate and community-building, subscriptions, portals, and many more. In this session, you'll review how each E-business model is faring in the marketplace, identifying key strengths and weaknesses, long-term prospects, market opportunities, and evolution scenarios. You'll learn how to identify the right model for your E-business, integrate the best aspects of multiple models, migrate your E-business to a new model – and above all, transform models into reality.

Innovative E-business Models in Practice

2:45-3:45pm

How are the world's most innovative business model experiments really working out? How are yesterday's innovators staying ahead of breakneck competition? In this session, a top E-business model theorist challenges the industry's leading innovators with tough questions about what's worked, what hasn't, what's changed – and what's next. With brutal honesty, leading E-business executives will measure yesterday's expectations against today's marketplace reality and explain how they've changed business models to reflect those realities. Most important, they'll offer powerful insights into what it takes to execute radical shifts in strategy – swiftly and successfully.

For All Business and Technology Executives, Managers, and Decision-Makers

Squeeze maximum profitability and competitive advantage out of your E-business initiatives! Discover solutions for all your key E-business challenges – from models, metrics, and marketing, to value chains and Web-based customer service!

Electronic Marketplace Models

5:00pm

As marketplaces move from drawing to reality, we've brought together creators, customers, and observers to answer today's key questions: Which will thrive, which will fail, and why? What operational and marketing issues are E-marketplaces encountering, and how well are they responding? Which industries are being most receptive – and least so? Will the latest E-marketplace purchasing offerings and packaged solutions speed new entrants to market? Will the FTC's antitrust rulings become more serious? Is the market's estimate of \$1.4 trillion in marketplace transactions by the Year 2000 realistic? Above all, how do you develop your company's strategy for participating in – or building – marketplaces?

REBAY, DECEMBER 14TH

**Issues: A New Equation
People, Ideas & Capital**

Panel Session

**5:00-5:30pm: Alternative
Funding Sources and
Company Launch Strategies**

5:11:45am

Tomorrow's great companies will get started and launched – but they'll have to be far smarter and more creative than ever before. If you're an entrepreneur, you can't afford to miss up-to-the-minute insider's look at alternative launch strategies. What are the funding alternatives? What are the pros and cons of 'angel' funding – and what's the most efficient way to pursue them? Are VCs funding? Should you wait, and if so, who's looking for deals now? What strategies should you incorporate as you build out your technological infrastructure? How will this year's successful business plans differ from last year's? Join a

powerhouse panel of experienced investors, entrepreneurs and technologists to discover how to get funded, get organized and get to market – fast!

Presented by AngelSociety



AngelSociety Forum provides a highly interactive conference and early-stage capital market for serious investors, exceptional new ventures, and important service providers. Company presentations, exhibit booths, and face-to-face meetings will complement industry-leading speakers and expert panel discussions.

**Winning E-business:
The Human Component**

1:30-2:30pm

Excellent people = excellent E-business. In this session, you'll learn how exactly to hire, motivate, nurture, and retain the world's best people. In this complete guide to the human side of the successful E-business, we'll address issues that are all too often neglected in the rush to the marketplace. Can you get the job done without endless 80-hour workweeks? What's the right role for training in today's E-business? Now that stock options have lost their sheen, what financial or non-financial motivations can replace them? Is the hyper-competitive E-business culture sustainable for the long term? Is it possible to rebuild employee loyalty? Should you try?

**Value Creation: What's the
Right Exit Strategy?**

2:45-3:45pm

Recently, important new approaches have been introduced for measuring E-business return on investment. In this session, we'll compare them, helping you understand how they differ from traditional ROI methodologies. We'll address urgent questions such as: How do you measure shareholder value in a marketplace with unprecedented volatility? What is the true value of a new customer, and what should customer acquisition really cost? Is there such a thing as E-business customer loyalty, and can it be measured and valued? Which web metrics matter now, and which ones have become virtually useless? From start to finish, we'll help you choose metrics that offer real insight – and avoid those that obscure your E-business realities.

**Customer Management:
InformationWeek/eBusiness
Conference and Expo Joint
Research**

4:00-5:00pm

Year after year, eBusiness Conference and Expo delivers breakthrough research you can use right now to build winning E-business strategies. Join us this year for highlights of the brand-new 4th wave of the InformationWeek /eBusiness Conference and Expo E-business Agenda Study, focusing on customer relationship management, and the transactions and infrastructure behind it. These results offer unprecedented insight into today's leading E-business strategies, practices, and business models – and quantify the radical changes being wrought by E-business in each major segment of the economy.

Organized and led by the E-business experts at Business Week and InformationWeek

Technology Solutions Track

TUESDAY, DECEMBER 12TH

From Here to E-business: Managing the Transition

Making the Most of E-marketplaces

1:30-2:30pm

In this session, you'll define your optimal strategy for profiting from E-marketplaces, and master today's best practices for achieving maximum cost savings, speed, and flexibility. We'll review every leading approach to E-marketplaces, comparing the benefits, costs, and risks of supply chain marketplaces, vertical and horizontal trading hubs, sites deployed by enterprise software firms, and other alternatives. You'll discover how to tell the winners from the losers, and identify steps you can take right now that position you for profit, no matter which marketplaces ultimately succeed.

Supply Chain E-process Automation

2:45-3:45pm

Suddenly, enterprises have an unprecedented range of software and Web-based options for automating communication and processes across their supply and distribution chains. In this session, leading providers and implementers compare the alternatives, and review the diverse applications E-process software can support – from supply-side engineering changes through customized channel pricing. You'll review approaches based on pure XML message-based architectures, as well as solutions that leverage LDAP, Active Directory, and other directory infrastructures. Finally, early adopters will offer practical insights into the challenges of implementation, including the need to integrate with an exceptionally wide range of ERP and legacy software.

Securing Your Perimeter

4:00-5:00pm

Witness a live attack on an enterprise network – and a state-of-the-art response! Network Computing Magazine editors walk you through every stage of a typical assault by sophisticated crackers, demonstrate state-of-the-art defenses and response techniques. You'll see intrusion detection and security scanning at work; discover how to plug vulnerabilities in firewalls and authentication systems, and learn how to weave multiple techniques and products into a powerfully effective security architecture.

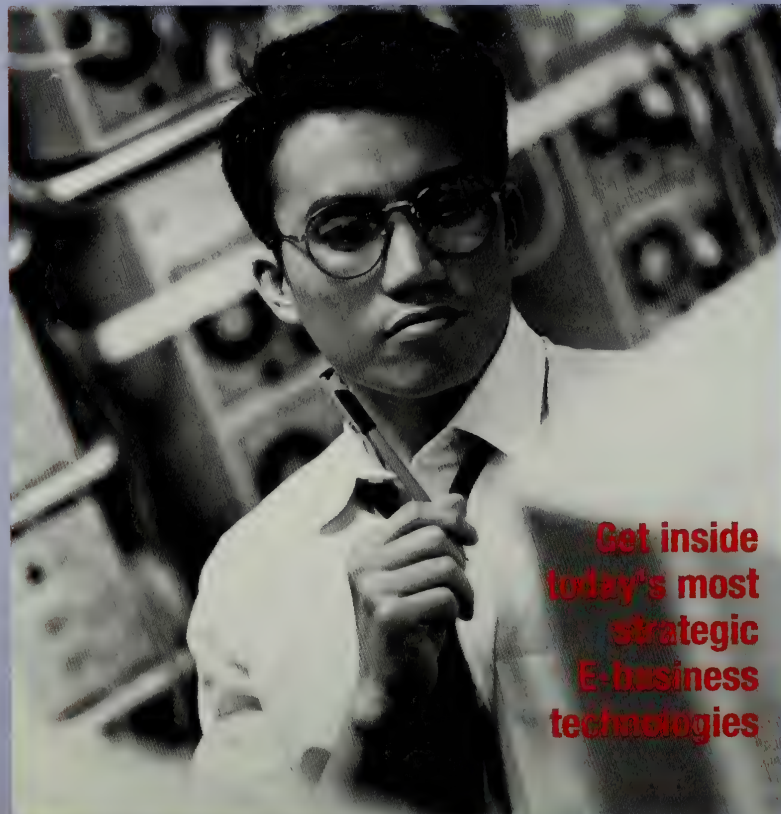
WEDNESDAY, DECEMBER 13TH

Reinventing Business Models: The E-business Imperative

Personalization: One-To-One Wonder Or Marketing Myth?

1:30-2:30pm

Personalization: is it all it's cracked to be? In this session, we review the state-of-the-art in E-business personalization technology, taking a tough look at what you can really expect – and what's really involved in implementing true personalization. We'll walk you through successful deployments, showing you the obstacles that E-businesses overcame to achieve their key business goals. You'll discover how vendors are responding to the criticisms leveled at first-generation personalization software, by delivering deeper personalization, greater scalability, and the ability to personalize entire sales campaigns encompassing multiple media.



**Get inside
today's most
strategic
E-business
technologies**

For IT/IS and Other Technical Managers and Decision-Makers

To make your E-business work, you've got to make E-business technology work. Get inside today's most strategic E-business technologies, identify every key approach, opportunity, risk factor, and technical limitation. Compare today's leading products – and preview tomorrow's. Then, check out the real-world case studies from leading edge implementers who'll identify key obstacles to implementation – and the best-practice solutions they've discovered.

Customer Information Files: Managing and Sizing Unprecedented Amounts of Data

3:45pm

and personalization systems
re massive amounts of accurate
mer data to meet their potential.
s session, you'll learn how to feed
systems the data they need, no
r what internal or external
ns that data is stored in. Discover
t's best strategies and techniques
egrating legacy point-of-sale
ns, call center databases, data
houses, and other key sources of
mer information. Learn how to
ve data quality and consistency,
ge massive quantities of data
effectively, and use your data as
ively as possible in real-world
nialization and CRM applications.

File E-commerce: Your Building Blocks, Tomorrow's Opportunities

5:00pm

re contemplating the potential
obile E-commerce, you can't
d to miss this comprehensive
w of the latest technologies –
what it'll take to implement them
ssfully. A panel of experts will
w mobile commerce technology
the perspective of IT, marketing,
the customer, offering a frank
ective on technical limitations
as screen size, memory, power,
bandwidth. We'll review the roles
obile devices and browsers, Web
r gateway platforms, WAP,
/WMLScript, mobile portals, and
le commerce personalization
You'll learn how to design
le E-commerce applications that
well even with today's limitations
d scale to tomorrow's more
arful platforms.

THURSDAY, DECEMBER 14TH

eValues: A New Equation of People, Ideas & Capital

Getting Closer to Your Customer: Breakthrough Content Distribution Solutions

1:30-2:30pm

The closer your content is to your
customers, the faster they can get it,
and the happier they'll be. That's the
simple idea behind content distribution
– but content distribution isn't so
simple anymore. It's evolved beyond
pure caching to become a full-fledged
service model that can supercharge
virtually any large-scale site or
E-business application – even those
based on dynamic content. Deploying
enterprise-class content distribution is
expensive, time consuming, and
complex. We'll walk you through
every key step, help you evaluate the
costs, compare architectures from
leading players such as Inktomi and
Akamai, and demonstrate how your
choice of solution will impact your
enterprise infrastructure.

Building More Efficient Web Sites

2:45-3:45pm

E-business ad spending soared by
1400% last year – but sites have made
absolutely no progress in converting
those expensive visitors into customers.
The #1 reason? Web site performance:
slow pages, inconsistent load times,
unreliable applications, server and
database problems, content errors,
and Internet slowdowns. In this
session, leading web content, site
management, and Internet access
experts offer a step-by-step plan for
dramatically improving site
performance, drawing heavily on real-
world case studies. Discover the
technical and usability mistakes that
may be alienating your customers right
now; compare new technologies and
services for measuring site
performance from the user's
standpoint; and identify low-cost
improvements that can pay for
themselves virtually overnight.

*Organized and led by the
E-business experts at
**InternetWeek and
Network Computing***

REGISTER NOW!

Online

www.ebusinessexpo.com

(Please use Customer Code BW)

By Fax

212-592-8233

By Phone

800-652-2578

By Mail

CMP Business Forums

3 Park Avenue, 30th Fl, NY, NY 10016

Mobile Commerce Track

TUESDAY, DECEMBER 12TH

From Here to E-business: Managing the Transition

GENERAL SESSION

The Wireless Web: Who'll Be The Gatekeepers?

10:30-11:45am

The jockeying has already begun, as billion-dollar enterprises vie for leadership in creating preferred customer gateways to M-commerce applications and services. In this session, the industry's leading competitors and analysts will address key strategic questions like: Will wireless service providers dominate with their own portals? What will be the role of 'tethered' Internet portal giants like AOL and Yahoo? Will new entertainment, retail, or vertical industry mobile portals emerge?

Shopping Without Wires: Mobile Commerce 101

1:30-2:30pm

Soon, millions of consumers will use wireless Internet technologies to order their groceries, books, clothing, movie tickets, and many other items on their way home from work – paying for them online, from web-enabled phones, Palm-type handhelds, or other wireless devices. This session previews today's state-of-the-art in mobile E-commerce – strengths and opportunities, weaknesses and limitations, and what M-commerce pioneers can expect next. It also offers a clear-eyed overview of today's most important mobile protocols, including WAP and WML.

Who'll Lead the M-commerce Applications Pack?

2:45-3:45pm

M-commerce may have a limitless future, but it's still in its infancy – and there are far more questions than answers. What will be the first 'killer' M-commerce app? How will successful M-commerce apps differ from wireline apps? Will there be a wireless equivalent of Yahoo or eBay? What will be the successful B2C play for investors

and VCs? How will B2B M-commerce take shape? How will the successful M-commerce business model differ from wireline models? Who should pay: Consumer? Advertiser? Someone else? With the help of an expert panel, you'll get a handle on all these crucial issues – and more.

Wireless Advertising: What Form? What Content? What Reaction?

4:00-5:00pm

M-commerce is expected to enable an entirely new generation of highly-targeted advertising messages to mobile users. What will those advertising messages look like? How will they be created and delivered? Who'll pay for them? How will users react to them? What are the implications of advertising targeted at where you're standing and what you're doing right now? In this session, pioneers in M-commerce advertising compare their approaches, explain their business models, and address the key questions raised by service providers, advertising purchasers, and customers alike.

WEDNESDAY, DECEMBER 13TH

Reinventing Business Models: The E-business Imperative

GENERAL SESSION

M-commerce in the Real World

10:30-11:45am

This session offers an across-the-board review of today's increasingly diverse M-commerce consumer applications, in finance, retail, travel, entertainment, and beyond. Who's using wireless technology to build sales? Who's succeeding? Who's failing? Which applications are proving most successful? Where trends have the pioneers identified – and what obstacles have they had to overcome? Mobile applications to be discussed include: stock trading, mortgage rate updates, movie reviews, restaurant reservations, ordering sports and entertainment tickets, and many more.

Getting Your Business on the Mobile Bandwagon

1:30-2:30pm

Your sales force is on the road. Great: that's where you want them. But wouldn't it be nice to give them immediate, no-hassle access to inter-telephone extensions and email, or the latest sales figures for their key clients? Companies are struggling with mobile-enabling a wide range of internal functions: email, groupware, employee directories, ERP, CRM and other tethered Intranet applications. In this session, leading implementers confronts a wide variety of key issues including adapting content for inter-mobile applications, network security and much more.

M-commerce Payment and Settlement: Practical Solutions

2:45-3:45pm

M-commerce will face all the payment and settlement issues that E-commerce has been working through: ensuring security of credit card transactions, efficiency of bill paying, and easy customer access to account information. Reliable, flexible M-commerce payment and settlement systems must be fully integrated with a company's existing systems. This session introduces businesses whose M-commerce systems handle these tasks, and providers of the state-of-the-art software that supports them.

Unlocking M-commerce: Application Design Secrets

4:00-5:00pm

To mobile-enable your company, you need to master the complex art of creating mobile applications. In this primer, leading mobile application consultants cover every step from design through rollout and beyond, offering detailed guidance on updating tethered applications with mobile-friendly ends. Discover state-of-the-art solutions for creating time and location-based applications; and learn practical techniques for leveraging existing business logic, application infrastructure, and design.

Wireless, E-commerce solutions for key business sectors such as retail, banking and finance, entertainment, travel and emerging E-marketers.

Check out the latest in wireless devices, investigate vertical and broad-based technologies and consult top wireless vendors at the only M-commerce event embracing innovation in the Customer Economy. Get connected to cutting-edge wireless solutions providers and device manufacturers involved in the deployment of M-commerce applications in a variety of industries. Experience the future of the wireless economy!

New! Mobile Commerce is now co-located with eBusiness Conference and Expo!

mobile commerce
Conference and Expo
www.mccexpo.com

THURSDAY, DECEMBER 14TH

**Themes: A New Equation
People, Ideas & Capital**

GENERAL SESSION

**Shift from E-commerce
to M-commerce**

10-11:45am

E-commerce and M-commerce systems, marketing, and E-commerce marketing, management and design strategies must be viewed separately – yet it must also be possible to integrate wired and wireless strategies and technical systems. In this session, leading e-commerce executives discuss how to deal with the differences between e-commerce and M-commerce, and the challenges that arise when shifting between them. They'll also present successful systems and approaches for integrating M-commerce and e-commerce together, and preview integration improvements they see on the horizon.

**More Bandwidth!
More Power!
More Intelligence!**

1:30-2:30pm

To understand the M-commerce opportunities associated with emerging 3G wireless systems, you must understand the capabilities and limitations of current narrowband wireless infrastructure, as well as key trends in device manufacturing and marketing. In this session, leading market players address each important issue associated with 3G M-commerce, and introduce powerful emerging technologies such as enhanced location sensing, which can target customers more precisely and support creative new service offerings.

**'Tommy Can You Hear Me?'
Incorporating Voice into
M-commerce**

2:45-3:45pm

Increasingly, technologies like interactive voice response and voice-over-IP are being used to enrich the

mobile customer's M-commerce experience. These technologies will also create new services and markets. In this session, companies on the cutting edge of these technologies discuss the opportunities they present, and review key enabling standards, such as the forthcoming Voice Over XML (VoXML).

**Creating a Positive, Friendly
User Experience**

4:00-5:00pm

M-commerce applications will fail without practical, useful, and engaging user interfaces. Identifying the goals of your interface is only half the battle. You'll then need to decide how you're going to implement it – and who you'll turn to for assistance. In this session, leading wireless application designers share their experiences and insights about every aspect of interface development, covering simplicity, reliability, performance and much more.

*Organized and led by the E-business experts at **InformationWeek, InternetWeek, tele.com, Network Computing and Mobile Computing & Communications***

REGISTER NOW!

Online
www.ebusinessexpo.com
(Please use Customer Code BW)

By Fax
212-592-8233

By Phone
800-652-2578

By Mail
CMP Business Forums
3 Park Avenue, 30th Fl, NY, NY 10016

Next World Case Studies Track I

TUESDAY, DECEMBER 12TH

From Here to E-business: Managing the Transition

Wireless E-commerce Now: Making Sales Anywhere, on Any Device

1:30-2:30pm

Why force your customers to stay at their desktops or PCs to buy from you? Discover how a leading E-commerce site is already profiting from transactions made on Web-enabled wireless phones, Palm PCs, and other handheld devices. Join the firm's IT leaders as they compare platforms and approaches to supporting the wireless Web, decide what to outsource, select development tools, adapt existing site content, and more. Draw upon their experience to answer crucial questions such as: What do wireless customers expect from your site? Which types of transactions are they most receptive to? What's the best way to cope with the limitations of today's wireless Internet access technologies?

Creating an E-commerce Ecosystem with Secure Mobile Access

2:45-3:45pm

Online retail has grown from a curiosity to a hyper-competitive marketplace. Wireless access to Internet sites will soon become standard operating procedure for dot coms, so being first to market is important. LetsBuyIt.com, a European Internet trading community, is transacting E-commerce today on HP "always on" infrastructure and are developing a mobile system for users to purchase products and check order status via secure mobile devices anytime, anywhere. Creating the ecosystem to support E-commerce built around the mobile consumer requires a great deal of balance. If balanced properly, E-commerce components like Content, GUI, Payment and Presentment, Security, Personalization, Legacy Application Integration, Workflow, and Platform result in an ecosystem that

provides great benefits for all participants. This case study will focus on putting the right components, infrastructure and relationships in place to support an operational E-commerce ecosystem with wireless functionality.

How Lycos Network Chose a New Web Platform and Server to Build its Next Generation Internet Portal

4:00-5:00pm

The Lycos Network is a unified set of Web sites that provides leading search and navigation resources as well as community and communications services such as free homepage building, free Web-based e-mail, and an assortment of compelling content. To improve administration, manageability, and reliability of its Web sites, Lycos wanted to develop a common, flexible infrastructure to unify existing Web applications into a single platform. This session will show how Lycos evaluated several platform options, then selected Intel®-based servers and the Microsoft® Web solution platform as the best overall technology solution for its high-volume, commercial Web sites.

WEDNESDAY, DECEMBER 13TH

Reinventing Business Models: The E-business Imperative

MetalSpectrum to Serve Manufacturers, Distributors and Customers in the Specialty Metals Business

10:30-11:30am

MetalSpectrum is a new online neutral marketplace for the purchase and sale of aluminum, stainless steel and other specialty metal products and related items. The marketplace will combine the strengths of more than 80 percent of the specialty metals market's leading players, linking manufacturers, distributors and end users. In this session, MetalSpectrum will discuss its approach to E-business and the online exchange model that enhances the way all participants interact with each other to save time and money, and ultimately

recreate their business processes on Internet. MetalSpectrum will address role of Arthur Andersen as the system integrator, building on an Ariba/i2 platform, for the online marketplace.

Focusing on the Consumer: Capitalizing on the Digital Economy

1:30-2:30pm

The Internet is drastically changing the way business is conducted. The relationship between businesses and consumers has been transformed by the new digital economy. Consumers are more informed than ever before and now dictating business models. Businesses must strive to enhance the customer experience at all levels – seeking a more in-depth understanding of their customers to create a competitive edge. Xpedior, a leading provider of innovative and comprehensive E-business solutions to Global 2000 companies and emerging digital businesses, can help put your company on a successful E-business path. Real world strategies for developing superior E-customer relationships will be explored in a session provided by Xpedior and one of their leading clients.

State-of-the-Art Intrusion Detection and Reaction

2:45-3:45pm

E-business security has three key elements: prevention, detection, and reaction. Unfortunately, many E-business providers place all their eggs in one basket: prevention. Once intruders get past the firewall and the preventive mechanisms, they can often wreak havoc. In this session, you'll walk through the implementation of a state-of-the-art E-business intrusion detection and response system. Security specialists at a leading E-business will review every step of the process: product selection, the creation of practical intrusion detection policies and procedures, implementation, how to reduce false positives, and an effective response to a real intrusion.

Real Customers, Real Experience

There's no substitute for the experience of real-world E-business implementers – especially when it comes to the "bet-your-company" applications that promise the greatest competitive advantage. In these two case study tracks, you'll go deep inside today's breakthrough deployments, gaining unparalleled insight into the technical and business realities associated with them.

Internet Service Deployment Platform Key to Unified Communications Services

10-5:00pm

A trend in the communications services arena is a movement towards a streamlined way for consumers and mobile users to access email, scheduling, faxes and paging in a single, unified messaging store. iPlanet's customer will discuss how iPlanet's communications deployment provides a platform for managing information and allowing voice and data communications to be united and device-independent. This session will show how the iPlanet Internet Service Deployment Platform provides the end-user with a reliable, scalable and standards-based architecture.

THURSDAY, DECEMBER 14TH

Values: A New Equation People, Ideas & Capital

Managing the Internet to Change Your Business Model: The JD Williams Story

10-2:30pm

Early this year, JD Williams, the first direct-home shopping company in the United Kingdom, moved all of its apparel and soft-goods catalog to the Internet. An integral part of the change involved transforming JD Williams' narrow and reactive catalog-based sales process to a fully integrated, knowledge-rich, proactive, customer-targeted selling system. In this presentation, the customer will learn how MERANT and JD Williams partnered to transform this e-order company into an E-business leader. This session will walk participants through the complete business solution that resulted in the creation of 17 integrated E-commerce websites that interact with existing complex legacy systems.



What's your
E-business
Strategy?

Enterprise Portals: Maximizing Their Reach, Manageability, and Business Value

2:45-3:45pm

Here's your chance to benefit from insights gained at one of the world's most advanced corporate portal projects! Learn how to architect – or re-architect – your portal for maximum performance; then walk through the integration and automation of an extraordinarily wide range of applications, encompassing structured and unstructured data from both internal and external sources. Along the way, discover how to customize your portal for multiple classes of employees; walk through an interface redesign reflecting crucial usability lessons; learn better ways to leverage XML-based document and content management; and much more.

Transactions Secured with Biometric Technology

4:00-5:00pm

As electronic business continues its exponential growth the need to verify and authenticate transactions is becoming more prevalent. Since the

Electronic Signatures in Global and National Commerce Act (E-Sign) will soon make electronic signatures legally binding, verifying and authenticating the signer becomes necessary while maintaining privacy. In a session provided by a LCI-SMARTpen customer, a biometric solution that will allow an old economy wet signature to produce a new economy digital signature – without compromising privacy and security – will be presented.

REGISTER NOW!

Online

www.ebusinessexpo.com

(Please use Customer Code BW)

By Fax

212-592-8233

By Phone

800-652-2578

By Mail

CMP Business Forums

3 Park Avenue, 30th Fl, NY, NY 10016

Real World Case Studies Track II



TUESDAY, DECEMBER 12TH

From Here to E-business: Managing the Transition

Deploying a Storage Area Network

1:30-2:30pm

The industry analysts, vendors, consultants and press are passing out advice left and right on how to implement a large SAN. But do they really understand what you, the end-user, go through to complete a successful SAN implementation? This case study is your opportunity to hear the reality about SAN implementations from a storage architect who has installed and run one of the world's largest heterogeneous SANs with thousands of servers and petabytes of data. Eric Madison, Director of Storage engineering for USInternetworking, Inc. will address topics including: Do you really need a SAN; What do I need to know before jumping into the SAN Box; Lessons learned: Deploying a SAN!, and Futures: Where will we put our data tomorrow. You will also learn what to look for in building a SAN that must be highly scalable, support an international network and run true 24X7.

Scalability: Staying Ahead of the Performance Curve, No Matter What

2:45-3:45pm

Everyone wants traffic, but once you've got it, how do you cope with it? In this session, you'll discover how one of the world's leading content sites maximizes scalability, staying ahead of the curve even as its community of regular visitors soars into the millions. Join this site's executives as they evaluate and select load balancing and content distribution systems; optimize their site content and applications; deploy and manage clustering; and implement real-time metrics that show exactly how they're doing – from the customer's point of view.

Creating Smart Enterprises with E-marketplaces

4:00-5:00pm

Every day another alliance/new exchange is created in the E-busin market. Before leaders can react to rapid changes such as these, they need to understand an e-business market model. Exactly what business pains can be best addressed by an E-marketplace? How are E-marketplaces re-writing the rules competition with improvements in time and reduction in cost and cap requirements? And, what are the competencies you need to compete? We will look at alternative approaches to building exchanges and the session will conclude with a discussion of implications of model variables on your enterprise.

WEDNESDAY, DECEMBER 13TH

Reinventing Business Models: The E-business Imperative

bLiquid.com Creates a Specialized Marketplace for Used Equipment Sales

1:30-2:30pm

bLiquid.com, the first-ever "self-listing" equipment exchange, is the leading auction site for industrial equipment, linking together people who want to buy and sell used construction and other heavy machinery. bLiquid.com allows users to list industrial equipment and materials for sale through an exchange format that enables one-on-one price negotiations. bLiquid.com chief executive John M. Vyge will address the need for a strong technical foundation and the success bLiquid.com has achieved using Systems' Dynamic Commerce technology to power their exchange.

Real Lessons from the Real World

Don't reinvent the wheel! Chose between 19 exclusive powerhouse case studies that illuminate the hard lessons pioneers have learned about E-business transformation. From wireless to CRM, enterprise portals to site scalability, here's your chance to learn from those who have gone before you – without taking the arrows!

Building E-business Intelligence

3:45pm

Business intelligence tools serve to enhance the growth strategies and marketing tactics of many companies. This session will examine successful applications of business intelligence to target, up-sell and cross-sell. The panel will examine ways to best manage information, issues around privacy, challenges in analyzing behavior on the Web and concerns around market segmentation.

Building an E-business from Concept to Reality

5:00pm

E-businesses evolve through stages far from traditional high-growth companies but at a much more rapid pace. It is essential to determine the critical elements of strategy as the size and character of the business changes. This panel will explore challenges of building staff, strategic planning, competitive analysis, pricing and execution models. Panelists will discuss broad experiences as well as specific examples, both successful and cautionary, from real companies.

THURSDAY, DECEMBER 14TH

eValues: A New Equation of People, Ideas & Capital

Service Level Assurance: Keeping E-businesses Going at Full Speed

1:30-2:30pm

Powerful companies, like BMW and Orange, demand outstanding Internet/intranet performance in areas such as web hosting/access, E-mail and E-commerce. Many leading businesses and service providers use Firehunter, from Agilent Technologies, to measure, monitor and enhance the complete end-to-end user experience. BMW, the premier German automaker, will tell how their IT team guarantees user satisfaction by monitoring their corporate e-mail system and offering performance-based Service Level Agreements (SLAs). Orange, the largest provider of cellular phone service in the United Kingdom, will discuss how they monitor access to their Web portal page and simulate end-user transactions to allow them to improve their customers' experience.

Ensuring Effective Customer Care

2:45-3:45pm

Customer retention is an ongoing concern for E-businesses once the battle to acquire a customer is won. This session will examine how E-business ventures can succeed in providing excellent customer care. Panelists will discuss strategies to employ, challenges faced with legacy systems, integration of CRM solutions and staffing strategies. Providing customer care across all areas of operation will be examined in a session whose focus is on a critical asset for any E-business: a satisfied customer base.

Building a Profitable E-business

4:00-5:00pm

Attaining profitability is now prominently at the forefront of E-business planning. This session will explore the aspects of planning and operations that have the most dramatic impact on profitability. The tradeoffs between revenue generation and expense containment will be examined, including such topics as the impact on quality, customer service levels, infrastructure, outsourcing models, compensation and marketing. Panelists will discuss how successful organizations have achieved this balance and navigated through difficult operational constraints.

REGISTER NOW!

Online

www.ebusinessexpo.com

(Please use Customer Code BW)

By Fax

212-592-8233

By Phone

800-652-2578

By Mail

CMP Business Forums

3 Park Avenue, 30th Fl, NY, NY 10016

Monday Tutorials

A must for Technical and Marketing Managers, Network and IS Managers and anyone involved in evaluating E-commerce products!

Monday Workshop 1: Enabling Web Storefronts

9:30am-3:30pm

Getting ready to deploy your first (or next) Web store? This unique full-day workshop carries you through the entire process from planning and design, through implementation and management! You'll examine representative Web storefronts, identifying the factors that make them unforgettable or condemn them to "me-too" mediocrity. Next, you'll compare the leading Web store-building suites, identifying strengths and limitations you must know about upfront. We'll help you cover all your bases: back-end payment systems, accounting, inventory, merchandising, personalization, fulfillment, metrics, and more. We'll even teach you today's best techniques to reduce the rate of shopping cart abandonment. Store-building has changed dramatically in the past year: we'll show you how the bar's been raised and give you all the techniques you need to stand out in your marketplace now!

Monday Workshop 2: VPNs: The New Extranet Architecture

9:30am-3:30pm

While VPNs have been touted as a way to cut internal communications costs, they hold even greater potential for linking companies with suppliers, customers and other outside business partners. VPNs allow companies to set up B2B communications at relatively low cost, while delivering the security extranets need. They also sidestep key obstacles, such as a partner's reluctance to open holes in its firewall for extranet traffic. This session offers a thorough overview of the technical and business issues associated with VPN deployment, reflecting the newest technologies (including Windows 2000), security standards (including IPSec), and trends (such as secure mobile access to VPNs). It covers every key issue to consider in developing your VPN strategy; and reviews the paybacks, costs, and risks of VPNs for each leading internal and external E-business application.

eBusiness Exhibitors

ACTA TECHNOLOGY, INC. • ACTION POINT, INC. • ACXION CORPORATION • ADAY SOFTWARE INC. • ADERO • ADVANTI.COM CORPORATION • ALBERT, INC. • ALPHATEC • ALTER EGO NETWORKS • AMERICAN SOFTWARE • ANCHORSILK • ANNUN SOFTWARE • APPLIED THEORY • Ariba, INC. • ARSDIGITA • ARTHUR ANDERSEN • AR • ASERA, INC. • ASPEN TECHNOLOGY • AT THE MOMENT, INC. • ATTUNITY, INC. • BANKSERV • BANTER • BEA • BIZBUYER.COM • BISNET • BLACKSMITH, INC. • BLUEFLA INC. • BLUESTONE SOFTWARE • BREAKTHROUGH SOFTWARE • CAPITALSTREAM • CAPSTAN SYSTEMS • CAREERBUILDER • CASEWISE • CEREBELLUM SOFTWARE • CEI INC. • CHAIN LINK TECHNOLOGIES, INC. • CLARUS • CLICKSOFTWARE, INC. • COGI • COLLABRIA • COMPAQ COMPUTER CORPORATION • COMPUWARE CORPORATION • CYBRANT • CYCLONE COMMERCE, INC. • CYVEILLANCE • DCTI • DELANO TECHNOLOG CORPORATION • DEMANTRA • DISTRIBUTION RESOURCES COMPANY • DUCOUTOU DUNN SYSTEMS, INC. • EBUSINESS TECHNOLOGIES • E-COMMERCE SUPPORT CENT INC. • EHELP CORPORATION • ECOM XML • ELCOM.COM • ELECTRONIC SCRIPTOR EROOM TECHNOLOGY, INC. • EMC • ENIGMA, INC. • ENTEGRITY SOLUTION ENTERWORKS, INC. • ENTRUST TECHNOLOGIES • ENVIVE CORPORATION • EPIPHAI EPX • ELECTRONIC PAYMENT EXCHANGE • ESKER, INC. • EVERGREEN • EVOKE SOFT • EXCALIBUR TECHNOLOGIES • EXCELOM CORPORATION • EXTENSITY • ENTERPRISE, • EXTREMELOGIC • EXTRICITY SOFTWARE • FIREHUNTER, FROM AGILENT TECHNOLOG • GE GLOBAL EXCHANGE SERVICES • GLOBALCENTER, INC. • GLOBAL FACTORY • GLC LOGISTICS TECHNOLOGIES, INC. • GLOBALSIGHT • GREAT PLAINS • GUIDANCE • H SOFTWARE • HEWLETT PACKARD • HIGH JUMP SOFTWARE • HYPERION • IBILLZ.COM • IBM • ICT GROUP • IJOB (E-SERVICE OF LAWSON SOFTWARE) • IKNOWLEDGE • CORPORATION • IMEDIATION • IMEDIUM • INFOMECH INTERNET COMMERC INFORMATICA • INFORMATION BUILDERS, INC. • INFORMIX • INTEL • INTELLI INTERBIZ, THE EBUSINESS APPLICATIONS DIVISION OF CA • INTERNET COMM CORPORATION • INTERNETIVITY INC. • IPLANET E-COMMERCE SOLUTIONS • I SOLUTIONS • ISHARP • ITERATED SYSTEMS, INC. • ITSQUARE.COM • JD EDWARD JETFORM • KANA • KEYLABS, INC. • LANGUAGE WORKS • LCI-SMARTPEN • LEVEL LIAISON TECHNOLOGY • LOGICTIER, INC. • MARKETTOOLS • MARTSOFT CORPORATION MASG.COM • MAXAGER TECHNOLOGY • MEGA INTERNATIONAL • MERANT • MERI INTERACTIVE • MICROSOFT • MICROSTRATEGY • MIMECOM • MIRONNEX TECHNOLOG • MOAI • MONDUS.COM • NATIONAL TECHTEAM, INC. • NCOMPASS LABS • N NETEMPOWER.COM, INC. • NETFISH TECHNOLOGIES • NETVENDOR • NEXTJET, IN NEW ERA OF NETWORKS, INC. • NSTL, INC. • NUASIS • OBJECT SPACE, INC. • OB OMNISECURE.COM • OPENCONNECT • OPENSITE TECHNOLOGIES, INC. • C SOFTWARE, INC. • ORDERFUSION • ORSUS SOLUTIONS • PELICAN SECURITY • PENTA • PEOPLESOF • PERCUSSION SOFTWARE • PEREGRINE SYSTEMS • PERSONIFY • PFS • PHOBOS • PLANET INTRA • PORTALSHERE INC. • PRECISE SOFTWARE SOLUTIONS • PRESCIENT SYSTEMS • PRETZEL LOGIC, INC. • PROACTIVITY INC. • PROCURENET IP PROFORMA • PURCHASESOFT, INC. • QAD • QUEST SOFTWARE • RADWARE IN RATIONAL SOFTWARE • RCG INFORMATION TECHNOLOGY • REDCELSIUS • RE RENAISSANCE SOFTWARE, INC. • RETURNCENTRAL.COM • RIGHTNOW TECHNOLOG ROCKYSOFT CORPORATION • ROGUE WAVE SOFTWARE • RSA SECURITY • SOFTWARE • SAP • SAQQARA SYSTEMS, INC. • SAVVION • SEAGULL • SEARCHS CORPORATION • SECURE DIRECT • SECURIFY • SECURITY FINANCIAL SERVIC SEMAPHORE • SEQUOIA SOFTWARE • SERENA SOFTWARE • SHARE TREND SOFTWA SIEBEL SYSTEMS • SILVERSTREAM SOFTWARE • SMARTSHOP.COM • SOF CORPORATION • SOFTWARE EMANCIPATION • SOFTWARE TECHNOLOGY CONSULTING • SOLUTION CENTRAL • SPACEWORKS • SPIDER TECHNOLOGIES • SPR SQUARETRADE • STERLING COMMERCE • STORAGETEK • STREAMSERVE • SUREBR INC. • SURF & CALL NETWORK SERVICES • SYNTAX SYSTEMS, INC. • SYNTEL IP TALISMA CORPORATION • TEAMON.COM • TECHNOLOGY AND BUSINESS INTEGRA • TECHNOLOGY BUILDERS INC. • TECSYS INC. • TELEMATE.NET SOFTWARE • TELETI TIE COMMERCE • TOWER TECHNOLOGY CORPORATION • TPN REGISTER WORLDWIDE • TRILLIUM SOFTWARE • TRIFOLIUM, INC. • UNIFY • UNISYS • VANTE VENTRO CORPORATION • VERANO • VERSIENT • VERTEX, INC. • VIEWLOC VIGNETTE • VISUAL TECHNOLOGY GROUP • VIVIANCE NEW EDUCATION • WATCH WEBCRITERIA • WEBRIDGE, INC. • WYLE SYSTEMS • XDRIVE.COM • XOH CORPORATION • XPEDIOR • XTRA ON-LINE • XUMA • YANTRA CORPORATION AND A

Keynote Speaker Tuesday, December 12th

Louis V. Gerstner, Jr.

Chairman and Chief Executive Officer
IBM Corporation

Louis V. Gerstner, Jr. was named chairman and chief executive officer of International Business Machines Corporation in April 1993. In addition to directing IBM's financial turnaround and its return to technical leadership, he was among the very first information technology leaders to understand the transformative potential of networked technologies. He is the architect of IBM's strategy for "e-business" - a term the company coined.

Keynote Speaker Wednesday, December 13th

Gregory Hawkins

Chief Executive Officer
buy.com

Greg Hawkins has served as chief executive officer since March 1999 and chairman of the board since September 1999. Prior to joining buy.com, Mr. Hawkins served as Senior Vice President, Global Sales for Ingram Micro, Inc. His previous experiences include J.C. Penney, GTE and Mitel Corporation. Mr. Hawkins received his B.S. in Business Administration from Oregon State University.



David Archer
President & CEO,
Software

Azzara
Chief of Business
Development & Expo

Ed Babson
President
MIT E-Solutions

Bakalov
Vice President
Technology Risk Services,
Waterhouse Copiers

De Bakos
Associate Professor
Management
School of Business,
York University

David Barry
Founder & VP Marketing,
Vana

Bertin
Vice President, Bertin & Co

Bishop
Vice President, Wireless Mobile
for The Yankee Group

Boyce
Operating Officer,
e.com

Brynolfsson
Associate Professor,
 Sloan School of
Management & Co-Director,
Center for
Business/IT

Canosa
Scientist,
Eris Consulting

David Carrier
Director & Chief Technology
Officer, MimiEcom

Jim Chachra
Founder and Chief
Technology Officer,
Commerce Solutions

Dr. Pohong Chen
President, Chairman and
CEO, Broadvision, Inc.

Alexei Chirokikh
PhD, Quixia Consulting

Jerry Colonna
Managing Partner,
Platinum Partners

Ted DellaVecchia
Senior VP and CIO
Starbucks Corporation

Michael Drapkin
Chair of eCommerce Track,
Columbia University

Bob Evans
Editor in Chief, CMP VP,
InformationWeek

Julie Fall
Principal Network Architect,
Emerging Technology
Solutions

Julie Ferguson
Co-Founder & CTO,
Clear Commerce Corporation

Tom Fothergill
General Manager,
e-Business, JD Williams

Robert W. Frey
Director E-Marketplace
Industry Solutions,
Sterling Commerce

Louis V. Gerstner, Jr.
Chairman and
Chief Executive Officer,
IBM Corporation

Jeff Giese
Editor, FutureWireless.com

Jacob Goodman
Director of Business
Development,
Ericsson Internet Applications

Gadallah Gurlian
International Marketing
Director, Televand

Jan-Erik Gustavsson
Chief Technology Officer,
LetsBuyIt.com

Gregory Hawkins
CEO, buy.com

Michael Karasick
Chief Technology Officer,
Pervasive Computing Group,
IBM

James Keogh
eCommerce Chair,
Columbia University

Dr. Setrag Khoshafian
Senior VP of Technology,
Savvion, Inc.

Cees Jan Koomen
Chairman, SecureLink

Jerry Machovina
Chief Executive Officer,
OneMediaPlace

Kate Maddox
Nielsen/NetRatings

Eric Madison
Director of Storage
Engineering,
USInternetworking, Inc.

Bill Margarites
Corporate Vice President,
WorldWide Communications
& Investor Relations, FedEx

Bill McBeath
Director, Emerging Solutions,
Surgency

Bruce Mello
SVP, Wireless, Broadband &
Emerging Media, 24/7 Media

Elizabeth Moray
Vice President, Mobile
Commerce, MasterCard

William Murphy
Chief Technology Officer,
MetalSpectrum

Brian Naeel
Editor in Chief,
Mobile Computing
& Communications

Dr. Ronjan Nag
Chief Executive Officer,
Cellmania

Fritz Nelson
Editor in Chief,
Network Computing

Har Nigo
Vice President,
Product Management,
Securant Technologies

Gerry Palmer
Executive Vice President and
Chief Technology Officer,
GNX (Global Network Exchange)

Charles Pelton
General Managing Partner,
Phocas Partners

Rob Preston
Editor in Chief, InternetWeek

Vladimir Preysman
President and CEO,
DataSweep

Terri Ramsey
Chief Customer Officer,
NUASIS Corporation

Linda Rosetti
CEO & Co-Founder,
eMaven

Sal Salamone
Consultant,
Remoteaccessconsulting.com

Chris Selland
VP, Business Strategies,
Research and Consulting,
The Yankee Group

Jack Serfaty
Co-Founder & Co-Chairman,
Bowstreet

Dave Shuker
SVP, Wireless Practice, iXL, Inc.

Patrick J. Spain
Chairman & CEO,
Hoover's, Inc.

John M. Spens
Consulting Manager,
Business Decision
Support Practice,
Claritas, LLC

Stephanie Stahl
Editor, InformationWeek

Thomas A. Summerlin
Vice President,
Marketing & Strategy,
Unisys Corporation

Ed Taylor
President,
Collective Technologies

Mark Teflian
President, Time0

John M. Vyge
Chief Executive,
bLiquid.com

Rusty Weston
Senior Editor, Research,
InformationWeek

Tim Wilson
Editor at Large,
InternetWeek

Ann Winblad
Principal,
Hummer Winblad
Venture Partners

Jeffrey Wu
CEO, Claritas, LLC

David Yockelson
Senior Vice President
and Director, Electronic
Business Strategies,
META Group

Adam Zawel
Senior Analyst,
Wireless Mobil Services,
The Yankee Group

Al Zollar
President & CEO,
Lotus Corporation

All speakers have been either
invited or confirmed.

eBusiness Conference and Expo Sponsors

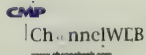
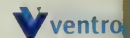
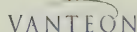
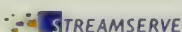
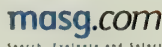
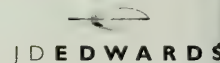
CONFERENCE PRODUCED BY

BusinessWeek

AND

CMP

INFORMATIONWEEK





eBusiness
conference and expo

DECEMBER 12-14, 2000
JACOB K. JAVITS CONVENTION CENTER
NEW YORK CITY

Act now to
get Early Bird
Conference Prices
and your
FREE Exhibit
Pass

Register Today!

**Hotel
and
Travel
Info**

Discount hotel
rates, airfares and
car rentals have
been arranged for
attendees by
Expo Travel Inc.,
the official
eBusiness
Conference and
Expo travel
provider.

For more
information go to
ebusinessexpo.com
or call
Expo Travel Inc.
800-829-2281

REGISTER NOW! Online www.ebusinessexpo.com (Use Customer Code BW) Fax 212-592-8233
or 800-652-2578 Mail **CMP Business Forums** 3 Park Avenue, 30th Floor, New York, NY 10016

REGISTRATION INFORMATION Complete ALL sections of this form. To register additional names, photocopy this form.

NAME

NAME

COMPANY

ESS

STATE ZIP

COUNTRY POSTAL CODE

PHONE FAX

CONFERENCE PROGRAM SELECTION

Business Conference Passport

Access to ALL Conference sessions throughout the Event, including the Monday Workshops.
Go anywhere, pick-and-choose your own custom program. Includes complimentary breakfast,
lunch and refreshments on all days PLUS free access to all Keynotes and the Exhibit Area.

Before
NOV 15 ☐ \$1095 After
NOV 15 ☐ \$1395

Conference Package

Access to ALL Conference sessions, Tuesday thru Thursday. Go anywhere, pick-and-choose
your own custom program. Includes complimentary breakfast, lunch and refreshments on
all days PLUS free access to all Keynotes and the Exhibit Area.

☐ \$995 ☐ \$1295

3-Day Conference Package

Access to all Conference sessions and Keynote for ONE day. Includes complimentary
breakfast, lunch and refreshments and free access to the Exhibit Area.
(Please check which day) ☐ Tuesday ☐ Wednesday ☐ Thursday

☐ \$495 ☐ \$595

Workshops Only

Access to the Monday Workshops only.

☐ \$395 ☐ \$495

Exhibit Pass

Access to the Exhibit Area on all THREE days, plus entry to ALL Keynotes.

☐ FREE with pre-registration
(\$50 on-site)

PAYMENT METHOD

Check or Money Order, payable to **CMP Business Forums**

VISA ☐ AMEX ☐ MASTERCARD (please fill out your 13,15 or 16 digit account number below)

CREDIT CARD NUMBER EXP. DATE

CARDHOLDER'S NAME

Total Charged Amount \$ Cardholder's Signature Date

TOTAL AMOUNT ENCLOSED: \$ TODAY'S DATE

QUESTIONNAIRE INFORMATION Please circle ONE answer for each of the FOUR questions below.

Primary Business of your Company

Finance/Banking/Insurance
Education/Government/
Non-profit
Retail
Manufacturing
Technology
Publishing/Media
Utilities/Transportation/
Hotel/Hospitality
Aerospace/Engineering/

Construction

I. Health/Medical

J. Advertising/

Public Relations/Marketing

K. Business Services

L. Telecom/ISP/

Communication Services

M. Wireless Internet Solutions

Your Job Function

A. Corporate Management

B. CIO/CTO

C. IT Director

D. Director of Sales/Marketing/
Customer Service

E. Business Unit Manager/
Project Manager

F. Consultant/
Systems Integrator

G. E-business/E-commerce
Director/Manager

H. IT/IS Manager/Supervisor

I. Web Master/Developer

Your Company Size

A. 20,000 or more

B. 10,000-19,999

C. 5,000-9,999

D. 1,000-4,999

E. 500-999

F. 100-499

G. Under 100

Your Purchasing Role

A. Recommend

B. Final

C. Specify

D. No role

Customer Code BW

Don't Miss It!

Tuesday, December 12th

Keynote Speaker

Louis V. Gerstner, Jr.

Chairman and CEO

of IBM Corporation



**Competing in the Next
Generation of e-business**

As in any revolution, the first phase of e-business was a period of rapid, often chaotic expansion and experimentation. The first "killer app" -- consumer e-commerce -- brought with it thousands of overnight businesses, booming stock valuations, a river of venture capital and, among the world's entrenched brands, more than a little dot-com paranoia.

That was e-business 1.0.

We're now entering a second phase -- call it the next generation of e-business -- a period that will be simultaneously more mature, more exciting, and more important. Lou Gerstner, chairman and chief executive officer of IBM -- the company that defined the first generation of e-business -- opens eBusiness Conference and Expo with his point of view on what lies ahead.



eBusiness

conference and expo

December 12-14, 2000

Jacob K. Javits Convention Center, New York City

**Check out what's new at
eBusiness Conference
and Expo!**



www.mccexpo.com

**Angel
SOCIETY**

Forums & Events

www.angelsociety.com

**Act now to
get Early Bird
Conference Prices
and your
FREE Exhibit
Pass**

REGISTER NOW!

Online

www.ebusinessexpo.com

(Please use Customer Code BW)

By Fax

212-592-8233

By Phone

800-652-2578

By Mail

OMP Business Forums

3 Park Avenue, 30th Fl, NY, NY 10016

One small step for you. One giant leap for your small business.

BusinessWeek online



frontier

THE RESOURCE FOR ENTREPRENEURS

Discover frontier and launch your business to new heights.

frontier.businessweek.com

Small businesses are setting the pace of today's economy. *frontier* is an essential resource that merges the immediacy of the web with the expert tools, information, and analysis you've come to expect from *BusinessWeek Online*. *frontier's* in-depth coverage and archives let you learn from the past and prepare for the future. And it's updated every day. Best of all, it's free

to *BusinessWeek* magazine subscribers. One click and you're powered with the knowledge only *BusinessWeek Online* provides to make your small business successful.



2000 National Magazine Award Winner
General Excellence in New Media

AOL Keyword: BusinessWeek
Internet Keyword: BusinessWeek frontier

A Division of The McGraw-Hill Companies



020100

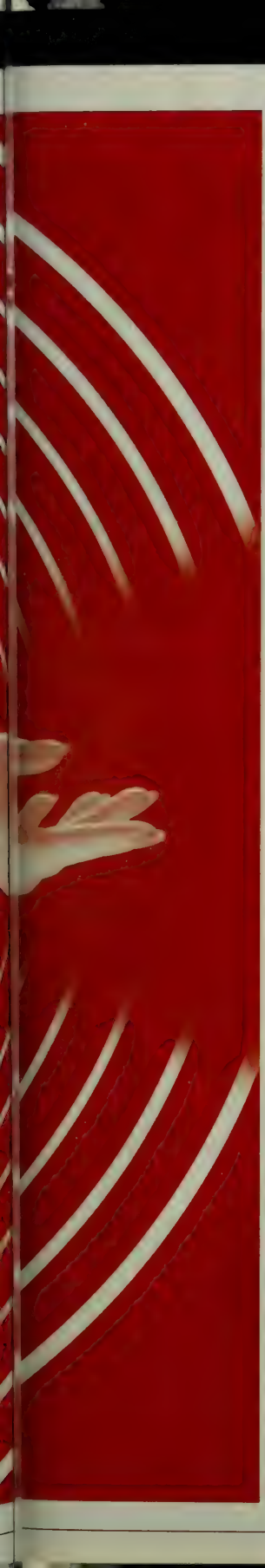
020100

HANDHELDS

020100

020100





POCKET ROCKETS

The do-it-all wireless handheld of your dreams? Close, but no cigar yet

David Lowenthal's daily ferry ride from Bainbridge Island, Wash., to downtown Seattle used to be 35 minutes of downtime. But now, armed with a Palm Vx and a wireless hookup from OmniSky, Lowenthal, director of software development for online education company Acadio, can send and receive e-mail and surf the Web as he rides the waves across Elliott Bay.

In a country where wireless service is fraught with dropped calls and dead spots, Lowenthal is lucky to find a wireless channel through the open waters around Seattle. Credit AT&T Wireless Group for the network that makes his connection work. "Other services, including my cell phone, give out halfway across the bay," he says. Still, Lowenthal's makeshift portable office isn't all that he wants. For one thing, it can't handle his company e-mail directly, so he has to have that forwarded to a separate OmniSky account.

Lowenthal's experience illustrates both the promise and the shortcomings of wireless computers today. At best, pocketing one of those connected gizmos, such as a Palm and its ilk, can be downright exhilarating. They free you from the excess ton-

nage of the laptops and attachments, diaries and Daytimers of today's over-equipped business traveler. At the same time, they open up a new anytime, anywhere world that puts all manner of information—stock charts, plane reservations, your boss's entreaties, you name it—at the tip of your stylus.

Still, there are plenty of gotchas. Only a tiny fraction of the Web has been trans-

coming practical. Palm got the ball rolling last year when it introduced Palm VII. But that \$399 Palm is already the most limited of the new wireless devices. It can connect only to those Web sites specifically set up for the Palm VII, including MapQuest for driving directions, Moviefone for movie listings, and Fidelity Investments for stock trades. The problem: Companies that

want their service to be on the Palm have to create Web pages especially for Palm. E-mail is similarly constrained, requiring you to sign up for a palm.net account.

FLEXIBILITY. The OmniSky arrangement that Lowenthal uses is much more flexible. But it comes at a premium price and size, requiring both a \$399 Palm Vx and a clip-on Novatel Minstrel modem for an additional \$299 (\$99 after a cash rebate offered through January). The

combo will hook up to all the Palm VII Web sites, plus another set from OmniSky and its partners. You also can go to any Web site you choose—some work on the Palm Vx, some don't. And you're not limited to OmniSky's mail service. It works with any standard mail offered by an Internet service provider, such as EarthLink.

There's now good news for buyers who prefer other brands of handhelds. Start-

It is only now that both the networks and the products themselves are becoming practical. And although Palm got a head start, the choices are growing

lated into the style needed by the smaller-than-life screens. Storage is at a premium, meaning e-mails are bounced back when the mailbox is full, and attachments are blithely ignored. Each contraption has its own quirks, so you need to shop carefully to match your idiosyncrasies to those of the device you're considering.

It is only now that wireless handhelds and the networks they run on are be-

WIRELESS ACTS

PRODUCT/MFGR.	PRICE	SERVICE (MO.)	WIRELESS TECHNOL.	THE SKINNY
SELF-CONTAINED DEVICES				
PALM VII Palm	\$399	\$44.99	Bell South Mobile Data	Network slow but reliable. Web access limited to pre-defined sites.
BLACKBERRY 957 Research in Motion	\$499	from \$39.99	Bell South Mobile Data	Best access to Microsoft Exchange corporate e-mail.
ADD-ON WIRELESS MODEMS				
OMNISKEY FOR PALM V OmniSky	\$299	\$39.95	CDPD	A better wireless Palm than the Palm VII. HP and Handspring versions coming.
@CTIVELINK FOR VISOR SkyTel	\$428 (includes Visor)	from \$24.95	ReFlex Paging	Odd service requires Web wait: info comes back as pager messages.
PHONE-BASED DEVICES				
MOBILE INTERNET KIT Palm	\$49	None	GSM	Allows standard Palms to access Internet through wireless phones.
DIAMOND MAKO S3	\$399	None	GSM	Clamshell device with keyboard. Popular in Europe as the Psion Revo.

DATA: BUSINESSWEEK; COMPANY REPORTS

ing this month, they can sign up for OmniSky service as well, using Minstrel modems for either Handspring's Visor, a Palm clone, or the Hewlett-Packard Jornada, a handheld organizer that uses Microsoft's PocketPC system, a scaled-down version of Windows.

Coupled to a choice of handhelds, the OmniSky package is enough for a lot of people. Michael A. Lynch, business development director for New York new-media company Sweet16.com, has found that the service is good enough to let him get away without a PC at home. He gets mail from both his server at work (which is not behind a firewall) and Yahoo! Unlike the Palm VII, OmniSky can download mail while the Palm is turned off, making the network's slow speed less annoying. He also uses the Web to check on flights and weather forecasts and to buy movie tickets.

Sure, Lynch still has a couple of complaints. One is that because the Novatel Minstrel modem connects to the Palm through its sync

connector, he cannot use his \$99 Palm Portable Keyboard and the modem at the same time. And the wireless network has dead spots and can be slow. "On the whole, I'm happy," Lynch says. "Faster would be better, but it's not too bad."

TINY E-MAIL. Now that they've gone wireless, handheld computers are well on their way to becoming solid, general-purpose business tools. But if your main need is e-mail, there's an even better way: the growing BlackBerry family from Research in Motion (RIM). The original pager-size BlackBerry now has been joined by a larger model, the \$499 Palm-size 957, which keeps the same tiny but usable keyboard and adds a much larger display.

While the BlackBerry can synchronize its contact lists and calendar with Microsoft Outlook and even browse

the Web, it doesn't do any of those things terribly well. What it does superbly is give you mobile access to your office mail for about \$40 a month. Read and delete a message on the go, and it's gone from your office mail as well. And many people find that it's easier to compose messages on the BlackBerries. As funny as

it looks, typing them with both thumbs on the miniaturized qwerty keyboard turns out to be reasonably efficient.

Largely for its e-mail capabilities, BlackBerry is a favorite with corporations. Salomon Smith Barney has handed out nearly 3,000 of them to its bankers, traders, and other professionals. "Bankers are on the road all the time," says Peter Estlin, chief administrative officer of Salomon's Global Investment Bank. "Now they are in touch with the office 24/7. I can e-mail while driving. When I'm sitting at a light, I can do e-mails." General Motors is working with RIM and on an even more ambitious plan that will give GM executives access to Lotus Notes mail and company databases, as well as voice-mail messages, on BlackBerries.

Another pager approach is the @ctiveLink Modem for Handspring Visors. The two-way pager module fits into the accessory slot on the back of the Visor and can receive and send e-mail, in a peculiar way, by transferring information from the Visor's screen. What it actually does is send queries on specific subjects, such as requests for sports scores



Slimpoint Stylus

TTOOLS LLC

www.ttools.com

\$12.99

Throw away that cheap plastic stylus that came with your

handheld and replace it with the Slimpoint from ttools, a Providence design firm. This sleek black metal cylinder docks securely in the slot of most Palms or the Handspring Visor and sports a plastic tip that won't damage the screen. It has a dual analog purpose: Press the red plastic tip and it turns into a ballpoint pen. \$12.99 at www.styluscentral.com, with your initials engraved for free.

SHARPER STRONGER EASIER FASTER KEMPER RISK MANAGEMENT

More flexibility. More options. More than ever, you can count on Kemper Risk Management for customized solutions to today's complex business issues.



INSURANCE FOR TODAY'S WORLD
TRUST • HISTORY • SERVICE

Contact your broker or riskmanagement@kemperinsurance.com or 1-800-228-2579.

or flight information, and then gets a response back as a text message that you can scroll through. It's a bit odd, but if you don't mind waiting a couple of minutes for your info, it works pretty well.

There's another way to go wireless with standard Palm devices, whether from Palm itself or licensees such as Handspring and Sony. But it works only if you have a GSM wireless phone, which is the standard in most of the world and is offered in the U.S. by such carriers as VoiceStream and Pacific Bell. The \$99 Palm Mobile Internet Kit allows a Palm to dial out using any infrared-equipped GSM phone as a modem. Sure, it's a little awkward to use, since the phone and the Palm must be lined up end-to-end for infrared transmission. But it works—and will work a lot better as GSM systems begin offering faster data service next year. Folks with PocketPCs also can connect through GSM or CDMA (such as Sprint PCS and Verizon Wireless) phones using an add-on card from Socket Communications.

Europeans have had an alternative for the past several years to the tablet-style Palms and PocketPCs: handheld computers with keyboards, albeit small ones. The latest in Europe, the Psion Revo, can now be had in the U.S. as the Diamond Mako from S3. It's a little clamshell handheld with a good monochrome display and solid ability to sync with desktop data—and communicate wirelessly through any GSM phone with an infrared port.

Of course, the vast majority of the handheld crowd

does not want to connect wirelessly to anything. They're just looking for a portable way to keep track of their calendars, address books, and other information. And there's plenty of new gear to keep them happy, too.

Palm made a splash recently with its introduction of the entry-level m100, at \$149 the cheapest new Palm

color version, the \$329 Palm IIIc introduced earlier this year.

But the real story is that the add-on accessories that take advantage of the Visor's expansion slot—its biggest improvement over Palm—are finally starting to come out. Among the most interesting: the VisorPhone module makes it a wireless phone, modules from Good

from TRG Products. It looks just like a Palm III, but has a slot for a CompactFlash card. That means you can add up to 128 MB or, if you're a real memory hoarder, stick in a 1-GB MicroDrive from IBM.

POCKET POWER. While Palms continue to account for about two-thirds of the market, you can no longer write off handhelds based

on Microsoft's Windows CE software, rebranded PocketPC. There can be a very good choice if you need a handheld that is more powerful than a Palm—but also more expensive and somewhat harder to use. HP's Jornada 540 series (from \$470), the Sio E-125 (\$560), the Compaq iPAQ (from \$499) offer brilliant color displays, fast new processors. The very thin, lightweight iPAQ has lots of fans for its usually impressive design. Software for PocketPCs includes viewers for Word, Excel, and PowerPoint files, as well as Windows Media Center, which can play MP3 and Windows Media recordings.

Still, no single handheld is going

to please everyone all of the time. Salomon's E-spends a lot of time listening to the wish lists of its power users. "We've mapped out the ideal device mentally," he says. "It's the equivalent of a wireless phone, with BlackBerry service, and end-to-end synchronization. It will work on networks globally." Don't expect a handheld like that any time soon, given the challenges coming up with such a satellite tool at a price people are willing to pay. Still, what you want to know is when you sign up to get one.

By Stephen H. Wilder in Washington, D.C.



Enough Reach

David Lowenthal's Palm Vx transforms his daily ferry commute from downtime to e-mail time

ever. The display is smaller, and it has a sync cable instead of a cradle. But that shouldn't matter much to the first-timers that Palm is aiming for, such as college students.

Rival Handspring is targeting the other end of the market. The \$449 Prism is Handspring's first color unit and features a display considerably superior to Palm's

Technology and Innogear turn it into an MP3 player, and the IDEO EyeModule lets it take digital snapshots.

If it's more memory you're looking for, take a look at Sony's new \$399 CLIE, its first entry in the Palm-compatible world. It's a trim competitor to the Palm Vx, but with a big difference. You can add memory to the basic handheld by buying Sony MemorySticks. That's more and more important as buyers want access to their corporate databases, and Palm's built-in 8-MB memory simply isn't enough to handle it. Another good bet is the \$330 TRGpro

THE EPITOME OF PERFORMANCE.



ANNOUNCING HIGH-PERFORMANCE
PROJECT COMMUNICATION SOFTWARE.

Join us one hour. We'll show you how ActiveProject®, our high-performance Web-based project communication software, enables world-class companies to communicate with external partners at extraordinary speed—faster than any traditional method. And we'll demonstrate how it helps you deliver your products to market faster. In return for your time, we'll give you an extraordinary chance to win a high-performance Porsche® 911™ Carrera® worth \$82,290 (MSRP). Visit www.frametech.com/AA or call 888.311.9138 to schedule your private product presentation. You must complete your live demo before November 30, 2000 to enter the sweepstakes. Contact us now—your commute may never be the same again!

ActiveProject®



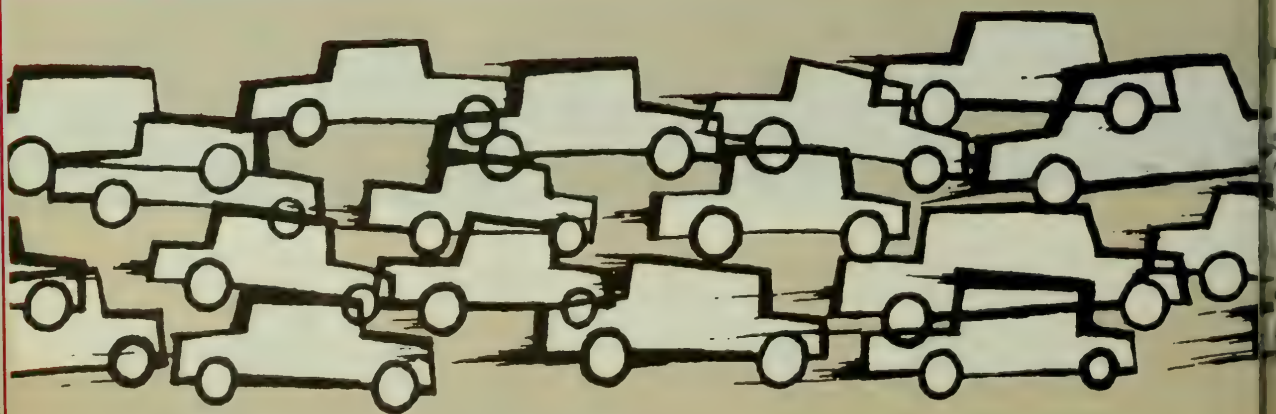
FRAMEWORK
TECHNOLOGIES

MAKE PROJECTS VIRTUALLY ANYWHERE™

Sweepstakes available only to program managers and above in selected manufacturing companies. You must complete a live presentation/demo by Nov. 30, 2000 to qualify. No purchase necessary. Void in Florida. View complete rules at www.frametech.com/rules. PORSCHE and CARRERA are registered trademarks. 911 is a trademark, and the distinctive shapes of PORSCHE automobiles are trade dress of Dr. Ing. h.c. F. Porsche AG. Used with permission of Porsche Cars North America, Inc. Porsche Cars North America, Inc. and Dr. Ing. h.c. F. Porsche AG are not affiliated or associated with this contest in any way.

©2000 Framework Technologies Corporation. All rights reserved.

AA



It's time to take cars in a new direction. Along a cleaner, more open road that travels the outskirts of convention. That's why we've created the Toyota Hybrid System, the power inside our breakthrough gas/electric vehicle, the Prius. Toyota is the first company to mass-produce a hybrid vehicle, and we're working to develop even more advanced technologies down the road. Fasten your seatbelts. It's going to be an exciting ride.
www.toyota.com/ecologic 800-GO-TOYOTA ©2000

Going our way?



TODAY TOMORROW **TOYOTA**

WEB PHONES: A LONG WAY TO GO

They're hassle-ridden—but getting better fast

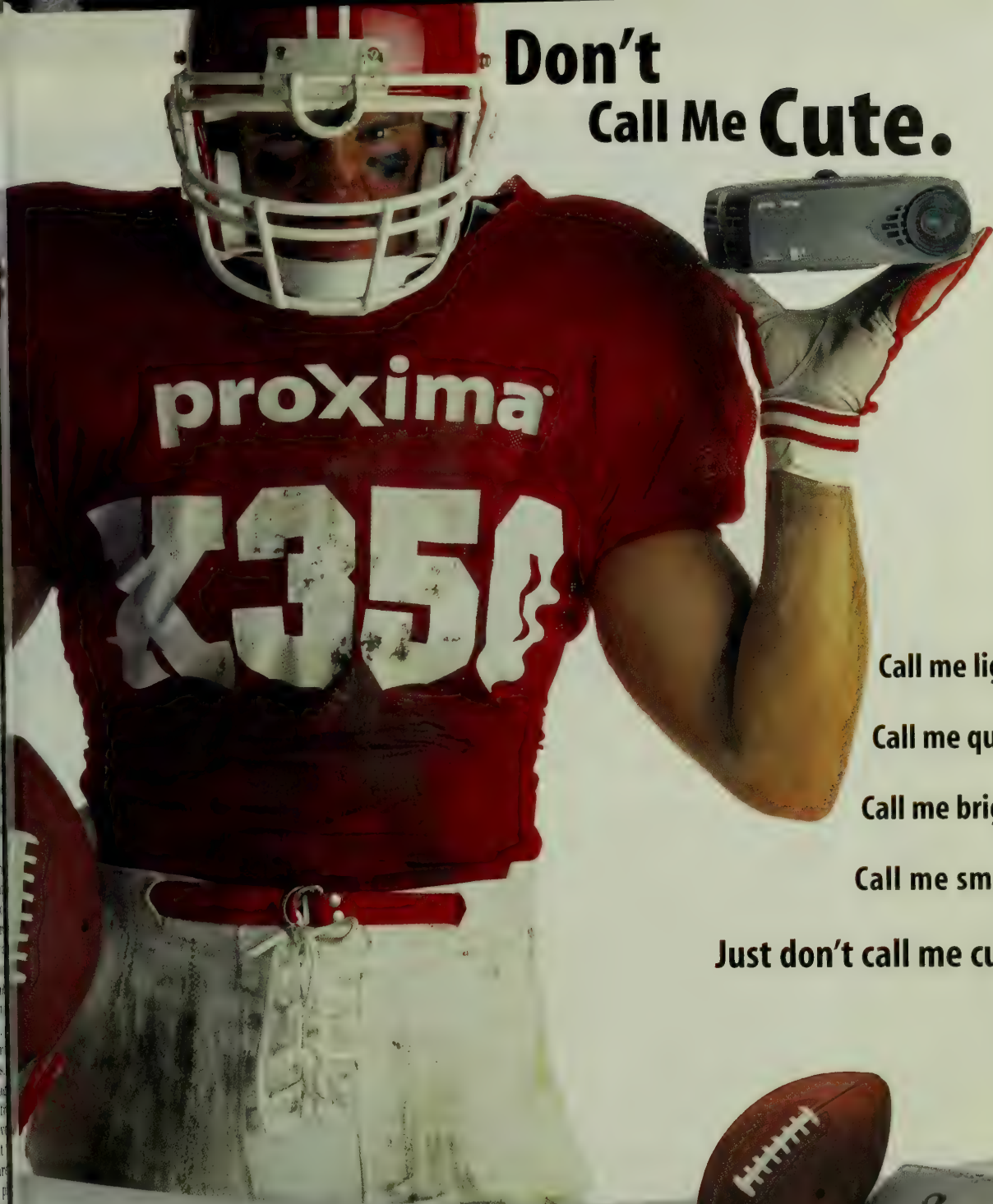


PHONES

On the road in Phoenix with his younger brother James, Paul Wester, a 28-year-old security company supervisor in Denver, fired up his Ericsson R280 Web phone to check www.travel.com, a site for weather and traffic conditions. He quickly discovered that an on-ramp they intended to take was closed. Moments later he also found step-by-step directions for an alternate route. When he relayed the info to James, who was driving, his brother was astonished. "He was like: 'How'd you know?'" says Paul. "I said, 'My phone told me.'"

Web phones, those rugged gizmos that add a web browser and e-mail to a wireless handset, are proving handy for a wide variety of simple tasks. People are using them to remember appointments, make stock trades, find a restaurant, check news flashes, check air schedules or horoscopes, and dash off short e-messages. Service fees can run from \$50 to \$90 a month for voice and data combined. But the phones themselves are much more costly than plain wireless units. They can be had for as little as \$80, go up to \$400 for the coolest looks.

The phones are certainly showing up in increasing numbers of pockets and pocketbooks. Jupiter Communications, a New York City search and consulting firm, estimates that 6.1 million Web phones are now in



Don't Call Me Cute.

Call me light.

Call me quiet.

Call me bright.

Call me smart.

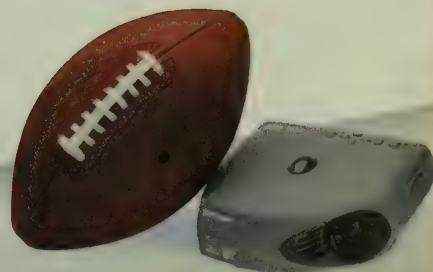
Just don't call me cute.

10 pound Proxima UltraLight® X350 is the new all-star in Proxima's lineup of mobile projectors. At 1100 lumens, it's powerful enough to use in any room. And modular. Detach the video module and connect to your laptop for maximum mobility. Using the video module, the UltraLight X350 also accepts input from a VCR, DVD, digital camera or camcorder. Smart electronics sense the room environment and adjust the UltraLight X350 for optimal brightness and image quality. All this and silent as a whisper.

Add the UltraLight X350 to your winning team today.

Visit www.proxima.com or call 1-888-PROXIMA.

FREE video module
with your purchase—
a \$250 value.
Limited time only.



proxima
Own your audience.

©2000 Infocore Corporation. All rights reserved. Proxima and Proxima UltraLight are registered trademarks of Infocore Corporation. DLP is a trademark of Texas Instruments. 10-00 X350 Business Week.qxd

Time Saver

Paul Webster, shown here in Denver, uses his Web phone to dial www.travel.com and learn about traffic conditions and find alternate routes around trouble

in the U.S., up from 1.1 million last year, and that number is pegged to reach nearly 80 million by the end of 2003.

The growth, however, doesn't accurately reflect the phones' popularity—or unpopularity—with users. The reason: Some wireless companies, such as Sprint, won't sell you anything other than a Web phone now—whether you want one or not—when you sign up for their services. A more telling statistic: 65% of wireless phone users say they have no interest in using their phone for e-mail or Net surfing, according to a study by Forrester Research.

MATCHBOOK-SIZE. I sometimes feel like I'm one of them. While I use some of the online features, I often find them poorly explained and maddeningly difficult to figure out. Typing messages or Web commands with my thumbs on a phone's keypad is still cumbersome, despite recent improvements. Although some of the newest models have slightly larger screens, most still have those matchbook-size displays that are too tiny for more than two or three lines of text. Long messages download in segments, requiring you to stop in the middle of an e-mail and wait for the next chunk to arrive. It can seem to take forever.

Because of their convenience, plenty of people swear by—rather than at—their Web phones. And wireless providers are adding new services, features, and content almost monthly. Some of the cleverest features make writing e-mail and typing in Web addresses a bit easier. At first glance,



composing a message on a phone keypad would appear torturous, with each number representing three or four letters. To type a "C," for instance, you press the 2 key three times, then wait for the cursor to move to the next space. But more phones now come with a technology called T9 Text Input, which cuts down the typing by making educated guesses about what word you are entering. And you can store uncommon words, such as proper names, in its dictio-

message is sent. The service also allows you to create 35 short customized phrases—such as "Miss you, Sweetie"—to add to the menu.

Eventually, voice-recognition technology may make fiddling with the keypad moot. Again, Sprint has taken the lead with what it calls Voice Command. For \$10 monthly, you can upload your personal phone list—up to 500 names and 2,500 numbers—to a Web site, and then "dial" those numbers by simply saying the name

service provider, so you can converse, in writing, as easily as you can back and forth on the phone. Sprint's service includes AOL's Buddy List so that you can get a glance at your phone which friends are on their phones and read receive instant messages. **LOTS OF FUN.** Another common headache for me is all the keypad typing required to arrange for Web services as new stock quotes. Now Verizon Wireless, Sprint, and

Right now, tiny phone keyboards are a pain to use. But voice-recognition technology may eventually make that problem moot

nary so that it will guess correctly the next time around.

Last month, Sprint added a menu of common questions and responses that promises to save you even more typing. Just highlight "Call Me ASAP," click, and the

of the person you're calling.

Both AT&T and Sprint recently added instant messaging, a real-time text chat feature that America Online has offered computer users for years. This lets customers send short messages to friends who use the same

let me lay all the groundwork for desktop computing with a real keyboard. That makes the use of a phone less of a pain.

Choosing what you will receive can be a lot of fun. Sports, for instance, can have to clutter

little screens with entertainment news or market results. You can schedule specific information to be sent to your phone at defined intervals—your horoscope, or perhaps the Dow Jones industrial average. And you can set up



[I'll be up when I feel like it]

I'M YOUR CRITICAL BUSINESS APPS

COMDISCO

Availability is as important to your business as your product or service. How do you avoid the inevitable business disruption? You turn to a true expert in availability. In our 20 years of technology experience, we haven't had a single miss. For more details, visit our web site, www.comdisco.com. Delivering the promise of technology.

to beep you when specific events occur, such as a company issuing a news release, or a stock hitting a particular price.

Not all the bugs are worked out yet. You must configure AT&T pages at the Web sites of its partners. If you want to be notified when a stock passes a target price on the way up or down, for example, you'll have to go to, say, eTrade and tell it to page you on the phone. Sprint's alerts, which draw content from a "My Yahoo!" page, require real digging: I had to plow through 14 screens to complete one set-up—though Sprint blames that on a computer glitch and insists the process can be done in a few steps.

If you can deal with the tiny screen, sit back and start viewing. Plenty of sites, including America Online, mySimon, Amazon.com, and even eBay, have devised a phone version of their services by stripping out memory-gobbling graphics and shortening text into byte-size pieces. Without graphics, though, I'd use a site such as eBay only to keep tabs on auctions. I wouldn't buy a Tiffany lamp without at least seeing a photo.

Some features, such as restaurant listings, still need a lot of improvement. The worst problem is the inadequacy of the third-party databases. Verizon, for instance, uses a restaurant guide from InfoUSA, a list that includes eateries that have been closed for two years. AT&T's restaurant search is powered by the more up-to-date *Zagat's*, whose shuttered places have been out of business for only about a year. Also, the guides sometimes omit the logical establishments. In my search for an Italian restaurant near my home, Sprint found only a single chain pasta joint—and overlooked two dozen authentic places in Baltimore's Little Italy.

When it comes to choosing hardware—the actual

GETTING ON THE WIRELESS WEB

COMPANY/ PLAN*	MONTHLY MINUTES	MONTHLY FEE	INTERNET SERVICE	THE SKINNY
AT&T Digital One Rate	650	\$79.99	Free access to 50 partner sites; \$6.99/mo. for e-mail, \$14.99 for unlimited access. No per-minute fee.	Service can be set so that your phone and office e-mail work as one.
NEXTEL National Business Plan	600	\$89.95	Free access to 25 partner sites, \$15/mo. for unlimited use. No per-minute fee.	You're always connected to the Web, but you can still make phone calls any time.
SPRINT Free & Clear	500	\$49.99	Unlimited use with \$10/mo. option, waived with contract. Use charged against voice minutes, then 30¢/min.	Offers AOL's Instant Messaging Service, including Budd List that alerts you when friends are online.
VERIZON Single Rate	600	\$75.00	\$6.95/mo. for unlimited access. Use charged against voice minutes, then 35¢/min.	Software for personal phone book, calendar, news alerts are included in monthly fee.

*Includes free long distance and roaming. One-year contract may be required.

DATA: BW, COMPANY REPORTS

handsets—first try this simple test: Can you turn it on without resorting to the instructions? Any phone that requires a 200-page manual is too difficult to use. In fact, the easiest phones tend to be those with the fewest buttons. My favorite is the Sprint Touchpoint TP2200 (\$229.99), which has 16 buttons. I could figure out even advanced features, like voice commands, without opening the how-to book.

I also liked AT&T's \$99 Ericsson R220LX, a basic workhorse. It has the usual small screen, but uses larger letters than usual for easy reading. And its icon-driven menu is easy to see and fairly simple to figure out.

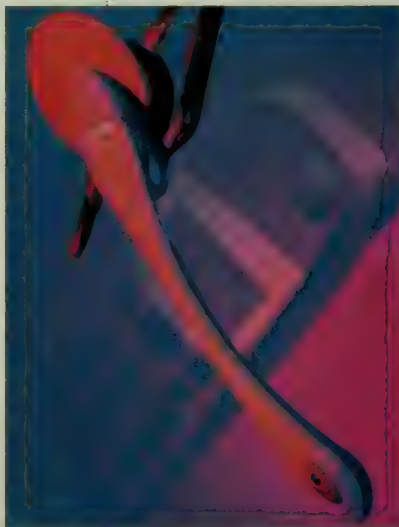
Nextel's top-line phone is the Motorola i1000 plus, a \$199.99 flip-open number with a Buck Rogers look that's designed for durability. Its "private call" feature works like a walkie-talkie to con-

nect users within a coverage area, which is sometimes as large as several states. Those calls don't count against paid minutes. So this model is useful for regional operations, such as construction companies that need to stay in constant contact with their crews.

For people who want

wow impact, a good choice is Verizon's Motorola T100 port P8767, a \$299.99 Star-style phone with a color screen that's brighter and easier to read than the usual monochrome screens.

At the top of the line is the \$399 Sprint TP3000, which comes with a



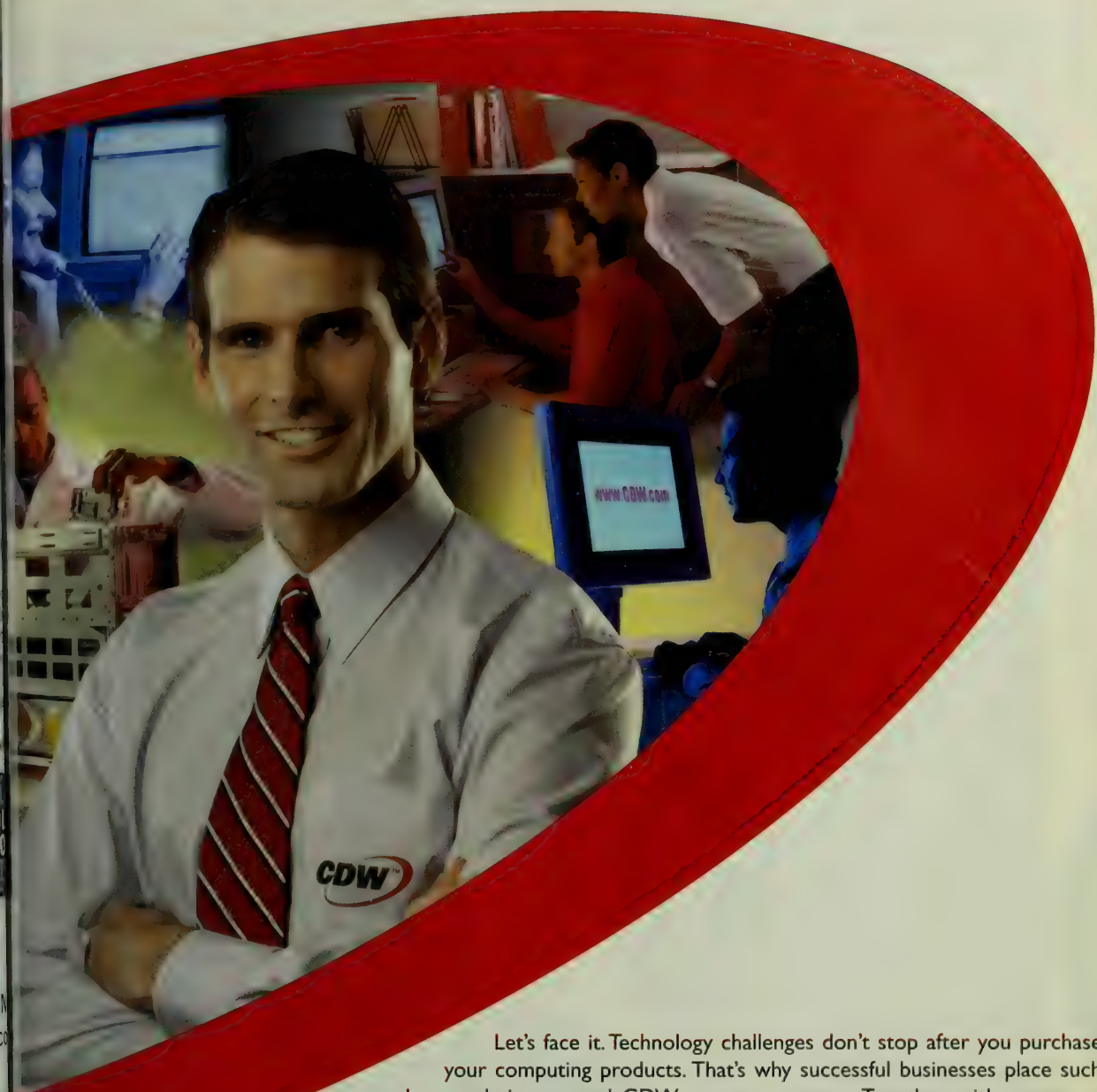
M130 Headset

PLANTRONICS INC.
www.plantronics.com
\$44.95

With the spread of banning the use of phone handsets while driving, and lingering fears about radiation from wireless antennas, maybe it's time to treat your cell phone to a headset. Plantronics makes a line of in-the-ear and over-the-ear models

a tiny, noise-canceling boom mike that combats traffic noise and the general din of train stations and airports. The cost: \$44.95 at office supply and phone stores. Versions with earpiece and microphone volume controls are only \$5 more.

CDW. Our job is to simplify yours.



Let's face it. Technology challenges don't stop after you purchase your computing products. That's why successful businesses place such value on their personal CDW account manager. Together with a team of experts, your account manager will custom-configure best-of-breed solutions from hundreds of top name brands. Respond to your every need. And save you time and money. Add CDW.com, our award-winning site, and you have a total computing solutions resource from the industry's only Direct Solutions Provider.TM Call us. We're a trusted Fortune[®] 1000 Company. And we'll give you the 24x7 attention you need to rest easy.

Computing Solutions Built for BusinessTM
1-888-239-8283 www.cdw.com



touch-screen organizer, similar to a Palm or a Handspring. When the cover flips open, it activates a speakerphone so you can use your PDA (personal digital assistant), perhaps checking the calendar, while chatting. Its comparatively large screen—2½ by 1½ inches—makes reading e-mail much easier.

No list is complete without the Samsung Uproar, \$399.99 from Sprint, a tiny 4-by-1½-inch silver rectangle that weds a Web phone to an MP3 player. The phone plays an hour of digital music through headphones, which work independently from the phone earpiece. One drawback: The keypad's minuscule buttons make di-

aling a struggle. But that probably won't matter to electronics hipsters.

For all their difficulties, Web phones can be extremely useful—especially when you need specific information on the spot. For instance, I was recently in a Best Buy when big red tags on DVD players caught my eye. Were they really su-

perbargain prices? I whipped out my Web phone, logged on to a price comparison site, BarPoint.com, entered the bar code number—and in seconds had an answer. The players weren't a steal. The red tags were bit of hype—sort of like the wireless Web itself so far.

*By Roy Furchgott
in Baltimore*

Test Drive

'TURN OFF THAT COAT!'

A sunny fall afternoon in Paris. Kids in shorts and T-shirts are zipping along beside the Seine on scooters and skateboards. It's a normal scene, except for a perspiring man frantically shouting into the collar of a winter coat.

That bizarre figure is me. The coat I'm sporting is the latest design in wearable computing, a co-production of Levi Strauss & Co. and Philips Electronics. The jacket is a geek's delight. Behind one front panel lies an MP3 player, behind the other a Philips mobile phone. Dangling on my chest is a remote-control pad that lets me toggle between music and phone calls. And there's a microphone in my collar—hence the down-in-the-collar shouting.

Has the tech industry gone bonkers? Many in the wireless industry believe that eventually we'll be surrounded by information everywhere—in cars, in glasses, in our clothes. "We'll be doing videoconferencing from our ties," says Gartner Group Inc. wireless consultant Nigel Deighton, without a hint of irony.

SOARING SPIRITS. With an eye to pioneering this wireless frontier, I signed up to wear a new Levi's prototype in Paris. The company has made just several hundred of these coats and sells them only in Europe, where the mobile standard matches Philips' phones. It felt like an early Christmas when the big box arrived. My spirits soared higher when I opened up the flashy Philips Xenium mobile phone and the MP3 player.

Yet I soon discovered that this miraculous coat came with a heavier

burden than its \$900 price tag: I had to assemble it. The wires, jacks, and plugs at the bottom of the box looked like spillage from a space-shuttle repair kit. Worse, it didn't come with instructions. I called the Levi's contact, and he walked me through the process. If only I had a degree in electrical engineering, perhaps it would have been easier.

Fact is, despite endless tinkering, the jacket never fully worked. Later in the day, I walked toward the Seine. The MP3 music

could be heard through the earphones, but there was a lot of static. Reaching Trocadéro, I got my first phone call. The ringing interrupted the music. I fumbled for the remote control and hit the phone icon. The phone kept ringing. Frantically, I unzipped the phone compartment and hit the answer button. It was my wife. I spoke into the collar microphone, and through a sea of static, she replied: "Turn off that coat!"

Sadly, the phone-music jacket doesn't appear ready for prime time. And it may even become obsolete. Bluetooth, a low-power radio standard, should make it possible to connect these machines through radio signals instead of wires. Still, I'll be sad to ship that big coat back to Brussels. Someday not too far off, when wireless connections move into clothing and cap and scooters, a few of these quaint jackets will be hanging in museums.

*By Stephen Baker
in Paris*



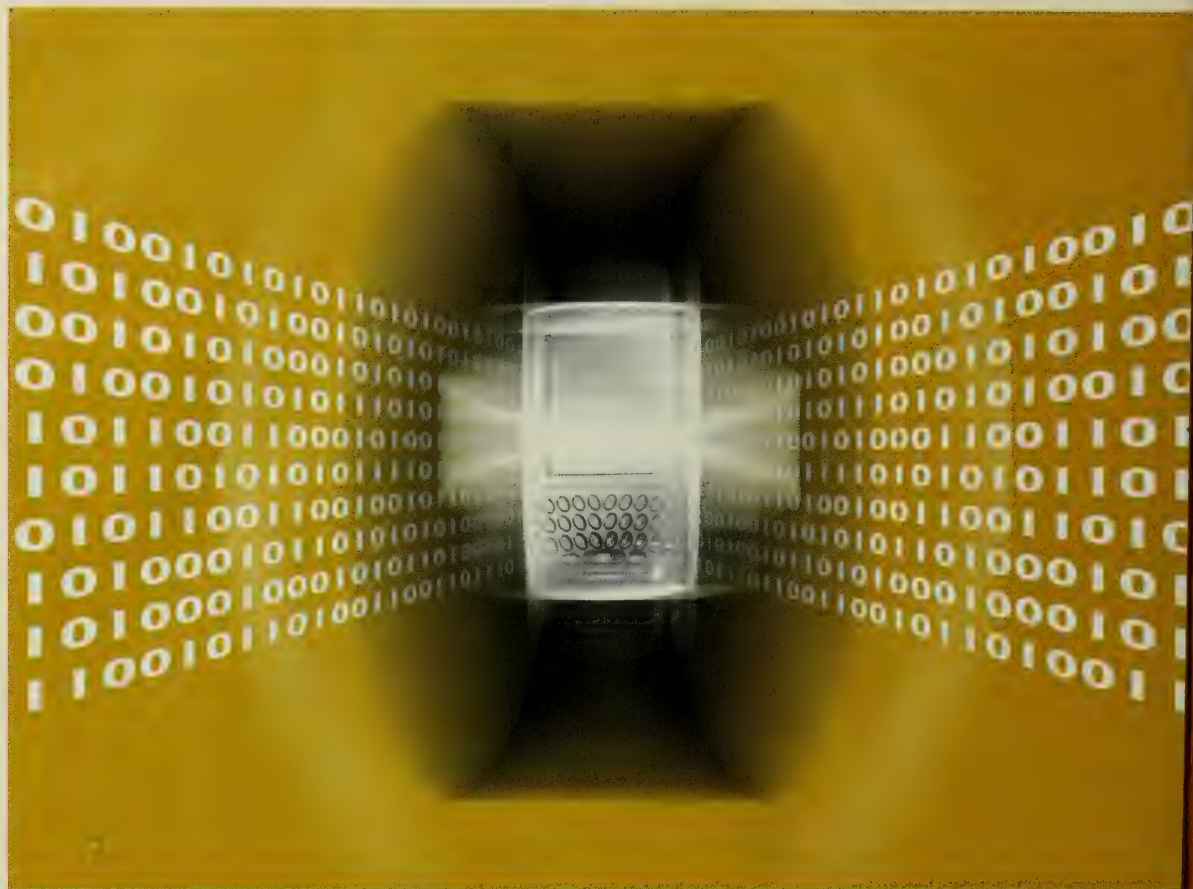
Sadly, the latest design in wearable computing doesn't work too well

75% of the top 20 independent B2B exchanges run Oracle.

The companies
that know the
Internet best
run Oracle.

ORACLE
SOFTWARE POWERS THE INTERNET™

www.oracle.com



IT'S NOT JUST NEWS

Better reliability and smarter software make the wireless Web more useful

IBM's TV ads for the new wireless Web are beautifully produced, painting dreamy images of people tapping into the Internet from wherever they happen to be. Who wouldn't want to use her cell phone to buy a cold drink in a sun-dappled Italian palazzo? But in reality, this New Age of wireless

data still looks suspiciously like a repackaged version of the Same Old. Stock quotes, sports scores, and the weather already are spewed constantly online and off. Slap it on a cell phone, and it's still the info you heard twice during your morning drive.

Things are getting better, though. With more reliable networks and smarter soft-

ware design, new services are emerging that are truly valuable for people on the go. Instead of just checking on stock prices, you can now trade stocks from your phone, using a range of brokerages including Charles Schwab, AmeriTrade, and Fidelity. And as businesses begin to convert their internal corporate software for

wireless users, employees will soon be able to download updated customer records before a sales call, use a Palm to collaborate with colleagues using the Lotus Notes software. "I'm about never having a disconnected employee," says Y. Yerusalmi, vice-president of professional services for Fone Inc., a Redwood City (Calif.) wireless-services developer. "Business can be conducted anywhere."

It will take at least a year before wireless fully arrives in Corporate America. In the meantime, most business users are making do with plain-vanilla consumer services offered by Yahoo! America Online, Microsoft MSN Mobile, and virtually all wireless carriers from AT&T to Verizon. Access to e-mail and Internet portals as MSN Mobile and Yahoo! is still limited, though you'll have to wait for your carrier's wireless

It's not
who you know.

It's what
who you know
knows.

There's research. And then there's research written by the world's top analysts and strategists. The leading industry authorities on everything from B2B and healthcare to investing in the Pacific Rim. Bottom line? The only people who should be guiding your investment decisions are the people who are truly "in the know." Who measure success one investor at a time. Move your money. Get well connected.

Well Connected

**MORGAN STANLEY
DEAN WITTER**

msdw.com

*Source, *Institutional Investor*, December 1999.

Morgan Stanley Dean Witter and Well Connected are service marks of Morgan Stanley Dean Witter & Co. Services are offered through Dean Witter Reynolds Inc., Morgan Stanley & Co. Incorporated and Morgan Stanley Dean Witter Online Inc., members SIPC. © 2000 Dean Witter Reynolds Inc.

fees to get to them. Those can range anywhere from free to as much as \$6.99 per month or 65¢ per minute, depending on your plan.

Each of the wireless portals and carriers features access to its own menu of business news and stock information. The best way to differentiate between the services is by judging how quickly the wireless content is updated. Yahoo is consistently fresh, as is the tech news on CNET's News.com. Others prove spotty: On the night that Amazon released its important second-quarter earnings, ZDNet's wireless site was still listing stories from early in the morning.

Instead of simply repackaging news, a new generation of wireless services is creating on-the-fly data that help you better interact with the physical world. Using satellite technology installed on public transportation, as well as predictive software tied to traffic patterns, NextBus Information Systems Inc. lets wireless users know when the next bus or train is actually arriving—for free. Other services include mobile buying-comparison services, such as DealTime and BarPoint.com. Type in the Universal Product Code embedded in a product's bar code, and the Web sites spit back price data collected from dozens of Web merchants.

NO WAITING. Not surprisingly, travel services are another fertile area. Scott Halford of Denver, a professional speaker on management, logs more than 100,000 miles each year jetting between conferences. He now uses his Mitsubishi Web phone and AT&T Digital PocketNet service to access the flight-tracking feature on Trip.com's wireless site. Via text alerts, Halford knows when a flight is delayed or canceled. "I'm now able to plan my time so I don't end up sitting on my rump in the waiting area," he says.

The rush is on to also de-

WHO OFFERS WHAT

THE SERVICE

THE SKINNY

WIRELESS

So far, the most comprehensive wireless service for basic business news and e-mail. They're quickest in refreshing sports scores, allowing fans to get quarter-by-quarter updates of the latest gridiron action.

SCHWAB

Allows individual investors to check stock prices and make trades from a taxi or during intermission at the opera. If you put \$10,000 into an account, you get a free phone.

TRIP.COM

Handy if you need to check airline flight information or want to book a flight when you're on the go. If your plans change suddenly, you can rebook without a hassle—even on another airline.

BARPOINT

Shopping for a new printer at the office-supply store? Key in the UPC code, and BarPoint spits out prices at online competitors. Soon you'll be able to close the deal online.

NEXTBUS

Using satellite technology, this service gathers up-to-the minute info on buses and other public transportation, including when the next vehicle will arrive. In use in San Francisco and Delaware.

velop services tailored for particular industries. Chris Lynch, owner of small trucking company Libra Motor Express in Walbridge, Ohio, is using a service from pFreight of Fruitland, Idaho, to help him track deliveries and find new shipments to load into his semi-trailer. In the past, he spent hours quibbling with dispatchers. Now, he can get information on potential new business in just a few minutes on his phone. "More access to information means more money," says Lynch.

Expect that to be a rallying cry as wireless services burrow deeper into corporations. Jim Galligan, director of service business systems for optical-networking company Ciena Corp., is running his own trial program with a few dozen Ciena field work-

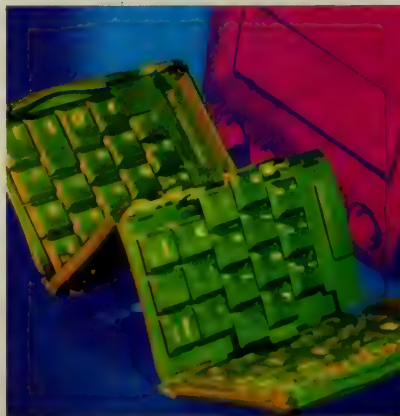
ers who install the company's optical gear into telephone switching stations. Using a Nokia cell phone, they send daily reports on the status of each installation. The updates—which take about two minutes—let Galligan know whether a project is on or behind

schedule and whether a worker needs more materials or additional manpower. Before, that kind of coordination required dozens of separate phone calls.

Not one of these wireless services works perfectly. For example, when Bob Gady Y. Linatser received a software consultant's offer to trade stocks Suretrade.com, his Palm and OmniSky wireless devices conked out in the middle of the transaction. "Sometimes I don't know exactly what happens, I don't know if it's confirmed," says Linatser.

With time, things will get better. Dozens of tech companies have begun building new services and technologies, from stalwarts such as Oracle and Microsoft to a raft of wireless startups. "We're at the very early stages of what we'll be able to imagine," says Jay H. Hiley, vice-president of business marketing at Sprint Group. The successful companies will create products and services that actually make business life easier, not just great material for spots.

By Dennis K. Bertram in New York



Palm Portable Keyboard

PALM INC.

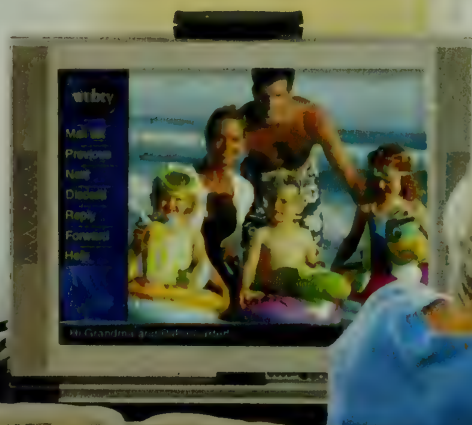
www.palm.com

\$99

Still a favorite, Palm's Portable Keyboard frees you from the tedium of standard keyboards and script. A must-have companion for the Palm at home

and in the office, it travels well, too, speeding you comfortably through your wireless e-mail in hotel rooms and on those transoceanic flights. The full-size keyboard collapses into a compact shape not much bigger than the Palm itself. It sells for \$99 at computer retailers.

THE FOLLOWING IS RATED PG-
PARENTAL GIFTING SUGGESTED



Give your parents 6 months of free e-mail and Internet access.

Few gifts make as much sense out of the box as keeping in touch through WebTV. All it takes is an existing phone line, TV, WebTV receiver and service. By giving your parents easy access to e-mail, the Web, and six months free, there's never been a better gift, or an easier way for them to keep in contact. For more information on this limited-time offer, call 1-800-GO-WEBTV, visit our web site at www.webtv.com or stop by a participating retailer near you.



CIRCUIT CITY
Price • Selection • Service

RadioShack®

DETAILS OF THE WEBTV NETWORKS SIX MONTHS FREE PROMOTION

via subscription fee for the WebTV® Classic Internet or WebTV Plus Interactive service is a flat monthly fee. WebTV services are available as a local call in most areas. In some areas, long distance charges may apply. To check local access, call 1-800-GO-WEBTV (1-800-469-3288). Six months free offer available to new subscribers only who purchase a WebTV Classic or WebTV Plus receiver from an authorized retailer between 10/15/00-12/31/00; activate their account between 10/15/00-1/15/01; accept the terms of service; pay for and remain on the service for at least 30 days; and return "six months free" promotion coupon postmarked no later than 2/15/01. Valid only within the 50 United States and District of Columbia. Must be 18 years of age or older. Limit one offer of free service per receiver. WebTV Networks, Inc. reserves the right to modify or withdraw this offer at any time. See store for full details. Offer does not cover any associated local or long distance telephone charges. Local market network activity may affect access availability.

©2000 WebTV Networks, Inc. All rights reserved. Microsoft, WebTV, the WebTV logo and WebTV Networks are either registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries. Other products and company names mentioned herein may be trademarks of their respective owners.



E-MAIL WITH NO WIRES ATTACHED

A host of new services make sure you get the message

You have to be out of the office for a day, but can't be away from e-mail for that long. Do you lug a laptop and hope to find a phone line to plug it into? Or would you be better off with one of the new wireless handheld devices? Thanks to the arrival of a host of new gadgets and improvements in e-mail forwarding technology, option No. 2 is becoming more attractive to people on the go.

In fact, for some people, wireless e-mail can literally be a life saver. Jonas Matz, who spends up to 17 hours a day as a medic on Hollywood movie sets, uses Microsoft's Hotmail e-mail to coordinate schedules of fellow medics at other locations. "I don't have to worry about getting a phone call, I can just check my Hotmail," he says.

SHORTCOMINGS. Wireless e-mail is still not easy, though. I've tried just about every service, and most of the time I've been disappointed. Many systems can't get to corporate mail hidden behind security walls. Critical attachments can't be opened. Small screens render some messages all but unreadable. And the all-too-common gaps in wireless digital network coverage often prevent you from retrieving messages when you need them.

But for people who need to be constantly in touch, these new services can be worth the hassles. To get the most from wireless, it's important to understand the pluses and minuses of the different types of services.

Web mail is the easiest to

use. This free e-mail service, such as Microsoft Corp.'s Hotmail, can be fetched with any Web browser. I've never had trouble getting to Hotmail with any device that can reach the Web, though it can be difficult to read messages that haven't been formatted

download a special program from the AOL site to your Palm or PocketPC device.

It's more difficult to gain wireless access to corporate e-mail, which is usually tucked away behind a fire wall and can be reached only from computers attached to,

Nextel phones are rigged to reach a special version of Hotmail

for a tiny telephone screen. It pays to pick your Web phone wisely. Nextel Communications Inc. phones are rigged to reach a specially formatted version of Hotmail.

Internet mail, the sort provided by Internet service providers (ISPs), generally doesn't work with phones, but can be picked up with wireless Palm-type handhelds. For \$39.95 per month, OmniSky Corp.'s wireless access service allows you to reach its own e-mail or any standard ISP e-mail. All you have to do is set up a wireless e-mail program with your user name and password and the address of the server computer where your mail is received and stored. Accessing America Online mail requires an extra step: You must

or dialed into, the company's private network. So you must take extra steps to have important mail forwarded to an outside wireless account.

No matter what type of e-mail you're using, be careful when arranging to forward it. All of your messages may appear in your inbox as though they have

come from you, not the actual sender. And if you just hit "reply," you'll send the message back to yourself. When you send a message from a handheld, it can carry a return address that the recipient won't easily recognize—and he or she might not know how to reply. And when you get back to your regular mail, all the messages will be waiting for you as though they had never been read. Moreover, many mail systems offer little or no control over what gets forwarded.

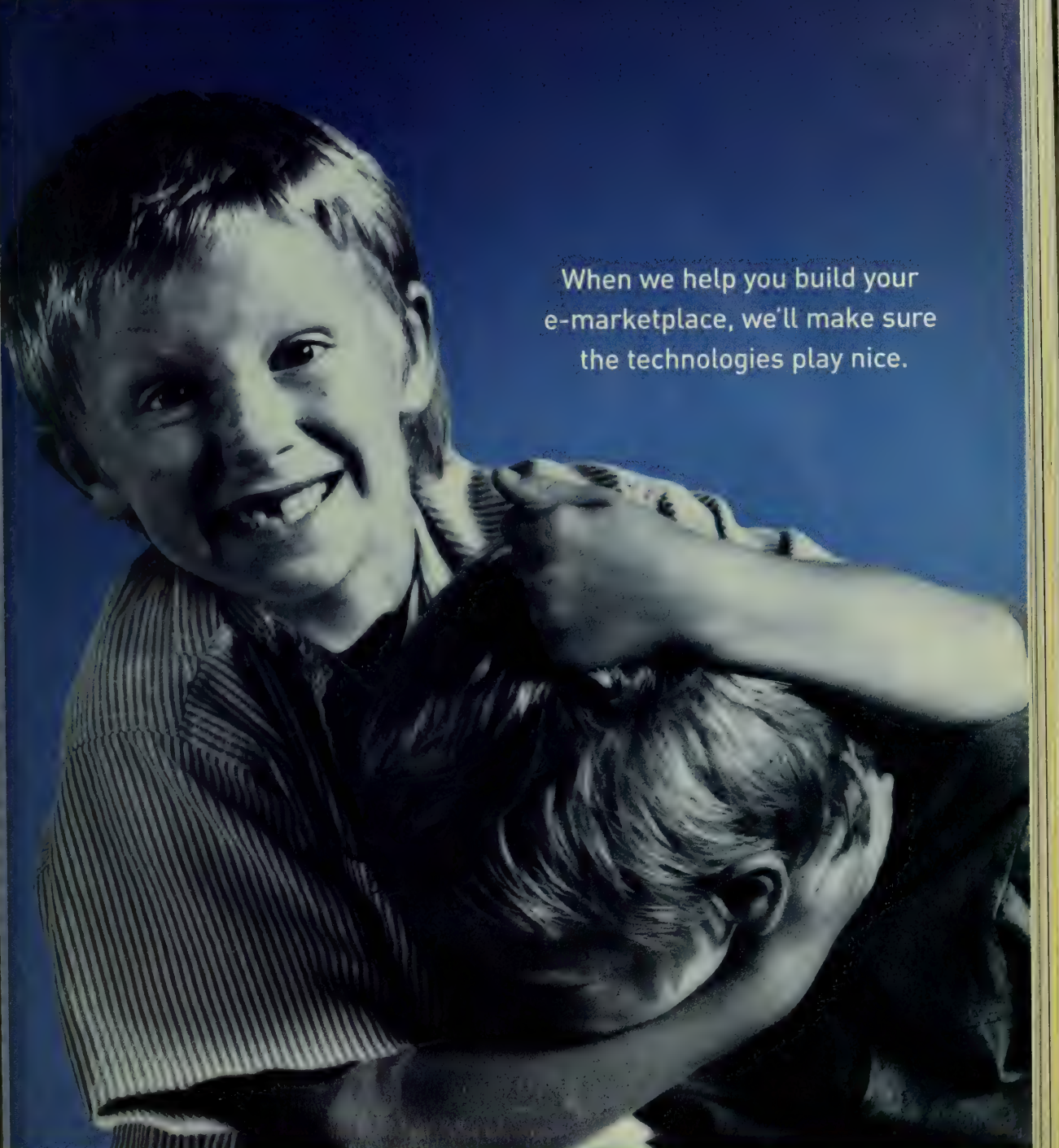
The most convenient solution I've found is Research in Motion Ltd.'s BlackBerry. The key to BlackBerry is software that works with Microsoft Exchange e-mail program. The BlackBerry setup directs messages, select according to rules, to handheld devices. I can see whom messages come from, and won't accidentally send a response to my own corporate account. The service costs \$39 per month.

A handful of new services are designed to help corporations give employees wireless access to e-mail. One example: Wireless Knowledge, a joint venture between Microsoft and Qualcomm Inc., provides secure transfer of e-mail between corporate systems and wireless devices. There's software in works that will make a similar service available on OmniSky-equipped Palm PocketPC handhelds.

Within a couple of years it will be a no-brainer to use wireless devices to info and e-mail from Web. And today, even with all the glitches, wireless mail is a lot better than mail at all.

By Stephen H. Wildst in Washington





When we help you build your
e-marketplace, we'll make sure
the technologies play nice.

LETTING YOUR database company build your e-marketplace is one way to make sure your technologies get along. Of course, then your e-marketplace only works with that one company. Defeating the very purpose of an open, virtual marketplace.

Our architecture supports the world's largest open trading community, the Global Trading Web,SM along with truly open exchanges like Exostar (the aerospace e-marketplace created by Raytheon, BAE Systems, Boeing, and Lockheed Martin). Our technology works with their technology. It will work with yours. Get experience.

Get it right. Visit commerceone.com/emarketplace3 or call 877-261-8516.

**COMMERCE
ONE.**



MANY MARKETS. ONE SOURCE.SM



VORTAL COMBAT: THE EARLY YEARS

Voice portals aren't perfect yet, but they're not useless, either

For Theodore J. (Ted) Leonsis, this was a business trip from hell. While driving to a dinner meeting in Los Angeles, he couldn't fire up his laptop to get his e-mail, couldn't find the score for his favorite hockey team, the Washington Capitals (which he owns), and had trouble finding the restaurant where he was supposed to go for dinner. All of this he could have handled if he had been able to get on the Web. He certainly knows how: Leonsis is president of America Online Inc.'s interactive services division.

Unlike the average information-starved business traveler schlepping through Los Angeles though, Leonsis could do something about his frustrations. Back at

headquarters in Virginia, he set in motion the dealmaking that led to the Oct. 25 unveiling by AOL by Phone, the latest entry in a new wave of Internet-like services delivering information, messaging, and commerce over the phone. These services use voice-recognition technology to let people navigate with simple spoken commands to check their e-mail, make dinner reservations, or get driving directions. To Leonsis, whose company's marketing promotes making the Web simple, the appeal is obvious. "Everyone has a phone, and everyone knows how to use it," he says. "When we tested this, everybody got it."

Certainly, everyone in Silicon Valley got it: As

many as a dozen "voice portals"—or, pardon the buzzword, vortals—have been funded in the past 20 months or so, including Tellme Networks, HeyAnita, and BeVocal. Other established Web services are getting into the act, too. Yahoo! Inc. introduced its voice service two weeks before AOL did. Basic services are free from most of these outfits, although AOL charges \$4.95 a month on top of its regular \$21.95 fee.

Service is getting better. But so far, not much is offered at the top vortals

Several of the companies charge—or plan to charge—for premium services. Yahoo! for instance, offers free service but bills for extras such as disk space or distance calls patched through from 1-800-MY-YAHOO.

SKETCHY. But is this any good? The short answer: Not really. It's O.K., and getting better. There have been big advances in voice-recognition software recently, making these services easier to use and more powerful. The main hangup isn't technology. There's not a whole lot offered yet at any of the leading vortals. Says J. Research analyst Scott McAtreer: "It's more a collection of services than a complete offering." AOL is likely to stay that way for a while.

In fact, voice portals will never be everything the Web is. It takes time to listen to people have computers read information. That's why users are likely to use voice portals most for things they can do easily. Since most people

Finance your dream online.



home

You've found the right home...now find the right mortgage. Visit the American Express Mortgage Center to access the lowest rates on hundreds of loan products. You can check current rates, choose a down payment and select the closing option that works best. Plus, use powerful online tools to quickly calculate your monthly payment, get answers to your questions or find out if refinancing is right for you. Best of all, you can apply for a mortgage online and get instant approval. Make your dream home a reality with the American Express Mortgage Center. It's another financial resource to help you do more.

online trading

mortgages

investments

1-888-297-1972 americanexpress.com



American Express Mortgage Center is available through Prism Mortgage Company, a residential mortgage licensee and Equal Housing Lender. Arizona Mortgage Banker License No. BK-0901891; California Finance Lender and Broker License #6036308; California Residential Mortgage Lender License #4130326; Licensed by the Department of Corporations under the Finance Lenders Law; Illinois Residential Mortgage License #3162; Massachusetts Mortgage Lender License #ML1484 and Mortgage Broker License #MB2000; New Hampshire First Mortgage Banker & Broker License #6412-MB; Licensed Mortgage Lender - New Jersey Department of Banking; Licensed Mortgage Banker - New York State Banking Department; Licensed by the Pennsylvania Department of Banking. American Express Financial Advisors Inc. *Member NASD and SIPC* American Express Company is separate from American Express Financial Advisors Inc. and is not a broker-dealer. © 2000 American Express Financial Corporation. All rights reserved.

don't have graphic displays, this medium is even more limited than the Web in showing off products. So commerce is likely to be confined to narrow areas—such as movie tickets—where you don't need to see what you're buying.

Those limitations aside, Tellme does the best job of offering an array of useful services. It has a database of about 450,000 restaurants nationwide. Plus it has Zagat's reviews for the 20,000 restaurants covered in Zagat's 31 city restaurant guides. When I gave it a whirl, the system delivered 10 choices of Italian restaurants in Pocatello, Idaho. Tellme is also the only one with a service that lets people call taxis wherever they are—a plus, since travelers almost never know how to find the local cab company.

CHEAP CALLS. Each of the major voice services offers something the others don't. BeVocal Inc. has a nifty "Business Finder" feature that lets you simply say "Starbucks" to get the nearest location, be connected to it by phone, and place a take-out order in one fell swoop. Yahoo lets people keep voice-mail boxes as well as have their e-mail read to them. Tellme offers free, two-minute phone calls that beat the heck out of the collect calls that many travelers have to make to accomplish the same tasks.

There's still much more you can't do than you can do. News and information reporting is shallow. Stock quotes usually aren't linked to news: On Oct. 24, the day Nortel Networks Corp.'s stock fell more than 20%, I couldn't move from the quote to a summary of the earnings report that sent the shares reeling on HeyAnita or BeVocal. I was also bitterly disappointed by several services for driving directions: Asked how to get to Carnegie Hall, not one told me to practice.

While the technology

makes the services more convenient than plugging in a laptop somewhere, it's a long way from refined. Consider my adventure finding a Manhattan restaurant through BeVocal's Business Finder feature. I asked for Le Bernardin, a four-star French restaurant two blocks from my office. "Olive Garden. Is that right?" came

recognizer thinks the band is talking."

None of this is fatal. And the vortals say they're improving technology and the breadth of their offerings. But with free or low-price services, it's fair to wonder how these companies plan on staying in business. Originally, most hoped to rely on advertisers to pay a good

profitability, vortals are marketing themselves differently. Entrepreneurs are beginning to promote the services as next-generation phone services, which people will pay for, rather than Web services, which people tend to want for free. McCue emphasizes how technology can let a brick-and-mortar company

LET YOUR VOICE DO THE BROWSING

Anticipating that nontechies will want to navigate the Web with voice commands, dozens of companies are offering over-the-phone voice access to Web information, e-mail, and e-commerce. Here's a sampling:

SERVICE	WHAT IT OFFERS	THE SKINNY
TELLME 800 555-TELL	The broadest of the services, with nationwide restaurant listings, travel reservations, nearly nationwide taxi dispatching, and brief, free phone calls. Coming: a personal phone book that lets you call Aunt Mary simply by saying "Aunt Mary."	It works well. Instructions are easy. And when the speech-recognition doesn't understand you, there are touch-tone prompts as a backup.
HEYANITA 800 44-ANITA	Offerings are rather thin. Basic info on stocks, sports, weather, and the like is spiced up with only a few special features. "Message Center" will read e-mail only from Yahoo mail accounts. No purchasing capability.	Voice recognition is shaky. More need to repeat than with Tellme in our test—got weather for St. Paul Minn., when Maplewood, N.J., was requested. Constant repetition of "Anita"-themed marketing messages was annoying.
YAHOO! BY PHONE 800 MY-YAHOO	A limited service that relies on touch-tone responses rather than spoken commands. Its big voice claim is that it reads clients their e-mail over the phone. Also offers basic news and financial info, but lacks easy voice access to e-shopping.	It relies on touch-tone prompts, not voice recognition, earning big minus points for inconvenience.

the response. Plus, to make it work, it helps to speak in a loud, distinct voice. My test drove the guy in the next cubicle nuts.

Add some background noise, and the fun with voice recognition really begins. I tried to use Tellme and BeVocal in Penn Station at rush hour to check movie times. Both systems dished up wrong listings because they couldn't make out what I was saying. Tellme's taxi service, for example, naturally draws a number of calls from bars late at night. But Tellme CEO Mike McCue cheerfully admits that one problem is that "the voice

chunk of the bills. That seems to be a no-go. Tellme gets most of its revenue from selling its technology to customer-support call centers and to what McCue calls "big e-commerce companies, the ones that are stable anyway." BeVocal is focusing on selling its service through deals with telephone carriers that will charge for it as an extra service, the way they do for Caller ID and call waiting. Qwest Communications International Inc.'s wireless unit became BeVocal's first distribution partner in late October.

To help pave the way to

costs in customer service while BeVocal co-founder Amol Joshi says his service is a way to let Qwest and other carriers reduce customer churn. Ads? What ads? "It's not a dot-com, insists Joshi. "It's a tele-enhanced-services business and the call volume is potentially huge."

He's right about that you remember the key word is "potentially." Even though the services aren't perfect, they're good enough to be useful. Next year, we'll continue to see if they're better and worth paying for.

By Timothy J. Mulligan
in New



Iberia's Intercontinental Business Class. More space between seats.

Traveling and relaxing can be one and the same. Especially when you have ergonomically designed reclining seats and 52 inches of room between your seat and the one in front. Enjoy access to 300 plus VIP lounges worldwide, and when flying on Iberia, members of oneworld frequent flyer programs, such as AAdvantage® may earn and redeem frequent flyer miles along the way. Iberia's Intercontinental Business Class. Just Smile.

For reservations contact your travel agent,
call Iberia Airlines at 1-800-772-4642, or visit www.iberia.com/ingles

Business
INTERCONTINENTAL

Distance measured between rows.



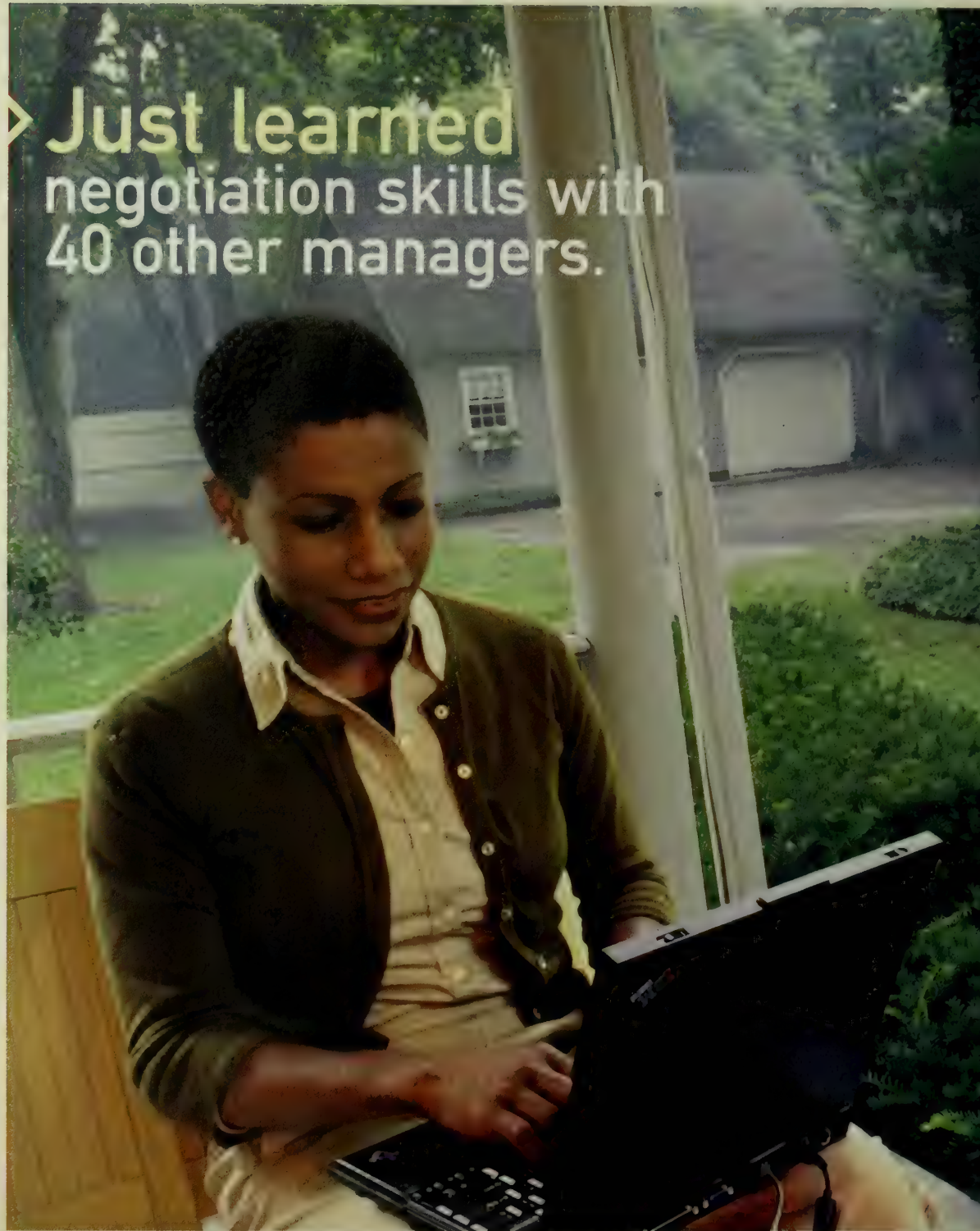
All our flights are non-smoking.

IBERIA

THE BEST KEPT SECRET OF EUROPEAN TRAVEL



American Airlines® and AAdvantage® are registered trademarks of American Airlines Inc. American Airlines reserves the right to change the AAdvantage program rules, regulations, travel awards and special offers at any time without notice and to end the AAdvantage program with six months notice. AAdvantage travel awards, mileage accrual, and special offers are subject to government regulations. Any such changes may affect your ability to use the awards or mileage credits that you have accumulated. American Airlines is not responsible for products or services offered by other participating companies. For complete details about the AAdvantage program, visit www.aa.com



► Just learned
negotiation skills with
40 other managers.

IBM

Lotus.

IBM Mindspan Solutions™ helps you plan, create and deploy innovative e-learning solutions to change the way your organization learns and works. We offer flexible training software and services for



Just learned
where all those socks
disappear to.



Learning experts to help create a solution tailored to your needs. And we'll support you at every step.
Make e-learning part of your company's business strategy. Learn more at ibm.com/mindspan/solutions

IBM MINDSPAN SOLUTIONS
PLANNING | DESIGN | CONTENT | TECHNOLOGIES | DELIVERY

ibm.com/mindspan/solutions

BIOTECH

BLOCKBUSTER OR BUST

Like many biotech startups, Cell Pathways' future rides on a single drug

Cell Pathways Inc. CEO Robert J. Towarnicki and Chief Scientific Officer Dr. Rifat Pamukcu were understandably wary on Oct. 3. They were about to go into a meeting with investors at a UBS Warburg life sciences conference just one week after the Food & Drug Administration denied approval for the company's lead drug candidate, Aptosyn. The company, based in Horsham, Pa., had spent 11 years developing this treatment for an inherited precancerous disorder, familial adenomatous polyposis (FAP).

With its only other drug years away from a possible approval, Cell Pathways was shattered by the rejection—as were its shareholders. The stock nosedived 69% on the news, from \$30 to \$9.31. By the day of the UBS meeting it was down to \$7.25.

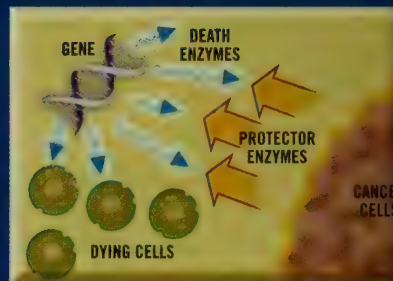
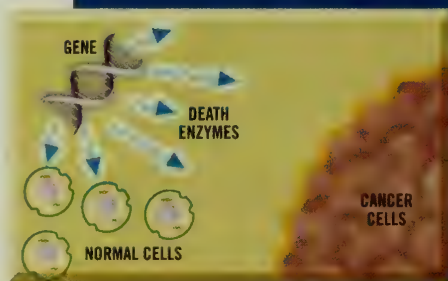
So Towarnicki and Pamukcu did not expect an easy ride from the investors who crowded into their segment of the conference. The two men explained their plan to meet with the FDA to determine if they could overcome the agency's concerns about the safety and efficacy of the drug. They also described ongoing clinical trials testing Aptosyn against breast, lung, and prostate cancers. "There was some animosity from upset shareholders," says Towarnicki. "We got some very probing questions at the meeting, and then spent another 45 minutes talking with them in the hall."

EXTREME RESPONSE. But what they also got were offers of additional funding from eager venture capitalists and investment bankers. "People were handing me tear sheets at the meeting already typed up with specific financing offers—and that was after the share price dropped," says an amazed Pamukcu.

Welcome to the crazy, mixed-up world of emerging biotech companies. Biotech stocks have been climbing for a year now, despite recent setbacks in the Nasdaq composite index, where most of them are listed. Yet hardly a week goes

BREACHING CANCER'S DEFENSE

How Aptosyn blocks cancer cells' efforts to avoid a process called programmed cell death



1 Cells continuously die off and are replaced by new cells. The process starts when certain "death genes" trigger the release of death enzymes that prompt cells to die off.

2 But cancerous cells emit counteracting "protector" enzymes whose purpose is to block the death enzymes from reaching the cell's surface, where they would activate its cell-death program.



3 Aptosyn mops up cancer-cell-produced protector enzymes before they can block the cell-death enzymes.

allowing them to continue unimpeded. The end result: The cancer cells die off, and the tumor disappears.

WYNTON MARSALIS. COMPOSER-PERFORMER. VIRTUOSO.



VIZIO™ SPORT

MOVADO®

THE MUSEUM® WATCH. PUSHING THE ARTFORM™.

STAINLESS STEEL SWISS QUARTZ WATER RESISTANT MEN'S AND WOMEN'S

MACY'S



by that a biotech stock isn't hammered after some worrisome news about its lead—and often only—drug.

Just two weeks after Cell Pathways heard from the FDA, for example, Connecticut Corp. saw its stock plummet 79% on the news that its proposed drug for scleroderma, a life-threatening skin disease, had failed the final phase of clinical trials. Two days later, the stock of BioCryst Pharmaceuticals Inc. lost half its value when the company announced that its flu-fighting drug would be delayed until 2002. And in September, the shares of Gilead Sciences Inc. were hit by the news that its experimental HIV treatment hadn't lived up to expectations. "The investment focus is on the nearest-to-market problem, and there's a real negative reaction to bad news," says Jim McCamant, editor of *Medical Technology Stock Letter*. Still, he says, "there are a lot of drugs that looked dead at one time and five years later were making a huge profit."

DREAM CHILDREN. The Cell Pathways saga is a textbook example of life on the biotech roller coaster. The industry could not be hotter. After more than a decade of research, the first biotech drugs that attack specific disease targets without harming healthy cells are on the market, and making buckets of money. Plus, there are some 370 more in the pipeline. But drug development is one of the riskier businesses going. Clinical trials can take years and, in the case of novel

THE FIGHT CONTINUES

Floyd Nichols, with son Eric, co-founded Cell Pathways to combat FAP, the inherited disease they shared. Floyd died in 1996

biotech treatments that work in some strange new way, be devilishly hard to design. All that work can easily come to naught. Some 80% of drugs in development never win FDA approval, and companies can burn up \$500 million on research and development on their way to that rejection. Huge pharmaceutical companies can often take rejections in stride. But most biotech drugs are not developed by Big Pharma.

Instead, they are the dream children of countless startups, more often than not founded by a scientist who discovered a promising compound in the lab and views it as the cure for cancer. That vision can inspire intense dedication from employees and investors. But it also creates a risky bet-the-farm business strategy. "It costs so much and takes so long to develop a drug that these companies have little choice but to focus on just one or two," says PaineWebber Inc. analyst Elise T. Wang. If that one product hits a snag, however, it can endanger the company's entire future. More worrisome, it can mark the end of a promising medical treatment that failed for lack of financing.

Cell Pathways' story is laden with

an extra burden of emotion—the company was co-founded by Pamukcu and one of his patients, Floyd Nichols. Nichols suffered from FAP, a genetic disease that produces hundreds of precancerous polyps in the colon. The polyps can be removed, but they keep returning, often necessitating removal of the colon. Nichols had his removed at age 19, but polyps began showing up in his intestines in his mid-30s. Rather than have parts of his small intestine and stomach removed, Nichols, a computer salesman, searched for an alternative. That led him to Dr. William Waddell, now retired surgeon at the University of Colorado Health Sciences Center. Waddell had anecdotal evidence that polyps in FAP patients could be melted away with sulindac, a 20-year-old arthritis drug from Merck that was just coming off patent.

Nichols persuaded Pamukcu, his doctor at the University of Chicago, to treat him with the drug—and it worked. Doctor and patient were so elated they joined forces to found Cell Pathways in 1989 to commercialize their discovery. By now Nichols had a second crucial reason to find a cure: His son, Eric, born in 1988, also had FAP.

GAIN AND LOSS. The two men hired researchers from the University of Arizona to figure out what it is in sulindac that attacked the polyps and to eliminate the drug's severe gastrointestinal side effects. They soon discovered the pertinent molecule, dubbed exisulind, and found that it was free of side effects. Sadly, Nichols did not get to follow through on his initial efforts. He died of stomach cancer in May, 1996, at the age of 43.

Cell Pathways kept going. In October 1996, it hired Towarnicki, former president of Integra LifeSciences Holding Corp., as chairman, CEO, and president. By now Pamukcu was convinced that exisulind did more than just melt away polyps—it prevented them from forming. Even more exciting, in test-tube and animal trials it worked against a broad range of cancer cells. Cell Pathways thought it might just have a shot at the Holy Grail of cancer research: a drug that could prevent tumors without the horrible side effects.

The key to exisulind, according to Cell Pathways, is a biological process called apoptosis, or programmed cell death. Most of the body's cells die on a regular basis and are replaced by younger ones. But cancer cells short-circuit the cell-death process and proliferate uncontrollably.

Apoptosis is triggered when spec

Drug development is one of the riskier businesses going.

Some 80% of new pharmaceuticals don't get FDA approval

leath genes" in the blood send out an enzyme that triggers a cell's death program. Cancer cells, however, send out a countervailing enzyme, not found in normal cells, to block this trigger. Exisulind neutralizes the tumor cells' defense system, allowing the death enzymes to reach their target.

When Cell Pathways started limited clinical trials of exisulind in 1996, it saw significant regression of polyps in patients, but the FDA said the company could try to show actual polyp prevention. "Their reasoning was that this is a chronic disease so you want to show more than short-term reversals," says Towarnicki. Designing a trial that shows prevention—essentially trying to prove negative—is both difficult and risky from a regulatory point of view. As a result, the company could not find a large pharmaceutical house willing to derivate the costs of clinical trials, a

typical arrangement for biotech startups. It didn't help that FAP is a relatively rare disease: there are only 15,000 patients in the U.S. Cell Pathways hopes to make its fortune on the drug's ability to fight other cancers, but the company needed the FAP approval to prove the legitimacy of its approach.

Cell Pathways ran a two-year prevention trial. But when it analyzed the results in February, 1999, researchers were stunned to discover no significant polyp reduction in patients taking exisulind. The company concluded that it should have excluded patients with mild cases of FAP, and had independent researchers analyze the data by eliminating all patients with fewer than 10 polyps a year. Under that methodology, the drug reduced polyp formation by 50%.

Cell Pathways showed the study to the FDA in June, 1999, and was asked for more data. So it ran a one-year extension with 55 patients in the prior trial, and found that patients who received exisulind for the second year had another 54% reduction in polyp forma-

tion, on top of 50% from the first year.

The company sent the data off to the FDA this past June—with a heightened sense of urgency. In December, 1999, the FDA had approved G.D. Searle's arthritis drug Celebrex for FAP. In a six-month trial Celebrex had reduced polyps in FAP patients by 28%.

Searle's approval meant competition for an already small market. But it also gave Cell Pathways confidence that its own drug, with seemingly better results, would win approval as well. Then, on Sept. 25—while Towarnicki and Pamukcu were in Tokyo courting a potential Japanese partner—the FDA called to say that Aptosyn, as the drug was now called, would not be approved. A follow-up letter cited "deficiencies...regarding the safety and efficacy of the data submitted."

Towarnicki and Pamukcu returned to Horsham and requested a meeting with

the agency to see if the deficiencies can be addressed. Towarnicki believes the agency's concerns may relate to the first set of results in 1999—the ones that showed no improvement. He remains convinced that Aptosyn will eventually win approval for FAP. Industry experts are not so sure, but most give the company a fighting chance of a comeback. After all, notes Towarnicki, Taxotere, a popular cancer drug, was turned down twice before it was approved in 1998.

SURVIVAL MODE. But how do you keep the business going in the meantime? Cell Pathways has only a little over a year's worth of cash left for operations at its current spending rate. Towarnicki is counting on attracting new investment on the strength of Cell Pathways' apoptosis platform. In the meantime, "we are absolutely changing how we operate."

For one thing, the company is paring back exploratory research. It just takes too long to get any return on such an investment. It is concentrating on clinical trials currently under way for Aptosyn in combination with other cancer drugs made by Aventis Pharmaceuticals, Glaxo Wellcome, Eli Lilly, and Roche Laboratories. The combination trials for breast, lung, and prostate cancer have the added advantage of being funded by these Big Pharma partners.

The company is also developing a second-generation apoptosis drug, CP461. "I think this one is a lot more interesting, because it's a lot more potent," says *Medical Technology's* McCamant. But CP461 is just beginning early clinical trials, and is a good three years away from possible approval.

Cell Pathways continues to provide Aptosyn to the 41 FAP patients who volunteered to take the drug in clinical trials. Eleven of these, Pamukcu notes, are now clinically polyp-free. It is also conducting a pediatric trial of the drug. This one may be the most important to the company, at least on an emotional basis: Founder Floyd Nichols' son Eric is one of its subjects.

By Catherine Arnst
in Horsham, Pa.



HIGH STAKES Cell Pathways CEO Towarnicki and Chief Scientific Officer Pamukcu face an FDA hurdle and new competitors

dot common sense

www.amdahl.com

AMDAHL

a Fujitsu company

© 2000 Amdahl Corporation. All rights reserved.

Developments to Watch

EDITED BY OTIS PORT

ROBOT PLANES WILL OUTSTORM IN THE LONELY PACIFIC

WEATHER FORECASTS HAVE been much more reliable in recent years. But there's still a lot of room for improvement—especially on the West Coast. There, the problem is a paucity of data on weather blowing in off the Pacific Ocean. On land, weather balloons are lofted daily from hundreds of locations. But weather stations in the Pacific are few and far between. Soon, the blind spots may

get illuminated—by little robot planes being developed by the University of Washington and Insitu Group in Bingen, Wash. The partners plan to test their scheme next summer. For two or three days, an unmanned Aerosonde plane will ride the trade winds from the Orient to the West Coast, transmitting a steady stream of weather data. "Our long-term vision is that groups of aircraft would be launched at regular intervals from Asia—and from Hawaii and other is-



AEROSONDE: *A mind of its own*

lands—to provide constant monitoring," says Juris Vagners, a professor of aeronautics at Washington. Insitu Group is also working on a model that can be launched

from ships, then snagged out of the air with a net. It could provide reconnaissance for fishing fleets, among other things.

While the flying robots are expected to cost 100 times as much as the \$200 tab for a balloon, they could be used time and again.

The planes will also have "smart" robopilots that can spot and track ominous shifts in wind speed or air temperature—changes that can't be detected by weather satellites. □

HAVE A (VIRTUAL REALITY) BALL

VIRTUAL-REALITY SYSTEMS ARE GRADUALLY turning into real-world tools for business. For example, the so-called Cave system created in 1992 at the University of Illinois has notched three dozen installations, including Caterpillar Inc. and General Motors Corp. Now, Britain's University of Warwick is expanding VR's horizons.

The new system is dubbed Cybersphere. It's a big translucent globe, more than 13 feet in diameter, sitting atop a ring of ball bearings that allow it to rotate in any direction. Think of a globe-



CYBERSPHERE: *Like an exercise wheel*

shaped squirrel cage. A person standing inside could, say, have the experience of walking down a long assembly line. With each step, the orb would move, and the surroundings would change. Images are projected through the sphere from a battery of outside video systems and synchronized with the sphere's motion. By comparison, movements in a Cave and other VR rooms are restricted by the walls—typically no more than 20 feet in any direction. Developed by VR Systems, the Cybersphere was unveiled in late October as the centerpiece of the new collaboration center at Warwick Manufacturing Group. □

THESE MICE HARDLY EVER ASK TO BE EXCUSED

ALREADY 10% OF AMERICAN adults suffer from the inconvenience of an overactive bladder. Current drugs can partly diminish the persistent urge to urinate, by weakening the muscles that empty the bladder. But these come with unpleasant side effects, such as dry mouth. So in the mid-1990s, researchers at the Bioscience, a Palo Alto (Calif.) unit of Switzerland's

Roche Group, began looking for a better approach. They hoped to interfere with the frantic signals from an overactive bladder that it needs to be emptied.

The scientists knew from earlier research that bladders advertise their fullness by releasing a substance called ATP. If the nerve receptors triggered by the ATP could be blocked, might the urge to urinate subside? To test the idea, a team led by Dr. Anthony P.D.W. Ford, head of genito-urinary research at Roche, worked with ATP ex-

perts in Britain. They created genetically engineered mice that lacked the receptor, thus removing their ability to respond to the signal.

The results, reported in the Oct. 26 issue of *Nature*, surpassed the team's hopes. The gene-altered mice were able to hold twice as much urine as their normal counterparts—and urinated half as often. Moreover, adds Ford, "we haven't seen any other major changes." Roche is now beginning the long task of finding a drug for people.

John Carey

INNOVATIONS

■ Medicine may be making strides against scourges such as cancer and heart disease, but the arsenal against rampant parasitic diseases is shrinking dangerously. A new study finds that treatments for schistosomiasis, sleeping sickness, and malaria are in danger of being yanked from the market, if they haven't been terminated already. Why? Cold, hard economics. Because most victims are in poor countries, the drugs don't earn enough to justify continued production. "It really is a public health crisis," warns Dr. A. Clinton White of the Baylor College of Medicine. "We're losing drugs more quickly than they are being developed." The good news is that health officials have saved a few drugs.

■ In the past eight years, SRI International has been working on a new way to harness the Internet. The venerable Silicon Valley research and development center figures the Web needs a better sense of community—neighborhoods, cities, states, or nations. SRI is proposing a new domain name—.geo—for such sites, and it has developed the GeoBrowser, a geographically oriented browser tailored for tracking down location-related information.



MPG 52/45

F E 566mi

CO₂ 1/2NO_x 1/10

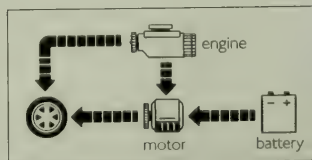
TOYOTA HYBRID SYSTEM

all figures based on EPA estimates — city/hwy mileage — actual results may vary — compared to conventional gasoline engines



Eat my voltage.

Introducing a work of pure genius. Prius, the world's first production car to combine a super-efficient gasoline engine with an advanced electric motor that never needs to be plugged in. No recharging stations. No plugs. No compromises. Prius is powered by the revolutionary Toyota Hybrid System, which stores the energy produced during deceleration and converts it back into electric power. It's fast, fun to drive and produces up to 90%* fewer harmful emissions. Prius. This changes everything.



The electric motor in Prius enhances performance while drastically reducing emissions.

Starting at \$19,995. Delivery, processing and handling fee \$485. Total MSRP \$20,480.**
Visit the new Prius at www.toyota.com/prius or call 800-GO-TOYOTA.

TOYOTA PRIUS | genius

*Based on EPA estimates. Actual results may vary. **Based on manufacturer's suggested retail price. Excludes taxes, license, title and other optional or regionally required equipment. Actual dealer price may vary. ©2000 Toyota Motor Sales, U.S.A., Inc.

GREEN MACHINES

The new automotive environmentalism





DOT says the cars and trucks on U.S. roads today collectively burn through 1.6 times as much fuel per year as they did in 1970.

Fuel Economy And The Carbon Dioxide Problem

The upswing in total fuel consumption is especially worrisome. Even super-clean engines generate large amounts of carbon dioxide, a gas not usually considered a pollutant but one that contributes to global warming. The volume of CO₂ they produce relates directly to how much fuel they consume and is independent of other emissions. That's because, whenever fossil fuels burn, the carbon

ARE TODAY'S CARS AND TRUCKS EFFICIENT ENOUGH? MAYBE NOT.

As environmental concerns rise, automakers are working on sometimes radically new ways to propel tomorrow's vehicles—whether consumers are ready for a change or not.

"People don't list environmental issues (in choosing a vehicle)," says Bernard Robertson, senior vice president for Engineering and Technology at DaimlerChrysler Corp. in Auburn Hills, Mich. "At the same time, just about everybody recognizes that fuel economy and emissions have got to get better."

The solutions—cleaner fuels, hybrids, electrics, fuel cells—aren't new ideas. But technological breakthroughs are making all these options much more feasible than they were just a few years ago.

THE ENVIRONMENTAL ISSUE

The cars and trucks in America's fleet run roughly 20 times cleaner than their brethren of 30 years ago, and they consume an average 14% less fuel per vehicle per year.

That's the good news.

The bad news, according to the U.S. Dept. of Transportation (DOT) is there are nearly twice as many vehicles on the road and each one drives 21% farther per year. The bottom line:

they contain is almost entirely emitted out the tailpipe as CO₂.

The U.S. Environmental Protection Agency (EPA) calculates the average car pumps about 727 pounds of pollutants—hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx)—into the air annually. Over the same period it generates five tons of CO₂. Light trucks average almost 50% more pollution and more than two-thirds more CO₂—some 8.4 tons each—per year.

How big a deal is CO₂? It's not toxic like more destructive greenhouse gases such as HFC refrigerants, but it does account for about 80% of total greenhouse gas emissions in the United States. So it's a significant factor.

Who's Cleaner?

Think a small car is inherently "cleaner" than a big one? Not true. When it comes to the emission of HC, CO, and NOx gases, all cars are pretty much equal under the law.

U.S. emission standards state—in terms of grams per mile—how much of those three gases a car may release per mile. The allowances are low: 0.41 grams of HC, 3.4 grams of CO, and 1 gram of NOx. The limits apply equally to all cars, so a big model with a powerful V-8 can't release any more of those three gases per mile than a little car with an economical four-cylinder engine.

Above: CO₂ auto emissions not only create air quality problems, but account for about 80% of total greenhouse gas emissions in the United States.

BY ELIMINATING ONE SOURCE

OF FUEL EMISSIONS, WE'RE **CREATING MORE
HOPE** FOR THEIR FUTURE.

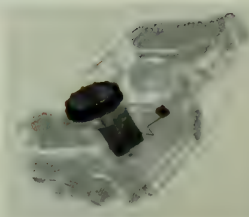


Consumers tell us they want a vehicle that can live in harmony with the environment. Visteon is listening. Through innovative thinking, we have developed a plastic fuel tank system that eliminates pollution caused by evaporative emissions, and enables manufacturers to meet the Zero Emission Vehicle (ZEV) standards. Compared to steel, these new plastic tanks also save weight and cost, are compatible with

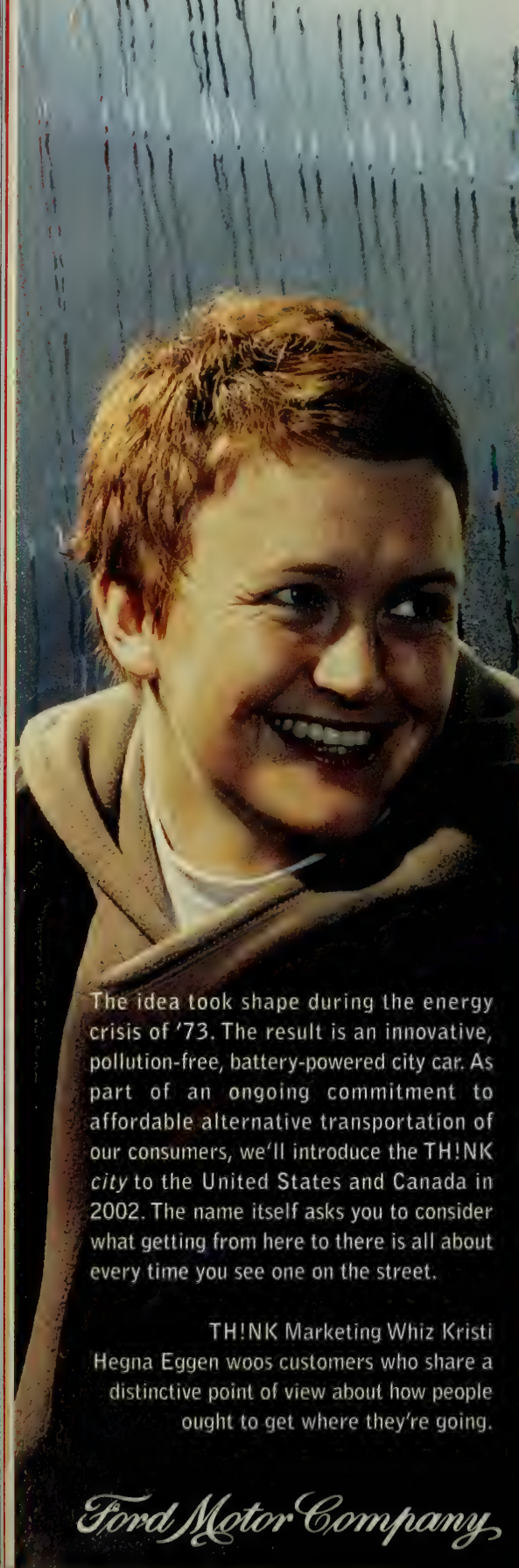
alternative fuels, provide greater fuel capacity for longer range—and eliminate corrosion.

To see how Visteon is working to integrate vehicle components from air induction through fuel storage and delivery, into an entire energy transformation system that will improve the environment, visit visteon.com or call 1 800 VISTEON. The possibilities will have us all breathing a little easier.

To meet ZEV standards, Visteon has developed a new plastic fuel tank system instead of steel. This system eliminates almost all external fuel system connections by integrating components into the tank.



See the possibilities™



The idea took shape during the energy crisis of '73. The result is an innovative, pollution-free, battery-powered city car. As part of an ongoing commitment to affordable alternative transportation of our consumers, we'll introduce the TH!NK city to the United States and Canada in 2002. The name itself asks you to consider what getting from here to there is all about every time you see one on the street.

TH!NK Marketing Whiz Kristi Hegna Eggen woos customers who share a distinctive point of view about how people ought to get where they're going.



Ford Motor Company

WWW.FORD.COM

NOTE:

BETTER IDEA #6

No exhaust

UNITED STATES

Alternative transportation

doesn't always have to mean a boring
government study about commuter trains.



GREEN MACHINES

If that's all there was to environmental protection, it wouldn't matter so much whether we drove fuel-efficient cars or not. But concern about carbon dioxide changes everything. With CO₂, size does matter. Vehicles with low fuel economy generate more carbon dioxide than those with high fuel economy, period. The only "cure" is to burn less carbon-based fuels.

In plain English, that means better fuel economy, switching to a carbon-free fuel such as hydrogen, adopting electric power, or trying some combination of these options.

REDEFINING "GREEN" CARS

The same old emission control techniques won't be enough to eliminate vehicles as a significant source of environmental concern. Automakers are working on several solutions right now.

What About Electrics?

The big problem with electric cars is, and always has been, power. Pound-for-pound, batteries simply can't measure up to gasoline.

That doesn't matter when your trip is under 50 miles or so. But most of us like the ability to cover hundreds of miles at a time, then refuel in

a few minutes and drive on. Electrics can't do that. Nor are electric vehicles happy about cold weather, heavy loads, or spirited driving, all of which sap their performance significantly.

No car company has had a higher profile in electric cars recently than General Motors Corp. Its highly publicized EV1, introduced at the end of 1996 in California and Arizona, was a rolling showcase of high-tech innovation. The zoomy two-seater could scoot from zero to 60 mph in under 9 seconds and run about 140 miles on a charge. It also delivered the energy equivalent to 128 miles per gallon, according to GM's calculations.

But consumer interest in the EV1, available as a leased vehicle only, was never very high. Early this year, GM halted production. Honda took the same action on its electric sedan, introduced in 1997 in California. GM insists its real-world experience with the EV1 has led to technologies it can apply in other advanced powertrain systems, including the Precept hybrid it has developed for the PNGV program.

Ford's Th!nk Group, meanwhile, is finding out what the public thinks of electric bicycles and runabouts. The recently-formed unit, which also heads Ford research on hybrids and fuel cells, is taking orders now for its two- and four-passenger Th!nk Neighbor and will begin delivering the open air vehicle to U.S. buyers in 2001. The unit also sells two electric bicycle models and a two-passenger commuter car in Scandinavia.

The Ultimate Answer

Pure hydrogen may be the ultimate solution to automotive pollution. When hydrogen and oxygen combine, the result is water. With no carbon involved in the process, the problems of unwanted HC, CO, or CO₂ disappear.

Hydrogen can be unlocked from water, making it the transportation system's ultimate renewable energy source. It even works well in

Right: The General Motors EV1 electric vehicle, introduced in 1996, delivered the equivalent of 128 mpg.

Below: Ford's Th!nk Neighbor electric hits the U.S. market next year.

Bottom Right: Opel's HydroGen1 fuel cell car is a zero-emission concept car burning pure hydrogen.



A woman with dark hair and a serious expression is in the foreground, looking directly at the camera. The background is a blurred, high-angle view of a city at night, with lights from buildings and streets creating a bokeh effect. The sky is dark with some clouds.

A car
that can see
and talk?

"Very responsive."

Delphi Automotive Systems is working to make vehicles respond to drivers as well as the road. Our Communiport™ Mobile MultiMedia Systems can navigate, download, read, listen and speak. Our Forewarn™ Collision Avoidance Systems will help drivers see 360 degrees around them. And our 42-volt system can power all this...and more. To find out more about how these future technologies can respond to you, visit www.delphiauto.com.

DELPHI

Automotive Systems
Driving Tomorrow's Technology



GREEN MACHINES

ordinary piston engines that have been adjusted to burn it. But production cost, storage, and distribution are big hurdles. It would take billions of dollars to transform our gasoline-based fuel infrastructure into one that puts a hydrogen filling station on every corner.

The same problem makes it difficult for other alternate fuels, such as alcohol, to catch on. Without a compelling incentive to change, experts say, even clearly superior alternatives like hydrogen face a very tough battle for acceptance.

PNGV

Much of the American auto industry's thinking about next-generation vehicle efficiency can be found in the Partnership for a New Generation of Vehicles, or PNGV.

Launched in 1993, the joint industry-government effort aims by 2004 to generate three production prototypes of mid-size family cars that can deliver three times the fuel

efficiency—equivalent to 80 miles per gallon—of a comparable car today. The program requires final prototypes to be reasonably priced, easy to manufacture, and practical with performance, luggage capacity, and six-passenger seating comparable to a Ford Taurus or Chrysler Concorde.

GM, Ford, and DaimlerChrysler introduced first-round PNGV prototypes earlier this year, but considerable work must still be necessary to cut manufacturing costs.

Road Test!

How do experimental super-clean cars stack up against each other in real-world driving? These days, there's only one way to find out: Challenge Bibendum, a 500-mile rally hosted by Michelin, the French tiremaker.

In September, Michelin put 34 "green" vehicles from 24 European constructors through their paces in a four-day trek through southern France. The entries underwent a series of performance tests covering noise, emissions, fuel consumption, acceleration, and overall design.

Since the technologies involved vary so drastically, Michelin avoids comparing cars to each other directly. Instead, it focuses on how much more efficient they are compared to ordinary vehicles. This year's entries were four times cleaner, 50% quieter and about 40% more fuel efficient than typical 1990-vintage vehicles.

In 2001, Michelin plans to bring its race to the United States for the first time, running between southern California and Las Vegas next fall.



Automakers introduced first-round PNGV prototypes earlier this year including (top to bottom): DaimlerChrysler's ESX3, General Motors' Precept and the Ford's Prodigy.

**THE PRACTICAL APPROACH**

If cost was no object, car companies could do wonders with fuel economy and tailpipe emissions. The technology to make it happen is ready to go. But cost is a big deal, as every automaker—and consumer—knows.

The Fuel Cell Option

Nobody expects the piston engine to vanish anytime soon. But its days may be numbered. Automakers are increasingly excited about fuel cells, a technology promising better fuel economy, longer driving range, superior acceleration, and next-to-zero exhaust emissions. Fuel cells also are twice as efficient as piston engines.

GREEN MACHINES

Sound too good to be true? It was—until the last year or so. Automakers say breakthroughs in design and cost are moving this technology closer to your driveway.

A handful of experimental fuel cell vehicles are on the road now as part of the California Fuel Cell Partnership demonstration program that was announced in 1999. The program aims to place about 50 fuel cell-powered vehicles, including 20 buses, into test fleets over the next three years. Consumers may be able to get their hands on production version fuel cell vehicles as early as 2004.

Battery-like in construction, fuel cells convert hydrogen and oxygen directly into electricity and leave only water as a byproduct. A big challenge is how best to supply fuel cells with the hydrogen they need to work. One option: Add an on-board chemical plant that can extract hydrogen from gasoline. That would enable a fuel cell car to fuel up just like cars do today.

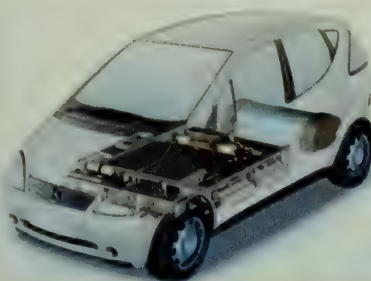
Next Up: Hybrids

In the world of options to the usual internal combustion engine, hybrids are the easiest next step. These systems combine electric motors and some sort of piston power to gain benefits from both.

There are several ways to configure a hybrid powertrain, but all share the same idea. An electric motor helps propel the car, and its batteries are recharged by a small, on-board piston engine that also helps move the vehicle. Honda's Insight relies upon its piston engine most of the time, using its electric motor for extra power. It's the other way around for the Prius, which uses its electric motor to get underway and then switches to piston power at cruising speeds.

The combination of electric power and a smaller-than-usual piston engine results in high fuel economy. But because hybrids carry two propulsion systems instead of one, they are inherently more expensive. "There's just about no way to get the cost differential down to zero," says DaimlerChrysler's Robertson. "We face that dilemma all the time."

But cost remains a fundamental hurdle. Since hybrids always consist of two power sources, they're bound to cost more than a conventional vehicle with one engine. Without more public interest in fuel economy and air quality, they caution, hybrids may have trouble getting beyond the novelty stage.



Honda introduced its sleek Insight two-seater to U.S. buyers last December, and Toyota rolled out its four-door Prius sedan a few months ago. Other automakers are poised to jump into the market with their own hybrids in a few years.

Cleaner Gasoline

One way to reduce what comes out the tailpipe is to clean up the fuel that goes into the engine. U.S. oil refiners have been doing just that for more than five years with the so-called reformulated gasoline they ship to parts of the country with below-par air quality.

Reformulated gasoline can reduce certain emissions as much as 25%. Compared to normal fuel, it contains less sulfur, limits certain hydrocarbons, evaporates less easily, and adds oxygenates—oxygen-containing compounds—to aid combustion.

Car makers are pushing refiners to scrub even more sulfur from gasoline. Sulfur clogs catalytic converters, making it tougher for manufacturers to design super-clean engine systems. Sulfur similarly hinders the catalytic material that is crucial to the performance of fuel cells. U.S. automakers want sulfur content slashed 90%, a move refiners say could boost the pump price of gasoline 3-20 cents.

Above: Toyota Prius hybrid went on sale in the United States a few months ago.

Top: DaimlerChrysler little NECAR 4 fuel cell car is a triumph in space-efficient packaging.





OTHER SOLUTIONS

The piston engine isn't dead, and replacing it isn't the only path to cleaner air. Automakers and their suppliers are chasing several effective, albeit less showy, innovations that will make even "ordinary" vehicles far more fuel efficient.

More Power!

Your car's engine does more than propel you down the road. It also drives the air conditioning compressor, coolant pump, and power steering system. You could squeeze out perhaps 10% better mileage if those auxiliary devices ran off electric motors that switched on only when needed.

Trouble is, today's cars don't generate enough juice to run the motors. That's why automakers will soon begin scrapping the venerable 12-volt electrical system for 42 volts.

Philip Gott, a principal with Standards & Poor's DRI in Lexington, Mass., estimates nearly 13 million vehicles per year will get the more powerful systems within 10 years. By then, he figures, the average car will need up to five kilowatts of power—about five times today's levels—to run accessories.

Non-Petroleum Fuels

Gallon for gallon, gasoline packs more energy than just about any alternative. Without larger tanks, vehicles plumbed for other fuels usually require more frequent fill-ups.

Ethanol comes closest to the energy content of gasoline. Other non-petroleum-based alternatives fall short, but they all offer significantly lower tailpipe emissions vs. gasoline—often at

lower cost. The alternates aren't without problems of their own, though. In cold weather, vehicles using pure methanol can become difficult to start. And liquid natural gas must be stored at -260° F.

Many automakers support the idea of transforming natural gas into synthetic fuel. The process to do it was invented 80 years ago and used to make diesel fuel out of wood and coal. The process can't duplicate the complex molecules found in gasoline, but it can produce sulfur-free naphtha, a cousin to gasoline, that would be well-suited for the chemical reformers being developed to feed fuel cells.

High Rollers

There's friction where the rubber meets the road, and it eats away at your car's fuel economy. A tire's rolling resistance accounts for at least 25% of the energy expended in propelling a vehicle at a steady speed. Lowering rolling resistance 5% boosts fuel economy about 1%.

Harder compounds and higher inflation pressures make tires roll easier but usually cause less grip and more harshness. To get the best of both worlds, tire makers focus on sophisticated chemistry and subtle refinements in tire design. The result has been a 20-year drop in the average rolling resistance of original equipment tires in North America, according to Michelin.

WHAT'S AHEAD

Want cleaner air and better fuel economy? Automakers have a grab bag of high-tech solutions. That doesn't mean the trusty piston engine is doomed, though. It would take many years under the most extreme circumstances for that to happen. Yet the next few years will bring more viable options to piston power than consumers have seen since the automotive age began.

If today's consumer is any indication, the success of these green machines will depend on cost and performance more than their contribution to a cleaner environment. But automakers know customers' attitudes can change very quickly. Their strategy is to push new technologies as close to production as possible—and be ready to roll when the green light comes on. ♻️

Bill Hampton has written about technology and the auto industry since 1971.

ADVERTISERS

BP/Amoco
www.bp.com

Delphi
Automotive Systems
www.delphiauto.com

Ford Motor Company
www.ford.com

Toyota
www.toyota.com

Visteon
www.visteon.com

ALTERNATE FUELS

Here's how other fuels compare to gasoline:

Fuel	Energy Density	Cost	Emissions (CO + NOx)
Reformulated gasoline	1.00	-	1.00
Ethanol	0.93	higher	0.75
Liquefied petroleum gas	0.74	lower	0.40
Methanol	0.57	lower	0.60
Compressed natural gas	0.25	lower	0.60

DATA: U.S. Dept. of Energy

It means solving the
paradox of a world that
wants mobility and a
clean environment.

What on earth
does it mean for
an energy company
to go beyond?

It means investing in
alternative fuels,
processes and ideas.

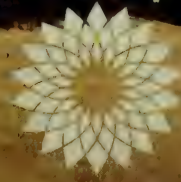
It means delivering
total energy solutions,
including electricity.

It means starting a
journey that will take
the world's expectations
of energy beyond what
anyone can see today.

beyond petroleum

bp.com

bp





The moment of truth is when the best price is yours.

At Instinet, we don't hold a portfolio or take a position in any of the securities we handle for clients.

We're neutral. Objective. Yours.

So you never worry about us competing with your trades, or taking a position against you or giving you some nonsense about spreads. No spreads here.

Our only goal is to help you get the fastest trade at the best price — and handle all the follow-up automatically.

Perhaps that's why thousands of

institutions worldwide use Instinet to electronically access some of the broadest, deepest — most liquid — trading opportunities around the globe.

With all those institutions at your fingertips every day, you have a greater possibility of finding a buyer or seller when you need one.

The fact is, we pioneered electronic brokerage over 30 years ago. Since then, we've helped U.S. pension funds and mutual funds save billions of dollars — \$3.2 billion last year alone.

For more info, call toll free 1-877-INSTINET or visit www.instinet.com



Instinet

A REUTERS Company

*Nothing comes between you
and the best price.SM*

CAMPAIGN FINANCE

WHO'S GIVING ALL THAT SOFT MONEY

Microsoft, telecoms, and financial firms top the lists



No doubt about it, Corporate America is not stingy when it comes to financing political contests. In the first 21 months of this election cycle, the top 1,000 companies by stock market value gave a record \$187 million to federal candidates, at least 12% more than in the previous Presidential election.

That's an enormous amount cash, and the total is likely to grow significantly when the next three months are tallied. But the amount is hardly surprising in an election cycle that saw many campaign fund-raising records smashed. Former Goldman Sachs CEO Jon S. Corzine is expected to spend some \$60 million of his own money—the most ever by a

Senate candidate—before his effort to win New Jersey's open U.S. Senate seat is over. A total of \$55 million has been spent in the New York Senate race between First Lady Hillary Rodham Clinton and Republican Representative Rick A. Lazio. Whoever wins will hold the most expensive Senate seat in history.

In California, the bitter struggle between GOP incumbent James E. Rogan, the House impeachment manager, and Democratic state senator Adam B. Schiff to represent the Los Angeles suburbs of Pasadena and Burbank has cost \$10 million so far—another dubious record and an unheard-of amount for a House seat. And at a June 5 fund-raiser, a

Service Employees International Union local forked over a \$1 million check to the House Democrats for the largest-ever single contribution.

Corporate largesse has surely been influenced by the still vibrant economy and the tightness of this year's Presidential race. But data supplied by the New York-based Campaign Reform Project, a nonpartisan group that favors a ban on soft money, shows that the campaign-finance activities of the 1,000 largest U.S. companies by market cap ratcheted up markedly during this election cycle.

NUMERO UNO. Microsoft Corp., for example, is now No. 1 among the Top 10 corporate givers, having written checks totaling \$3.7 million, compared with \$237,000 in 1996. Although Microsoft is a political newcomer, it has quickly become one of the leading corporate players in Washington as it fights to keep the Justice Dept. from breaking it into multiple parts.

The Top 10 list also includes AT&T and three of the four remaining Baby Bells. Among other things, AT&T, a close second behind Microsoft with \$3.6 million in campaign giving, wants Congress to instruct the Federal Commu-

nications Commission to relax rules that limit one company from owning more than 30% of the pay-TV market. That way, AT&T won't have to divest cable properties acquired in its \$58 billion merger with MediaOne Group. The Baby Bells, on the other hand, want Congress to reduce the amount of money they must pay other carriers for completing Bell customers' phone calls.

Overall, the 1,000 major corporations gave \$78 million in soft money—unlimited checks that go to political parties rather than individual candidates. That figure represents 42% of corporate giving, demonstrating that soft money—a phenomenon that didn't really take hold until the '96 elections—soon will overtake all other forms of giving. Through

ELECTION
2000
THE MONEY CHASE



THE QUESTION IS NOT, "WILL *lightning*
STRIKE YOUR E-BUSINESS?" THE QUESTION IS,
"WILL YOU BE READY?"

In the unpredictable world of e, only the right partner can prepare you for the unexpected. Which is why more and more companies are leaving nothing to chance by relying on our exclusive OnSite program. We are BMC Software. The world's leading provider of e-business systems management solutions. BMC Software OnSite™ allows companies to achieve maximum online availability all day, every day. Displaying the OnSite symbol shows that a company's e-business applications or service offerings are managed by BMC Software technology and have undergone rigorous performance testing. Make it yours.

For more information, visit us at www.bmc.com. We'll be there. We're always there.



Assuring Business Availability™

Government

Sept. 30, the total amount of soft money donated in this election cycle was \$357 million, and corporations accounted for about 22% of that.

Corporate execs insist that they give soft money because they want to participate in the political process. But campaign-finance reformers are dubious. "By writing these checks, their motivation is to get help with specific problems," says Larry Makinson, executive director of the Center for Responsive Politics, a nonpartisan watchdog group. A small list of companies is loosing to give no soft money at all, though their execs may continue to

make soft donations. The list includes prominent high-tech companies such as IBM, Cisco Systems, Dell Computer, eBay, EMC, Intel, and RealNetworks.

As hard-money donations fall out of favor, political action committees are also waning. While the number of corporate PACs continues to grow—1,548 at last count—the amount they give is declining as a percent of total giving. The 1,000 major corporations gave \$53 million this cycle, vs. \$55 million in '96. Still, the companies with the biggest PACs include many of the same telecoms that dominate the Top 10 list of soft-money, hard-money, and individual givers: SBC Com-

VOTING WITH THEIR CHECKBOOKS

Corporate America outdid itself with campaign contributions during this election season. The major 1,000, which consists of the thousand largest companies by stock market value, gave more than \$187 million to federal candidates this cycle, vs. \$167 million in the 1996 cycle.

Top 10 Overall Givers

1 MICROSOFT	\$3,686,781	6 MBNA	\$2,291,150
2 AT&T	3,637,945	7 VERIZON	2,251,644
3 GOLDMAN SACHS	3,191,123	8 FEDEX	2,249,528
4 SBC	2,987,765	9 ENRON	2,248,612
5 PHILIP MORRIS	2,896,217	10 BELL SOUTH	2,234,179

THE MAJOR 1,000's TOTAL: \$187,312,539

totals include corporate soft money, PAC money, and individual hard and soft money

Most Corporate Money to Democrats

	TOTAL TO DEMOCRATS	% OF OVERALL GIVING
1 GOLDMAN SACHS	\$2,078,935	65
2 MICROSOFT	1,561,274	42
3 AT&T	1,404,838	39
4 SBC	1,399,247	47
5 TIME WARNER	1,023,600	61
6 FREDDIE MAC	993,400	49
7 BELL SOUTH	939,025	42
8 VERIZON	895,139	40
9 FANNIE MAE	780,140	52
10 FEDEX	780,655	35

THE MAJOR 1,000's TOTAL TO DEMOCRATS: \$61,512,265

Most Corporate Money to Republicans

	TOTAL TO GOP	% OF OVERALL GIVING
1 PHILIP MORRIS	\$2,348,977	81
2 AT&T	2,185,509	60
3 MICROSOFT	2,073,062	56
4 MBNA	1,791,410	78
5 BRISTOL-MYERS SQUIBB	1,739,469	85
6 PFIZER	1,709,355	85
7 SBC	1,552,318	52
8 ENRON	1,541,634	69
9 FEDEX	1,445,254	64
10 UNION PACIFIC	1,385,145	82

THE MAJOR 1,000's TOTAL TO REPUBLICANS: \$119,974,654



THESE E-BUSINESSES ARE
NOW PREPARED FOR ANYTHING.



Connect Today. Conquer Tomorrow.



NaviSite



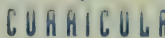
dbadirect



THE IT MANAGEMENT SERVICES COMPANY

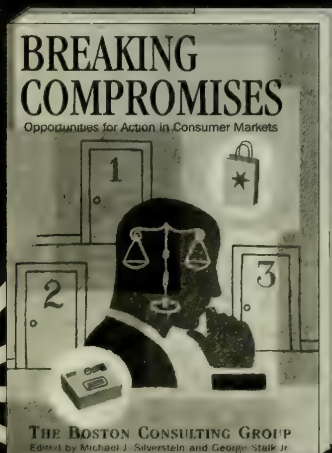


a meeting of minds



WHY ACCEPT THE TRADE- OFF BETWEEN CHOICE AND COST?

Rethink your
basic assumptions
about business.



More breakthrough thinking from
THE BOSTON CONSULTING GROUP
www.bcg.com/breakingcompromises



Available at bookstores or online retailers

Government

munications, BellSouth, and Verizon.

So who was the biggest beneficiary of Corporate America's money blizzard? The Republican Party, by far. Despite numerous fund-raising successes by Democrats—especially the House Dems' campaign committee—the corporate crowd continues to favor the GOP, giv-

ing the Dems only 33% of the total. But no matter which party is getting the most spoils, the Washington equation, which money equals access to power, has never been on such blatant display.

By Paula Dwyer and Nicole S. Pierre, with Richard S. Dunham, Washington

VESTED INTERESTS

Virtually all the big givers were Wall Street players or corporations with pressing business in Washington

Top Contributions from Individual Executives

	OVERALL INDIVIDUAL	% OF COMPANY OVERALL	% HARD	% SOFT
1 GOLDMAN SACHS	\$2,705,139	85	70	30
2 MICROSOFT	1,494,481	41	72	28
3 MBNA	1,016,900	44	75	25
4 AMERICAN FINANCIAL/CHIKUITA	959,085	86	20	80
5 TIME WARNER	955,850	57	49	51
6 AMERICA ONLINE	924,900	63	39	61
7 MERRILL LYNCH	886,357	63	86	14
8 MORGAN STANLEY DEAN WITTER	823,215	49	97	3
9 CISCO SYSTEMS	763,510	96	42	58
10 ENRON	741,100	32	37	63

THE MAJOR 1,000's TOTAL CONTRIBUTIONS FROM INDIVIDUAL EXECUTIVES: \$50,188,911
(70% came from individual hard money and 30% from individual soft money.)

Most Soft Money from Corporations

	TO DEMOCRATS	TO REPUBLICANS	TOTAL
1 AT&T	\$1,010,350	\$1,764,437	\$2,774,787
2 PHILIP MORRIS	285,000	1,800,225	2,085,225
3 FREDDIE MAC	975,000	1,023,250	1,998,250
4 SBC	796,122	706,653	1,502,775
5 BRISTOL-MYERS SQUIBB	210,750	1,271,499	1,482,249
6 PFIZER	160,000	1,241,871	1,401,871
7 MICROSOFT	407,792	978,397	1,386,189
8 VERIZON	481,600	692,884	1,174,484
9 MIRAGE RESORTS	553,621	600,000	1,153,621
10 FANNIE MAE	560,800	576,400	1,137,200

THE MAJOR 1,000's TOTAL CORPORATE SOFT MONEY: \$78,416,601

THE MAJOR 1000's TOTAL CORPORATE SOFT MONEY TO DEMOCRATS: \$23,827,305

THE MAJOR 1000's TOTAL CORPORATE SOFT MONEY TO REPUBLICANS: \$54,589,296

DATA: Federal Election Commission, Campaign Study Group

greater

success

Our benchmark: extended market leadership in our core businesses.

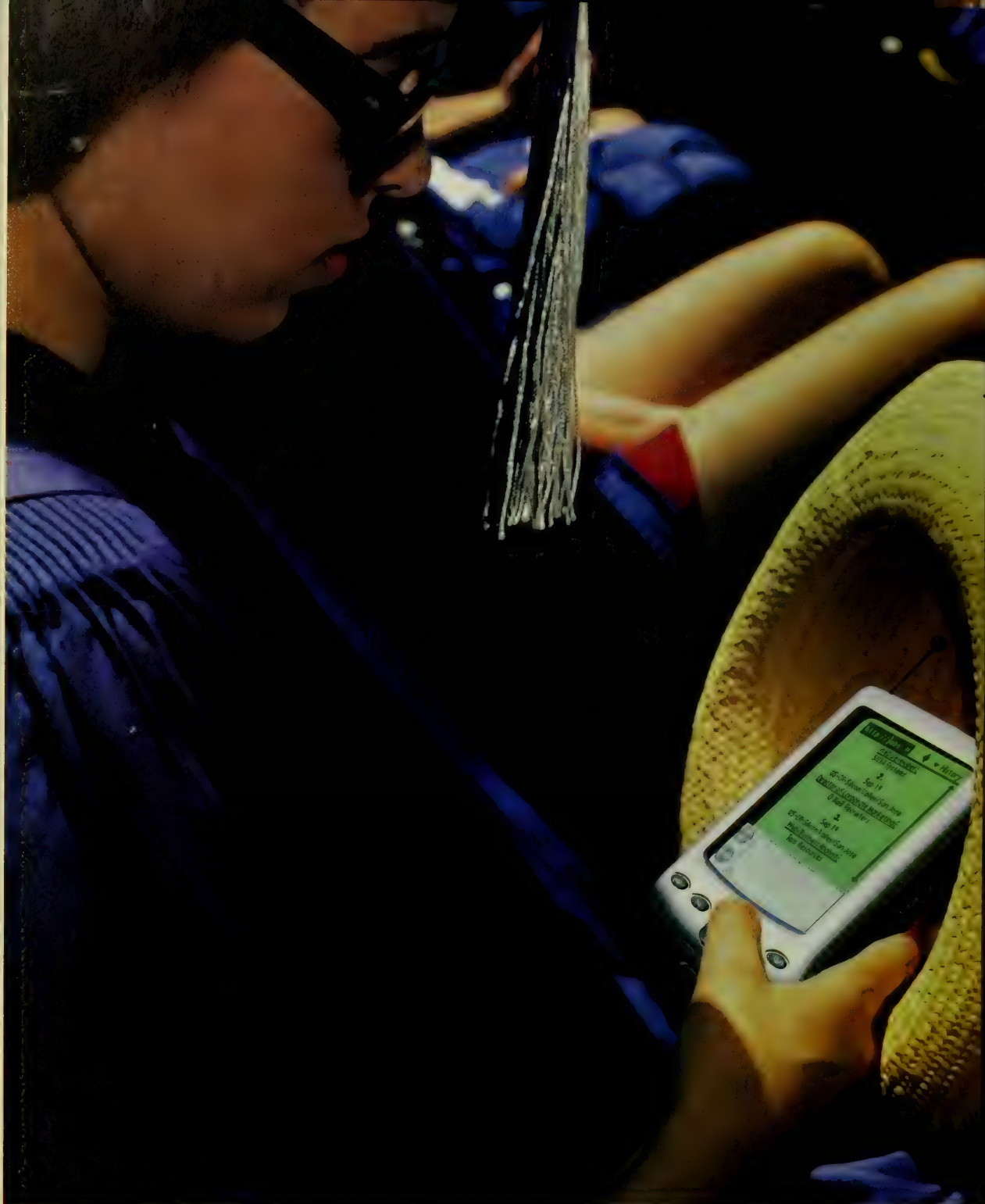
We already receive two thirds of our revenues from products that are leaders in their worldwide markets.

Going forward, we will make strategic investments in markets with strong growth prospects and high potential for increased value, as well as lower cyclical.

Our goal: a continuous increase of shareholder value.

Celanese AG. A global leader in the chemical industry. www.celanese.com





Companies are made of people. Which makes recruiting the right talent key to succeeding in today's competitive job market. Effective use of the Internet can help you quickly find the best candidates. We can show you how. We have the expertise, technology and alliances you need to deliver high-impact Internet solutions for your



Recruiting on the Internet.

business. Whether you manage your own network, or use the services of a Cisco® Powered Network provider, we can help you discover a new way to recruit for your future. Come see for yourself at Cisco.com/go/iq. Discover all that's possible on the Internet.

CISCO SYSTEMS



EMPOWERING THE
INTERNET GENERATION™

©2000 Cisco Systems, Inc. All rights reserved. Cisco, Cisco logo, and Empowering the Internet Generation are registered trademarks or trademarks of Cisco Systems, Inc.

THE DOMAIN NAME BIZ: WWW.DUD.COM

New laws and stiff competition have taken out the zest

It's the Internet's next frontier, and lots of folks want a piece of it. On Nov. 13, the quasi-federal agency that governs the online world's address system will meet in Los Angeles. It will select up to 10 new top-level Web domain names, such as dot-pro and dot-inc, to add to the ubiquitous dot-com, dot-net, and dot-org. At stake for companies that want to manage these new addresses: a growing bucket of cash, worth \$36 million this year and expected to double in each of the next three years. If they get control of new addresses and are allowed to run the big super-computers that dole them out to Web surfers, many think they'll have a "license to print money," says Malcolm Corbett, a corporate director at British

Internet service provider Poptel Ltd.

Don't count on it. Even though the registration of new Web addresses is expected to grow 100% a year for at least the next three years, few companies will be able to turn a profit from it. Why? Cutthroat pricing and the frightening cost of building a computer meganetwork capable of supporting domain names. The profit picture also looks gloomy in the secondary markets for domain names, where both cybersquatters and legitimate wholesalers sell names they've bought. Industry insiders think those markets are worth at least \$15 million a year, but that estimate may not take into account the increasing hostility of courts, corporations, and celebrities. "We would pay them some

modest amount of money for a domain," says Caroline Vanderlip, executive vice president at ProAct Technologies Corp., which just received what it considered "ransom note" from a squatter who had registered similar names, including proacttech.com. "But nowhere near the amount of zeros they're looking for."

MESSY MARKET. Even that may no longer be necessary. Last year, Congress passed a law to protect businesses from those who register computer trademarks as Web addresses and then try to sell them for profit. Violators face \$1,000 to \$10,000 in fines per domain name. The courts have gone a step further. Last November, Barry Diller, CEO of USA Networks, won a judgment against a company that was trying to sell Barrydiller.com for \$10 million. And pop star Madonna is embroiled in countersuits over the use of her name on a site that for a time was linked to a pornographic site. The bottom line: When legal means to fight, companies do have to pay squatters. So some expect to see prices in the secondary market, which average \$10,000 per name—falling a few percentage points a year.

The primary market is just as messy. The 70 or so domain-registration com-

THE WALL em better than employe

DOW JONES

VOL. CCXXXIII

★★★

It's

It's N

nies that have
pped up since
etwork Solutions
2. (NSI) lost its
onopoly last
ar are already
attering. Regis-
com, perhaps
e best known
d one of the
v that are
olically traded,
selling for an
amic \$6 per
ire. In the past two
nths, it has been
wngraded by three
ll Street analysts be-
use of concern about its long-
m future. "We'll see enormous con-
idation," says Matt Lake, a
sultant who tracks the domain-reg-
ation business. "It's not clear at all
y all these companies are needed."
A HOLE. Why the gloom? After all,
istering a site name, which can cost
ewhere from nothing to \$35, is a
0 million market that is growing
100% annually. Problem is, the up-
rts are killing each other. Some,
h as Register.com and Name-
o.com, offer some names for free as
ome-on to sell other services. That
s them in the hole on everything



GLOOMY PICTURE

The registration business has gotten tougher because...

- New entrants have increased competition, cutting prices. Some companies now give names away free.
- Even as prices drop, every domain-registration company has to pay Network Solutions \$6 a year for all names.
- Legal rulings against cybersquatters are eliminating the profits to be made registering famous names and selling them back to companies or celebrities.

they sell because NSI still has exclusive control of a giant database for all dot-com, dot-net, and dot-org names. So for every name upstarts register, they still have to pay \$6 to NSI.

That's why the domain summit, run by the Internet Corporation for Assigned Names & Numbers (ICANN), will be a hot ticket among cyber-prospectors. More than 60 companies from around the world are vying for a chunk of this next big build-out of the Net. The hope is that young companies, thanks to the new domains, will be able to get out from under the \$6 fee to NSI, now a division of VeriSign Inc.

But that doesn't begin to cover domain-name overhead. NSI's 13 supercomputers handle 1.8 billion address requests a day. It plans to spend \$100 million a year over the next three years to maintain and upgrade its network. "I don't think people realize how expensive it is," says VeriSign CEO Stratton Scavos. For NSI and its parent, which has more than \$1 billion in the bank, that's a digestible capital expense. For an upstart, it's a pipe dream.

*By Jim Kerstetter
in San Mateo, Calif.*

er sounds vastly TREET JOURNAL.

WSJ.com

....

75 CENTS

dex

Work Week

Sz Solution

only, you're an "Inc." Imagine what The Journal could do for you. **Adventures in Capitalism.**

Management



James E. Goodwin had had enough. In November, 1999, the UAL Corp. chairman and chief executive pulled his counterpart from US Airways Group Inc. aside at a business meeting to sketch out a widebody deal: He wanted to buy the rival airline. To Goodwin, the takeover was a no-brainer. Although already parent of the world's biggest air carrier, United Airlines, UAL could strengthen

its lead only through a big-time acquisition. And US Airways, with its East Coast routes, would fill the only sizable gap in United's domestic operations. But despite rounds of talks, the two sides remained miles apart on a price. So in April, sensing no chance of a compromise, Goodwin walked away.

As a negotiating ploy, his move worked beautifully. On May 18, US Airways executives lowered their asking price, and six days later,

WILL UNITED'S WOES SPREAD?

Its offer for U S Airways may
not fly. But other carriers must
pay for its labor settlement



Goodwin stood triumphant in New York as United and US Airways Chairman Steven M. Wolf announced an \$11.6 billion merger. After less than a year on the job, Goodwin had inked the industry's biggest airline takeover, one that would create a giant, with 145,000 employees, \$25 billion in annual revenues, eight hub airports, and 6,500 daily flights.

Too bad Goodwin didn't just keep on walking. The deal, which has yet to be completed,

might look smart on paper, but it has set off a ferocious chain reaction that will rattle the industry long after the memory of United Airlines' disastrous performance last summer fades. By acquiring US Airways, Goodwin had hoped for a crowning victory that would be his legacy. Instead, he ticked off United pilots, who feared the merger would cheat them out of pay and perks. They punched back with a work slowdown that upset travel plans



for millions of passengers. His back to the wall, Goodwin then handed pilots the fattest salaries in the industry, a deal that pulled UAL deep into the red and cratered its stock. As if that weren't enough, UAL, like other carriers, got smacked with a steep runup in fuel costs. Bottom line: On Oct. 19, UAL reported a \$116 million loss for the third quarter.

Now, UAL's other unions are clamoring for their share. That could mean more labor disruptions and, as settlements

are reached and payrolls rise, could lead to even poorer earnings, falling stock, and higher

fares. United, which six years ago set itself apart from the rest of Corporate America by boldly embracing employee ownership, today has the same explosive labor problems as any other big, unionized company.

To top it off, the airline has so antagonized the public—including frequent fliers in Congress—that government regulators appear likely to kill or cripple the US Airways deal. From the start, the merger faced long odds because of the lock-grip it would place on many of the nation's biggest cities. But United's summer service fiasco subjected the entire airline industry to renewed scrutiny by Congress and federal regulators. And it raised another argument against the proposed merger: Imagine how much worse things would be if UAL were running US Airways as well. The Justice Dept. could issue its verdict as soon as mid-November.

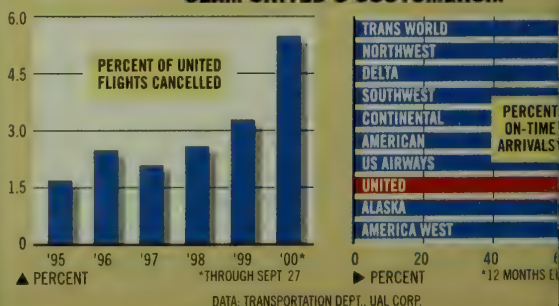
If the deal does go through, passengers seem likely to pay a heavy price. A combination of United and US Airways would probably force United's biggest rivals—American Airlines parent AMR Corp. and Delta Air Lines Inc.—to seek their own mergers. That could leave them bogged down for

years trying to integrate balky workforces and one-of-a-kind computer systems. And instead of six airlines vying against one another, a round of catch-up mergers would likely leave a trio that would control 87% of the U.S. air travel market. That would give them the clout to set prices almost at whim, industry consultants say. Drawing a parallel with a pending antitrust case, Terry Trippler of onetravel.com, an online agency, says: "If the top six airlines went down to three, the impact on the ordinary consumer would be much bigger than if Microsoft came loaded into the computer when I bought it."

But even if UAL never buys US Airways, Goodwin's quest is sure to send shock waves through the rest of the industry for months to come. Wages and ticket prices probably will rise as other airlines are compelled to match Goodwin's latest

Management

WHILE SERVICE WOES SLAM UNITED'S CUSTOMERS...



ATTLED
 Goodwin's
 for
 ed goes
 ough, the
 ic will suffer,
 critics



Goodwin made
 commercial
 ve) in which
 pologized
 ssengers
 yed or
 ded by the
 down



gains. Indeed, some executives worry that May 24—the day Goodwin basked in the media spotlight—may prove to be a turning point for all airlines. “If people look back five years from now, when the airline industry has collapsed, and they ask for one reason why, one name will come up,” snaps an executive at a rival carrier. “Jim Goodwin.”

Goodwin, 56, naturally doesn’t see it that way. A soft-spoken man with an easy grin, thick glasses, and the build of a retired football lineman, Goodwin says there’s nothing he could do differently. The UAL veteran—he joined the company in 1967 as an accountant and rose to chief operating officer in 1998—says he has seen plenty of airlines go through rocky times after labor agreements came up for renewal. To their way, he says, unions flex their muscles, and service suffers until new deals are reached. Then, quicker than out-

siders would guess, passengers come back. He points to American Airlines, which was crippled by a pilot sickout in early 1999. Within months, the company was back to normal by almost every industry measure.

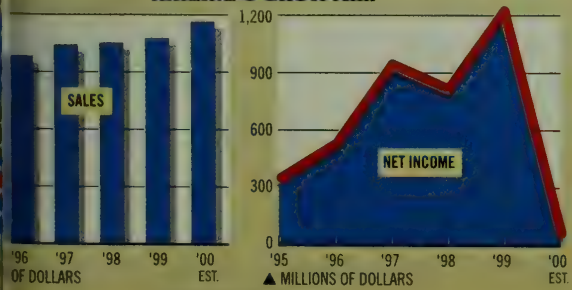
Goodwin insists he was right in pursuing US Airways even as he was squaring off with United’s 10,500-member Air Line Pilots Assn. (ALPA) and the International Association of Machinists (IAM), which represents 44,000 United mechanics, baggage handlers, and customer-service agents. “You have to decide whether you want to be a shaper of the outcome or a follower,” says Goodwin. “We wanted to be a shaper.” That meant grabbing US Airways before the chance was lost: “Sometimes you can’t control the timing. The ebb and flow of a transaction is whatever it is.”

DISPASSIONATE. Still, the months of crisis management seem to be weighing heavily on Goodwin. Last spring, when the deal was fresh, Goodwin enthusiastically made the circuit in Washington, extolling the promised benefits of the merger to congressional panels and federal authorities. But sitting recently in his office suite near Chicago’s O’Hare International Airport, the United CEO was oddly dispassionate about whether the transaction would gain clearance from the host of regulators that must bless it: the Justice and Transportation Depts., the Federal Aviation Administration, the European Union, and as many as 50 state attorneys general. “If it’s meant to happen, it will happen,” he says. “And if it doesn’t, life will go on at United Airlines.”

Goodwin has defenders in the industry, who note that US Airways, a chronic money-loser, was being shopped around a year ago. If Goodwin hadn’t jumped in when he did, AMR might have stepped in with its own bid. At the time, US Airways stock was dirt-cheap, less than \$20 a share. Today, it’s around \$37. These analysts and advisers also blame last summer’s delays and cancellations squarely on United’s pilots, who they say put pay concerns ahead of the well-being of customers and the carrier, even if it devalued their 25% stake in United. Moreover, they assert that United pilots, afraid of losing high-paying assignments to US Airways’ more senior workforce, would have tried to sabotage a merger whether they were in negotiations or not. “Labor has more power in the airline industry, and they use it,” says Glenn D. Engel, an analyst at Goldman, Sachs & Co.

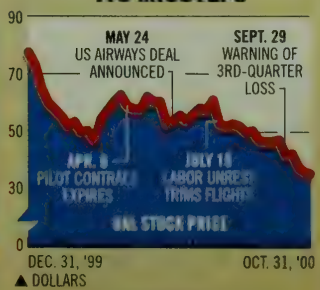
But suppose all that is true. Critics still say it doesn’t let Goodwin off the hook. In fact, if everyone in the industry knew pilots would object to a takeover, why didn’t Goodwin make peace with them first, or at least make plans that would have kept the planes in the air? And once pilots grounded flights by turning down overtime work, why did it take him nearly all summer to regain control? The answer, say many of

AND SLOW THE AIRLINE'S GROWTH...



DATA: UAL CORP., PAINWEBBER INC.

WALL STREET PUNISHES ITS MISSTEPS



DATA: BLOOMBERG FINANCIAL MARKETS

HOW UNITED'S LABOR WOES ARE SPREADING

ME, TOO

United's generous settlement with pilots made other employees jealous. Delta pilots are now asking for hikes of up to 28%; Northwest mechanics want raises averaging 117%; and even if the UAL takeover does not go through, US Airways will have to bump up pilot pay by 14%.

HEAVIER LOADS

As airlines cough up more cash for higher labor costs, their earnings are expected to level off or drop. That's on top of big increases in jet-fuel costs, which are up 42% for United this year.

GUESS WHO PAYS?

Airlines will try to recoup higher labor costs by boosting fares, just as they did with fuel increases. The Business Travel Coalition expects a minimum 10% hike in business fares next year to cover wage hikes, rising to 30% if a UAL-US Airways deal triggers other megamergers.

Goodwin's peers, comes down to inexperience and hubris.

Although both Goodwin and his No.2, President Rono J. Dutta, had been at UAL for many years before their promotions in July, 1999, neither had negotiated a labor pact before. And, of course, they had not put together a megamerger while simultaneously wrestling with a gridlocked air-transport system. "In a sense, they picked up a gun and put it to their own heads," contends Michael E. Levine, an adjunct professor of law at Harvard University and a former airline man.

Another ex-exec, who

worked with Goodwin at United, judges him just as harshly: "For him to enter into a merger without the pilots on board was just crazy."

It might also be folly for Goodwin to assume he can copy American's speedy rebound. Already, mechanics in Los Angeles and Denver have staged wildcat work slowdowns, and union leaders have taken preliminary steps for a full-blown strike around Christmas if they don't get a contract in mediated talks by mid-November. The Association of Flight Attendants, meanwhile, is demanding that UAL reopen its 10-year contract so that its 25,000 members can get immediate wage hikes of as much as 30%. The union threatened to begin informational picketing by Nov. 4—just as people start planning winter vacations. Even pilots are testy, despite the big raises. Growls Frederick C. Dubinsky, chairman of ALPA's United chapter and a UAL director: "I actually be-



lieve pilots should make even more."

The combination of higher wages, spiked fuel bills, and fleeing passengers promises to depress UAL's results for the year. Net income will tumble to just \$60 million, estimates Samuel C. Buttrick, an analyst at PaineWebber Inc. UAL shares have already skidded about 50% since Jan. 1, to \$35, a five-year low, before bouncing back to \$38. That shrunk UAL's market capitalization to \$2 billion. That's not even half the stock value of American or Delta and, in fact, is less than the current market cap of US Airways.

TRANQUIL UAL's fall is freighted with irony. Until last spring, the company had been held up as a model of labor relations thanks to its 1994 employee stock ownership plan (ESOP), which ceded 55% equity control and three seats on UAL's 12-member board to pilots and other workers. There were benefits for both sides. Management enjoyed labor peace for six years, an unusually long stretch in an industry that's militantly unionized. Across the table, union leaders used their positions on the UAL board to block Goodwin's predecessor, Gerald Greenwald, when he wanted to negotiate an earlier takeover, in 1994. The target then? US Airways.

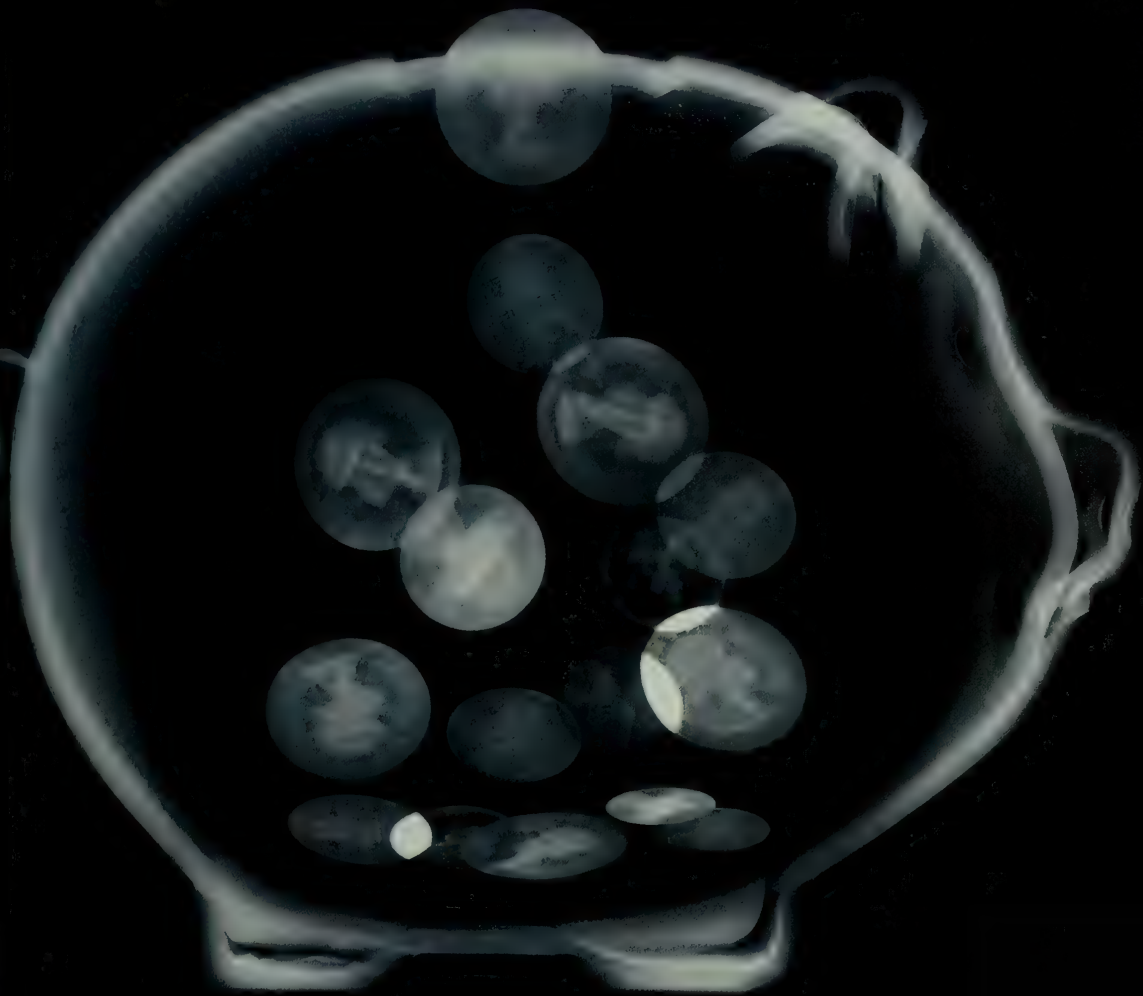
But behind the scenes, labor was losing its solidarity. This year, when Goodwin presented UAL directly with a merger agreement, the ALPA representative on the board, retired union executive John F. Peterpan, had a change of heart and voted to endorse the takeover. Since only a unanimous "no" vote from the board's union representatives could halt an acquisition, Goodwin's plan

FIREBRAND

Dubinsky says he'll make sure United pilots are the industry's best paid

WIDENING RIFT

If Goodwin does not grant flight attendants the raises they want, says union chief Farrow, "we will just make life miserable for him"



inside GMAC Commercial's MortgageRamp.com you'll now find a
microsoft and intel e-commerce solution.

because they know if they can't find loans for people quickly,
they won't be in the business of finding loans at all.

you're known for processing loans faster than anyone, you can hardly afford to sit around
waiting to get your e-commerce site up and running. But if you're executing over a billion
dollars in transactions annually, a reliable platform is just as important. So is it any
wonder MortgageRamp.com chose the Microsoft® Web solution platform and Intel®-based servers?

Additional information on some of the thousands of other companies who have turned to Microsoft and Intel is available at www.microsoft.com/ecdservice.

Microsoft | **intel**

© Microsoft Corporation and Intel Corporation. All rights reserved. Microsoft is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries. Intel is a registered trademark of Intel Corporation. The names of actual companies and products mentioned herein may be the trademarks of their respective owners.



sailed forward over Dubinsky's solitary objection. Meantime, the ESOP had been losing worker support. In exchange for UAL stock awarded under the ESOP agreement, pilots agreed to a 24% cut in pay and pension contributions. Over the contract's term, however, many pilots felt they had been taken for a ride. An ESOP rule bars employees from cashing out until they retire or quit, which rendered the shares useless for financing a mortgage, say, or a college education.

Also, pilots at Delta and American were passing them by in wages and benefits.

Management

United pilots had to sit and watch as UAL raked in record profits. Worse, the stock slid, diminishing their nest eggs.

Disenchantment began to surface when United's pilots elected Dubinsky, in October, 1999. A firebrand who had earned the nickname "Mad Dog" for his role in the pilots' 1985 strike against United, Dubinsky warned Goodwin last fall that he would again make United's pilots the highest-paid in the U.S., once their old contract and the ESOP lapsed, on Apr. 12.

But these tensions were hidden from the outside world until Goodwin and Wolf announced the merger six weeks later. Immediately, any pretense of harmony fell away. Why the sudden eruption? Goodwin admits he already had stirred up pilots by failing to give them a new contract the moment the old one ended, as management had long promised. But more than that, the US Airways deal threatened to undo not only wage gains United pilots were hoping for in a new labor pact, but also some previous raises. That's because, under seniority rules in ALPA contracts, senior employees get the highest-paid posts in merged airlines, and US Airways pilots generally have more years than pilots at United.

STORMY. UAL had inadvertently put itself at the pilots' mercy. To keep its payroll down, the airline had been relying on overtime to maintain its daily schedule of 2,400 flights. But under the pilots' contract, extra work was entirely voluntary. Feeling double-crossed, United pilots stopped signing up for

more hours. Already, an unusually stormy summer and overcrowded runways and air lanes had been triggering widespread delays and cancellations. The pilot shortage made matters exponentially worse. Management was forced to scrub hundreds of flights a week and delay even more. By August, as the summer travel season peaked, the airline had canceled 30,000 flights. Out of the 10 biggest airlines in the U.S., United dropped to dead last in on-time performance, with four of every five flights leaving late in August. The carrier's hub airports looked like emergency shelters after a natural disaster.

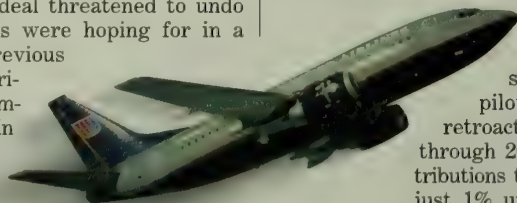
Goodwin was buffeted from all sides. Big corporations were phoning him to say that because their employees could no longer get to business meetings on United, they were turning to other airlines. United's own employees were filing reports of abuse by frustrated passengers. Transportation Secretary Rodney E. Slater and congressional leaders summoned Goodwin back to Washington to explain how things got so out of hand. And the UAL board wanted reassurance that the turmoil would soon end. "It ain't a good thing when an airline like ours is the subject of late-night television humor," concedes John K. Van De Kamp, a lawyer at Dev Ballantine LLP in Los Angeles and a UAL director since 1995.

"The board was concerned."

Then, a week before Labor Day, management and pilots reached a settlement. The Aug. 26 pact gave pilots pay hikes of 21.5% to 28% retroactive to April, plus annual 4% boosts through 2004 and a big pop in company contributions to pilot pensions, to 11% of pay for just 1% under the previous contract. Under the new accord, a Boeing 747 captain now earns \$291,700 a year. In a side deal, ALPA extracted a promise that United pilots would stay at their latest pay grades even if they got pushed into lower pay slots following the merger. Although it was pleased that the contract ended the summer conflict, Wall Street

OVERHAUL

Mechanics at United want pay hikes, too. At Northwest, they asked for 117%



In August, four out of five United flights left late, ranking the airline dead last

Shopping on Madison Avenue.

Tickets to a Broadway show.

And a hot dog in the park. | Define luxury for yourself.



Lincoln LS | Your definition of luxury is your own. So, experience the combination of 4.9 litre 32-valve V8 with near 50/50 weight distribution. And see how much fun driving potholes can be. Visit lincolnvehicles.com, or call 800-688-8898.



LINCOLN
AMERICAN LUXURY



was aghast that Goodwin was paying so much. Indeed, Dutta estimates the deal swelled UAL's payroll expenses by \$300 million in the third quarter alone.

The four-year contract, however, did bring United pilots back to the cockpit, and today operations are returning to normal. On-time departure rates are up 40% from United's low point in late August, and the cancellations are down 60%. Still, United won't be back up to its usual 2,400 daily flights until January at the earliest. Goodwin appeared in a TV commercial last August to

Management

apologize personally to the public. An autumn fare sale has helped fill United planes, and the airline is wooing frequent fliers with special offers such as bonus points. Even the airline's competitors concede that, with its unrivaled flight network and schedule, United will win back passengers in just months if it can maintain decent service. "You hear consumers say: 'I'll never fly them again,'" says Jeff Potter, CEO of discount carrier Vanguard Airlines Inc. "They will."

Off-camera, however, UAL's rift with organized labor is widening. Envious of the pilot contract, the company's other unions are banging on Goodwin's door asking for double-digit raises. If Goodwin stands up to the flight attendants and the IAM's three huge bargaining units, he runs the risk of setting off another guerrilla war that could quickly catapult the airline into chaos again. "We will just make life miserable for him," promises Linda F. Farrow, president of the United flight attendants' union. But as the airline's investors have discovered, the price of peace might be just as steep. UAL blamed much of its huge third-quarter loss on the generous raises it gave pilots, and Dutta warns that UAL will lose money in the fourth quarter, too, as raises for pilots and other employees increase its labor costs by a projected 16% from a year earlier.

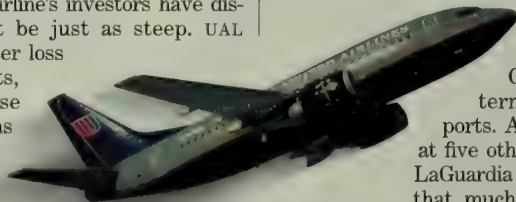
Goodwin's deal-cutting now is ricocheting through the rest of the industry. Repudiating their own leadership, American Airlines' 10,500 pilots spiked a one-year contract extension on Sept. 20, even though management had agreed to forgive a \$45.5 million fine the airline is owed from their 1999 sickout if pilots O.K.'d the pact. The reason? The pilots were eager to move quickly to match United's pay hikes. Delta's 9,000 pilots also upped the ante in their negotiations and now are asking for immediate boosts of 21% or more to vault them back into the lead over United's pilots. In the meantime,

the Aircraft Mechanics Fraternal Assn. stunned Northwest Airlines Corp. in late September with demands for a 117% hike in average annual pay and benefits. UAL's pilot contract "has caused a labor revolution," says O.V. Delle-Femine, AMFA's national director.

So far, none of these demands has hit competitors' bottom lines. Indeed, United's mess has been a bonus for many competitors, as they picked up unhappy passengers. But the prospect of high wages and fuel costs have shareholders worrying about the industry's future. Dutta says UAL's fuel bill jumped by \$200 million in the third quarter, despite hedging in the futures market. He warns that jet fuel will cost 42% more in this quarter than it did a year ago. Other airlines face similar increases. **FARES TAKING OFF.** Passengers will be next to feel the pain. Northwest Airlines executives estimate they would have to hike fares by an average of \$40 per ticket if they gave in to the wage demands of mechanics. Kevin P. Mitchell, chairman of the Business Travel Coalition, predicts that business fares will go up as much as 30% next year if the United/US Airways merger goes through and if AMR and Delta follow with takeovers of their own. Sound far-fetched? Not at all. In 2000, Mitchell says, business fares have jumped 20% as airlines passed along higher fuel costs.

A combined United/US Airways would enjoy unparalleled dominance, accounting for more than 50% of traffic at seven major airports—including Chicago O'Hare and Washington's Dulles International—and a dozen smaller airports. And it would control a third of traffic at five other big airports, including New York LaGuardia and Los Angeles International. With that much of the market, airline consultants agree, United could handily stamp out pesky discounters and charge premium fares. Just look at Rochester, N.Y., where US Airways now has 60% of the market. Fliers there already pay the fourth-highest fares in the nation. Louise M. Slaughter, a Democrat who represents Upstate New York in Congress, calls constituents "prisoners" and asserts that high fares limit business growth: "The economy cannot thrive if we cannot transport people and goods at a reasonable price."

Other carriers would be pressured to consolidate as well. Today, United, American, and



A United-US Airways combo would have unparalleled clout, with more than 50% of the traffic at seven top airports—including Chicago and Washington

FOR SALE?

US Airways may put itself on the block later, say Wolf, if United's offer is blocked

the day you wake up and realize that your e-commerce site is, well, all your commerce.

Have you heard of Kintana?



CO has.

By percent of Cisco orders are processed through a critical e-commerce operation called Cisco Connection Online. It brings together over 400 content providers, 700,000 data files, and 175 applications to generate \$55 million in revenue every day. Needless to say, as CCO goes, so goes Cisco.

asked Kintana for help in technology chain automation for this commerce side of their business. By providing secure, systemized processes, increased visibility, self-service reviews and approvals, and automated deployment of new site features, we have delivered in spades. Revenues through the site have quadrupled from \$4 billion to \$17 billion a year, while the team needed to manage the site has decreased by 25%.

Whether you know it or not, results like these can be achieved almost overnight. We can help you accelerate the speed at which your business can evolve. Do it in Kintana time.

Visit www.kintana.com or call 1-877-KINTANA to find out how.



KINTANA we make time

Mark Jonnesen, Vice President Information Technology
Cisco Systems

Kintana. All rights reserved. All other trademarks are the properties of their respective owners.



Delta are roughly the same size in domestic operations. But in tandem with US Airways, United would leap way ahead, carrying 35% more passengers than Delta and generating 65% more revenue than American. To maintain equilibrium, the CEOs of AMR and Delta have told Congress that they would be compelled to make acquisitions of their own. The likely matchups: AMR would resume negotiations with Northwest, while Delta would bid for Continental Airlines Inc.

Management

That could lead to bedlam as this troika contends with a raft of integration problems. "Airline mergers are very hard to digest," says Paul Hudson, executive director of Ralph Nader's Aviation Consumer Action Project.

Goodwin and Wolf knew antitrust regulators would stop their deal unless the companies reduced their combined dominance along the East Coast by unloading assets. So they worked out a companion deal to sell a big chunk of US Airways operations at Reagan National Airport in Washington to Robert L. Johnson, a US Airways board member and head of Black Entertainment Television (page 192). The parties wagered the side agreement would earn political points, too, because it would create the nation's only minority-owned airline. To temper opposition further, Goodwin pledged that United would freeze fares for two years, except to recoup increases in fuel prices. He also has argued that passengers in many smaller markets would gain from a merger because they could book flights from cities that US Airways has served and then "seamlessly" continue on a United flight. Of course, United would benefit by using US Airways as a feeder in the Northeast.

SLIM CHANCE. Finally, UAL pulled out its lobbying checkbook and retained such well-connected advocates as major-league Democrat Thomas Hale Boggs Jr. and Kenneth M. Duberstein, a Reagan Administration chief of staff. Nonetheless, Congress seems to be siding with United's opponents. In the House, Representative James Oberstar of Minnesota, the ranking Democrat on the Transportation Committee, sponsored a bill empowering the Transportation Dept. to set airfares if the industry consolidates to a Big Three. And the Senate Commerce Committee passed a nonbinding resolution against the takeover. "Passengers would lose in this deal," says Senator John McCain (R-Ariz.), the committee chairman.

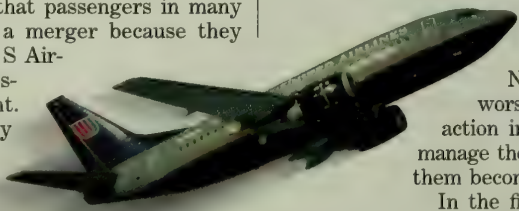
There's a slim chance the takeover could still go through, if Justice evaluates it without consideration for how the merger might trigger industrywide consolidation. But some airline consultants predict Justice will require the sale

of many more US Airways holdings, and that could scuttle the deal. The few signals the government's antitrust lawyers have sent do not bode well for Goodwin. In particular, Justice went to trial on Nov. 1 to force Northwest to sell its controlling interest in Continental. If antitrust authorities have concluded that this smaller and less-complete partnership stymies competition, analysts wonder how they could possibly permit an outright takeover of the nation's No. 1 carrier by the biggest. And Justice isn't the only potential deal-breaker. The EU must consent too. Even if UAL wins final clearance, it still could be tripped up by state attorneys general. Already, Minnesota Attorney General Michael Hatch warns that he might sue to block the deal if Justice doesn't. Among other things, that would protect St. Paul-based Northwest from a takeover.

Publicly, at least, Goodwin and executives at US Airways insist they still will obtain approval by Jan. 1, 2001, the expiration date of the merger agreement. "We have no Plan B," insists US Airways President and CEO Rakesh Gangwal. But analysts say that if the transaction wasn't done as soon as it was announced, Goodwin doomed it by allowing United's operations to spin so wildly out of control over the summer. Even so,

Goodwin's friends agree. "The former executive recalls that in the spring he gave the deal 50-50 odds. Now, he says, chances are much worse: 'There's a lingering knee-jerk reaction in Washington that if [United] manages themselves at this size, how can we then become so much bigger?'"

In the final stroke of irony, losing US Airways could be the best thing to happen to United. Otherwise, it would take on \$7.3 billion in debt and lease obligations from US Airways. United would have to borrow more to finance the billion cash purchase of the airline's shares at \$60 apiece. Goodwin has also tied UAL's hands when it comes to cost-cutting, promising that no one would be laid off at United or US Airways during the first two years of the merger. There are other costs that could bloat UAL's balance sheet. UAL would have to absorb US Airways' 45,000 employees into its 100,000-person workforce, a task made more burdensome by strict seniority and job classification rules spelled out in union contracts. In addition, UAL would have to mesh complicated flight schedules and cross-train mechanics to service the carriers' different fleets. Even the two carriers' reservations systems are incompatible. Given all that baggage, PaineWeb-



One critic predicts a sharp rise in business airfares next year if United's proposed merger with US Airways goes through—and if American and Delta follow suit with deals of their own

MINNEAPOLIS

If Justice wants to force Northwest to sell off Continental, how can it O.K. a United deal?

Welcome to the new economy. And welcome to the new Fannie Mae. We're using the power of the Internet to quickly become one of the world's largest e-businesses. With the click of a mouse, we can span continents and leap oceans to find low-cost mortgage funds.

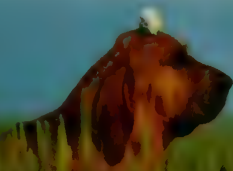
Of course, we're old hands at searching the international capital markets for the lowest-cost financing for American home buyers. During the 1990s, we raised over \$145 billion from international investors. And moving these processes to the Internet will continue to help us ensure affordable mortgage funds for American families.

In fact, last year alone, we issued \$48 billion of debt securities through our Web site. Which explains why we're among the world's largest e-businesses. Fanniemae.com. It's how we do business. Period.



FannieMae

www.fanniemae.com



**You may think it takes a bloodhound to
track down global sources of low-cost funds.
But it's amazing what you can do with a mouse.**

Buttrick advises Goodwin to take advantage of the merger agreement's breakup clause, pay the \$50 million penalty, and walk away. Whether Goodwin gets US Airways or not, United's image already has been tarnished, and the carrier has locked in higher wages that will crush earnings for quarters to come. Says Buttrick:

Management

"This is a case where a good concept turns into a bad deal."

Even in defeat, Goodwin could console himself that he would still be operating the world's biggest airline. And later, if US Airways puts itself on the block again as Wolf

has suggested that it might, Goodwin probably could buy select routes and airport access. But if he does wind up empty-handed, it will mark the end of a costly and torturous journey, unfortunately, that millions of United's customers can already relate to.

By Michael Arndt in Chicago

BusinessWeek online

For an interview with UAL's CEO, James E. Goodwin, go to the November 13 issue online at www.businessweek.com

THE DC AIR DEAL: MORE LIKELY TO STALL THAN FLY

On Oct. 2, Gordon M. Bethune, chairman and chief executive of Continental Airlines Inc., sent an unsolicited letter to the CEOs of UAL Corp. and US Airways Group Inc. In it, he offered \$215 million to buy the operations at Washington's Reagan National Airport that his two rivals have pledged to sell to get their merger past antitrust regulators. In an odd way, Bethune's bid could actually improve the odds that the UAL/US Airways merger will win government approval. For one, it gives another major airline a stake in seeing the deal completed. And Continental would be a stronger competitor to UAL's United Airlines, easing federal concerns.

At the same time, though, the all-cash offer may have hobbled the improbable dream that Robert L. Johnson would become an aviation executive. Johnson, founder, chairman, and CEO of Black Entertainment Television, was picked to acquire the D.C. assets by US Airways Chairman Steven M. Wolf last April as he negotiated the sale of his company to UAL. For \$141.2 million, Johnson would buy enough takeoff and landing rights at the Washington airport to support a 222-flight-a-day airline serving 44 cities.

Never mind that Johnson, 54, has absolutely no experience running an airline. US Airways and UAL contend that by selling to Johnson, they will create a brand-new regional carrier, DC Air, and answer critics who charge that their \$11.6 billion merger will cut competition. DC Air would



DRAWING FLAK
DC Air's Johnson (between Wolf and Goodwin) has acumen but no experience in airlines

become the only carrier in the nation owned by an African-American. And they would be handing it to a proven entrepreneur: Johnson launched the Black Entertainment Television cable channel in 1980 with just two hours of weekly programming; today, it has 60 million subscribers.

And Johnson is known to dabble in various businesses, such as restaurants and web sites.

ON A STRING? Good selling points, to be sure. But from the moment the deal was proposed, DC Air drew flak from competitors, lawmakers, and consumer advocates who see it as a thinly disguised puppet of UAL. DC Air would lease its biggest planes—10 Boeing 737s—from UAL at market rates for four years. And for as long as seven years, UAL would supply the airline with United flight, maintenance, and airport personnel, market-rate fuel and insurance, and other services. DC Air passengers would even earn points on United's frequent-flier program. "A virtual airline," scoffs Democratic Rep. Louise M. Slaughter, whose upstate New York district would be in DC Air's

territory. Johnson did not comment.

Investors also have objected. Accusing Wolf of cronyism—Johnson is a US Airways director and was the only buyer the airlines sought out—shareholders have hit US Airways with eight lawsuits to try to force US Airways and UAL to auction off the assets. Wolf and UAL chairman and CEO James E. Goodwin say in recent interviews

that the pact with Johnson bars them from talking with anyone else, so they've given Continental the cold shoulder. They also insist the deal creates new competition for everyone. But analysts suspect that UAL prefers Johnson because once stuck with high-cost crews, he would have a hard time undercutting United's fares.

So far, only Continental has made an offer, Wolf and Goodwin say. But analysts foresee a furious bidding war if the takeover is approved. There simply is no other way to get gates and landing rights at Reagan National Airport, a crucial stop along the heavily trafficked Northeast Corridor. Analysts say American Airlines and Delta Air Lines could ante in, and even some startups.

Could DC Air come out on top in an auction? Though he's had more than five months, Johnson hasn't lined up any financing. But he could soon. Viacom Inc. reportedly is in talks to buy BET Holdings II Inc., the cable channel's parent. Johnson's take if that deal closes may approach \$2 billion. That could allow Johnson to up the stakes on Bethune. But it wouldn't necessarily give consumers an independent alternative to United.

By Michael Arndt in Chicago

*ingenuity*²

We develop software for the intelligent. We create e-marketplaces for the resourceful. We apply our own ingenuity to ingenious companies to make them faster, smarter and exponentially more valuable. So far, we've created more than \$10 billion in value for over 800 companies worldwide. Want some? Contact us at www.i2.com or 1-877-926-9286.



Powering the Bottom Line.™

Relax. The first bill

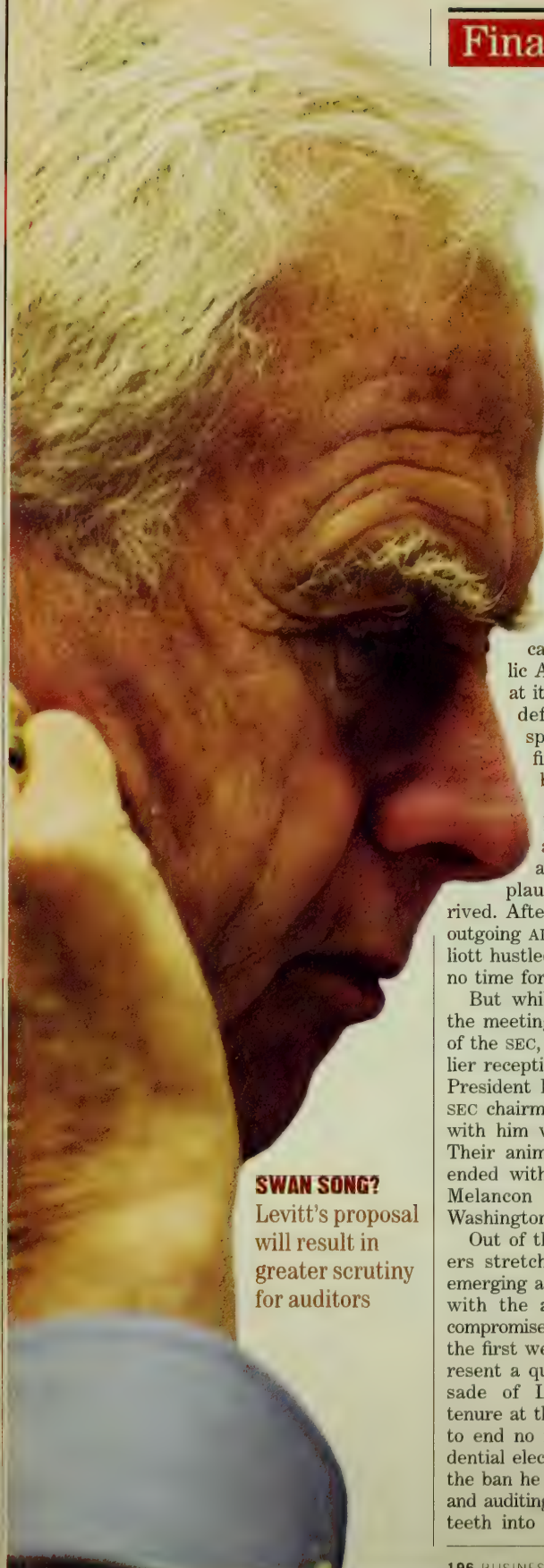
Always the hardest.



ACCOUNTING

A COMPROMIS

But Levitt's proposed peace treaty with the Big Five will still add teeth to ethics rules



When he climbed up to the stage at Las Vegas' Venetian Resort, Arthur Levitt Jr. was about as welcome as a fire-and-brimstone evangelist in a casino. The chairman of the Securities & Exchange Commission had publicly dared the American Institute of Certified Public Accountants to let him speak at its annual meeting so he could defend the SEC's proposal to split the Big Five accounting firms' management-consulting businesses from their auditing arms. The CPAs stuck him in the next-to-last slot at their Oct. 24-25 meeting and offered only polite applause when the SEC chief arrived. After Levitt's 25-minute speech, outgoing AICPA Chairman Robert K. Elliott hustled him off the stage—leaving no time for questions.

But while Elliott was wrapping up the meeting with another denunciation of the SEC, Levitt was getting a friendlier reception out in the hallway. AICPA President Barry C. Melancon took the SEC chairman by the arm and huddled with him while their aides looked on. Their animated 10-minute negotiation ended with smiles and handshakes as Melancon pledged to call Levitt in Washington the next day.

Out of that talk—and dozens of others stretched out over six weeks—is emerging a peace treaty in Levitt's war with the accounting profession. The compromise—likely to be finished during the first weeks of November—will represent a qualified win for the last crusade of Levitt's record seven-year tenure at the SEC's helm, which is likely to end no matter who wins the presidential election. While Levitt won't win the ban he sought on mixing consulting and auditing, the final deal will put more teeth into enforcement of accounting's

ethics rules—and focus far more pressure on auditors.

The deal isn't completed, and the accountants, scarred by months of public and private battles, remain wary of one another. But the deal that is emerging will spell out for the first time in SEC rules specifically which consulting services auditors must avoid if they are to remain independent overseers of public companies' financial reports. It subjects the Big Five's consulting firms to much stricter scrutiny by the SEC and audit committees of their clients' boards. Especially important to the Big Five: They'll still be allowed to install computer systems for their clients. Such information-technology services account for 60% of the Big Five's consulting revenues and almost a third of their total revenues.

COZY NO MORE. The SEC's original proposal would have gone much further. It would have banned accountants from consulting with their clients and to a wide range of affiliated companies. But Levitt can claim victory: His high-profile public battle will force the accountants to open up their cozy profession to greater public scrutiny. The likely deal will increase their power and an almost complete checkbook for the Public Oversight Board, a panel of five members chosen outside the accounting industry that will review the quality of audit firms' work.

SWAN SONG?

Levitt's proposal will result in greater scrutiny for auditors

AUDITING DEAL**The Likely Agreement****SEC ENFORCEMENT**

Current professional rules bar auditors from providing such services as keeping a client's books or giving legal advice. These prohibitions will now be written into SEC rules for tougher enforcement.

INFO-TECH

Audit firms are allowed to provide computer services to clients, but tighter scrutiny of audit companies by the SEC.

FROM THE CRUSADER

Itt may also win reform of the AICPA Professional Ethics Executive Committee, boosting the number of non-voting members on the 21-member panel to three to a majority. "Broader participation on any organization sustaining confidence," Levitt declares. "If the talks go off the rails—as they might—the stumbling block will be much discretion the SEC retains in

reforming the new rules. It wants to judge auditor independence by appearance: If a consulting firm appears to compromise an audit, the SEC could withdraw the audit and discipline the accounting firm. "The goal is to protect investors, and investors can only judge by appearance," says Dennis Packman, former chair of the National Association of Accountants and a Levitt ally. The Big Five firms fear such a "smell test" will limit the SEC too much power to expand its restrictions on consulting.

Chances for any deal at the SEC dimmed in late September. The SEC's proposal to bring under fire from the Big Five and three of its biggest members—KPMG, Deloitte & Touche, and Arthur Andersen. The firms, all heavy campaign donors, had enlisted 46 members of Congress to question the SEC's fairness in its authority to regulate accounting. Levitt returned fire. In an impassioned

speech to state accounting regulators in Boston on Sept. 18, he charged that the AICPA—which he derided as a "trade organization"—was ignoring its duty to investors. Instead, Levitt said the firms were turning auditing into "a business line used to get a foot in the door for other, more profitable services."

But even as he denounced the accountants, Levitt knew he had to talk to them. The firms were openly lobbying Congress for an amendment to the SEC's funding that would tie the agency's hands until after the election and Levitt's likely departure. The SEC chief was working the Hill hard, personally lobbying more than 50 senators. But his allies—labor and other pension funds, plus banking regulators and a few companies—weren't putting much muscle into blocking the Big Five.

So on Sept. 20—the day before AICPA President Melancon testified at an SEC hearing—Levitt called Melancon and suggested they meet. The session in Levitt's Washington office was tense. But as the 69-year-old SEC chief talked to Melancon, a 41-year-old Louisianan, "one good politician recognized that he'd met another good politician," says a participant in the talks. The two agreed to search for common ground. "Both sides felt that the heated

rhetoric was doing more harm than good," says Melancon.

To get negotiations rolling, Levitt passed over SEC Chief Accountant Lynn E. Turner, who had contributed some of that harsh rhetoric, and enlisted General Counsel David Becker. He met with a revolving cast of executives from the AICPA and the three opposing firms. Their initial blueprint was a pared-down version of the SEC proposal drafted by PricewaterhouseCoopers and Ernst & Young—the two Big Five firms that backed Levitt, at least in principle, from the outset.

ENDGAME. Suspicions ran high, especially on the issue of information-technology consulting. PWC and E&Y are selling their IT practices, and their draft accepts an SEC ban on blending auditing and IT. While KPMG and Andersen are also divesting IT, they—along with Deloitte, which remains in the business—don't want to let PWC and E&Y persuade the SEC to close that door forever. A PWC spokesman says the firm won't comment while the talks are in flux.

Congress unwittingly helped the talks along. Its long stall on passing spending bills gave the SEC and the accountants more time to talk. If Congress had wrapped up on schedule in early October, the accounting firms would have insisted on legislation to postpone any new rules for the rest of Levitt's tenure—blowing up any chance of compromise. While Senate Appropriations Committee Chairman Ted Stevens (R-Alaska) was in Levitt's corner, Senate Banking Committee Chairman Phil Gramm (R-Tex.) privately kept the heat on Levitt to compromise.

The deal, when it is finally settled, won't close the issue of auditor independence. Levitt's crusade has turned the public spotlight on audit failures and raised suspicions among investors and regulators about accountants' potential conflicts of interest. While Levitt isn't going to win the sweeping ban on consulting that he proposed, chances are good he'll get most of what he really wanted—a fitting endgame for a seven-year tenure spent looking out for investors' interests.

By Mike McNamee in Las Vegas



NEGOTIATOR
Melancon sought common ground with the SEC—and among a splintered Big Five

...And the Flash Points

AUDITS
Can hire auditors in states to verify financial statements. Must handle deals to committees and disloyal shareholders.

OVERSIGHT BOARD
The American Institute of CPAs will beef up the Public Oversight Board, which reviews audit firms' work, and provide unlimited funding.

APPEARANCE STANDARD
The SEC wants the ability to step in whenever an audit firm's consulting deals create an appearance of conflict of interest. Accounting firms want a more objective standard.

INDEPENDENCE BOARD
Accountants want to rein in the Independence Standards Board, established at the SEC's insistence in 1997, so it can't add new rules on top of those negotiated with the SEC.

A TALK WITH A FATHER OF THE EURO

Nobelist Mundell is dismayed by its fall but still hopeful

Robert A. Mundell, the Columbia University economist whose ideas paved the way for the euro, has watched in dismay as the European single currency has lost 27% of its value against the dollar since its launch in January, 1999. Nevertheless, he's proud of helping inspire its creation. Mundell, who won the Nobel prize in economics last year, answered questions about his views in an e-mail exchange with Associate Economics Editor Peter Coy.

Q: Is the launch of the euro a success so far?

A: It depends on what you mean by success. That the euro got launched at all was a near-miracle, given the difficulties in getting countries to meet the Maastricht convergence requirements, and the widespread opposition to the project by economists in the U.S. and even in Europe. The launching of the euro was a completely unprecedented event in monetary history. It was the first time that a group of sovereign countries decided to scrap their national currencies in favor of a single currency, and its importance lies not just in that precedent but in the size of the countries involved. Upon its launching, the euro instantly became the second-most-important currency in the world. The transition will not be complete until the middle of 2002. Only at that time, when currencies and coins have been introduced, will it be possible to say that the launch has been completely successful.

Q: Are you happy with the performance of the European Central Bank?

A: No, because they started off with a dogmatic belief that the exchange rate was a matter of no concern. On the contrary, it is just as important as interest rates.

In my opinion, the ECB should have intervened to put a floor to the euro when they saw it getting seriously undervalued and threatening an upsurge of raw-material prices and wage rates.

When intervention finally did take place, by the Group of Seven on Sept. 22, they merely dumped some currencies (mainly dollars) into the exchange market without announcing any goals of their policy. In my view, they should have announced a floor of the euro at 85¢.

Strictly speaking, however, the exchange rate is the responsibility of the governments. The problem of the euro

“Monetary union of the [yen, dollar, and euro] would be a great step forward”

also lies with a weakness in economic policy and with lack of leadership by the fiscal authorities. The euro needs a counterpart to the U.S. Secretary of the Treasury who could control herself, along with the ECB, with the dollar-euro exchange rate. At the same time, Europe itself needs to undergo fundamental reform in the direction of supply-side revolution.

Q: Why has the euro fallen so far?

A: There are a number of reasons:

One: With a single currency, transaction costs and bottlenecks from dealing with a dozen currencies are eliminated. This has the effect of injecting unexpected liquidity into the system, weakening the euro.

Two: The newly unified euro market has resulted in a spate of problems that could not be quickly absorbed without a discount on the euro.

Three: U.S. growth rates have been exceptional, outpacing Europe's projected satisfactory recovery.

Four: Europe has been sluggish in undertaking the supply-side reforms needed to enable it to exploit the benefits of the New Economy technology, as well as to prepare for the less favorable demographic picture associated with aging.

Five: The euro has not yet had a tangible manifestation in the form of paper currency, banknotes and is therefore seen as a “virtual” currency that the public does not yet understand or accept.

Six: Leadership in the community has been lacking by its absence, and a lackluster Commission and a leaderless Council.





BLUE MARTINI
O F T W A R E

NOW SERVING TWO TO TWENTY.

Shopping is simply more fun in a group. Now, Blue Martini's collaborative capabilities allow groups to shop online as well. With it, two people in different cities can browse their favorite site together, two dozen people can be taken through an online training exercise simultaneously and customer service representatives can guide clients through their site. The uses are endless. Browsers turn into buyers. And nobody has to be lonely. To find out how Blue Martini's e-business solutions can improve your customers' online experience, visit bluemartini.com/group.

"In the long run, I believe the euro will trade around parity with the dollar, if not higher"

Ministers, and an untested European Central Bank.

Q: What would happen to Europe if the euro stayed at this level?

A: It would not be a disaster because, as the German Chancellor has said, it keeps European industry competitive and promotes growth. The downside is that it will lead to a higher equilibrium price level, at the moment a lesser danger than stagnation.

Q: Should the ECB raise interest rates?

A: Interest rates should rise as a consequence of a strong, growing economy, not as a measure to cut off growth. Whatever tightness is required in the money markets should be achieved through unsterilized currency-support operations. The forward euro is at a premium over the dollar. When the euro recovers, interest rates in Europe and the United States will converge.

Q: Is the euro trading below where it belongs?

A: It is below its long-run equilibrium. In the long run I believe the euro will trade around parity with the dollar if not higher.

Q: Does monetary union have the support of the people of Europe? How important is public sentiment?

A: Opinion on the euro shifts, and it has been affected negatively by the fall of the euro since it was launched. Most if not all of the euro-area economies are getting a better monetary policy with the ECB than they ever had with their national currencies. That is even true of Germany, because its economy has been made much more competitive by the fall of the euro.

Nevertheless, the euro is considered an improvement in Germany by only about a third of the population. I believe the public's attitude will change when the paper currency and coins are introduced.

Q: You've said that you favor monetary union of the dollar, yen, and euro. Why?

A: I have said that a monetary union of the three largest currency areas would be a great step forward for the world econ-



THE AWARD: Mundell and Swedish King Carl XVI at the prize ceremony

omy. But it is extremely unlikely that there would be political support for a monetary union that would involve a single currency.

The U.S. is understandably against any reform that would undermine the importance of the most important currency of the 20th century and probably the first part of the 21st century. But I do believe that stable exchange-rate arrangements could evolve that would provide many of the advantages of a single-currency monetary union. After all, the major currencies were all fixed to one another in the great period of expansion after World War II and they could be fixed again.

Q: If the three currencies were to be fixed today, what exchange rates would be appropriate?

A: I would not recommend that the

three currencies be fixed today at current exchange rates because that would overvalue the dollar against the euro. It would be an enormous stroke of luck to be able to lock rates at 100 = 1 dollar = 1 euro, but that may not just a dream.

Q: Should a world currency be tied to gold standard?

A: A world currency has to be based on arrangements that ensure it will have stability. Gold is the only important noncurrency asset held in international reserves, and it is second only to dollars in national reserves. Central banks hold about a quarter of all the gold mined.

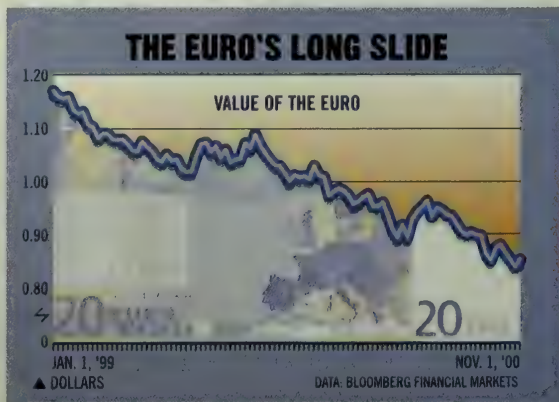
For this reason gold will play a role in the international monetary system in the new century. But a gold standard of the type that existed before World War I, when gold was widely held in coin, is no longer possible. If gold were to be used as the world currency of the future, some institutional mechanism would have to be developed to ensure that it was stable.

Q: You believe price stability is essential. Why?

A: We saw the evils of inflation in the late 1970s, when the dollar was dropping and inflation was at two-digit levels. People were shifted into higher income-tax brackets without being any better off, and the economy stagnated. At the same time, the financial stability of the most advanced economy in the world came under threat, and it looked as if the U.S. was about to become a banana republic. Fortunately, that problem was corrected in the early 1980s.

but the correction itself caused a recession and the great savings and-loan crisis. Whatever short-run gains can be achieved, "surprise inflation" is a poor way to gain when it is set against the losses caused by the inevitable correction.

The best way to get long-term growth out of the economy is by establishment of a more stable growth tax-and-expenditure system, which would involve a later income-tax schedule, lower corporate-profit tax rates, improvements in the education system.



We have the

TECHNOLOGY

A leading **Java-based** personalization and e-commerce platform.

We have the

PARTNERSHIPS

A network of more than 150 of the **world's best** technology and solution partners.

We have the

E-BUSINESSES

Over 400 **worldwide customers** including Benetton, BlueLight.com, Eastman Kodak, and J.Crew.

We have the best

PLATFORM.

Do you?

The Internet is fundamentally changing the way businesses interact with their customers. ATG is a part of that, and has created a blueprint for maximizing the value of your e-business initiatives. Attend one of our *Blueprint for Customer Management* executive seminars to find out how your organization can take advantage of the ATG Dynamo e-Business Platform for building and managing online relationships with customers, suppliers, and partners. For more information, including seminar locations and online registration, visit www.atg.com/blueprint



MARKETS

IN CHICAGO, THE EURO IS MAGNIFICO

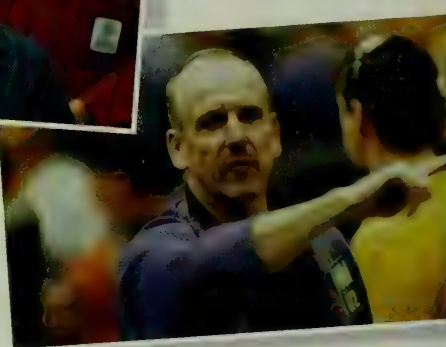
The volatile currency is attracting Merc traders in droves

The weak euro may be causing consternation in Europe and wreaking havoc on the profits of U.S. corporations. But in the currency trading pits of the Chicago Mercantile Exchange, the euro's the place to be. Just ask John P. Metcalf, who traded futures contracts in Swiss francs and Japanese yen for a decade. Lured by



PIT THRILLS:

Euro volume often tops that of the yen, British pound, and Canadian dollar combined



the euro's volatility, Metcalf and several other traders left their own pits two months ago to trade futures in Europe's single currency. Like any shrewd trader, Metcalf goes where the action is.

Although not yet two years old, the euro futures contract is shaping up as the Merc's most successful currency product. On ordinary days, trading volume in euro futures often exceeds all the CME trading in the Canadian dollar, British pound, and the Japanese yen combined. Volume soared in September when speculators thought the euro was turning around and heading back up. Average daily turnover leapt to 24,314 contracts, nearly double August's 13,188 contracts. That trading fever reminded Scott A. Brusso, the CME's director of currency products, of "the heyday of currency trading in 1993 and 1994."

REBOUND AHEAD? The euphoria was short-lived, though. When the currency abruptly headed south again, volume fell back to a normal 13,000 contracts a day—and more than a few traders took mean losses. But instincts in the pits are that the euro's still due for a big rebound, and Metcalf and his pals are waiting to pounce when the next wave

of volatility hits. As Stephen M. Levin, a broker in the euro pits, puts it: "Uncertainty is the best thing for our business, and that's still there."

The popularity of euro futures is all the more remarkable because the CME isn't an arena for big institutions. It's becoming a market chiefly for ordinary folk—individual traders and retail investors. Bank mergers have reduced the number of big currency trading desks, while some of the biggest speculators have simply faded from the scene: George Soros' hedge funds don't play currencies the way they used to, and

Julian Robertson's Tiger funds are not the investment du jour, especially since equities have been so rewarding, says Yra G. Harris, a CME floor trader.

Moreover, major corporations rarely use CME futures to hedge currency risk. They either hedge internally or buy custom-tailored swaps and forward contracts from the banks. In fact, the vast market in currency swaps, \$1.3 trillion a day, utterly dwarfs change-listed currency futures, which

average a mere \$6.8 billion a

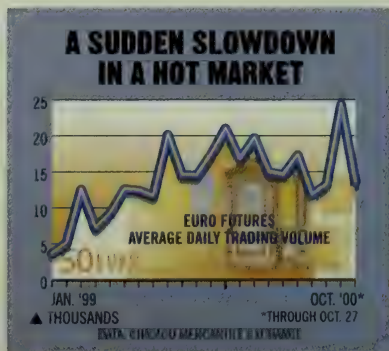
Some smaller companies hedge with futures contracts, but banks will sometimes lay off in their swaps portfolios by buying or selling futures. But with driving up volume in the M euro contract is a new breed

of retail trader. A good example is F. M. Pickering of Portland, Ore., who trades through online futures broker XpressTrade. The euro's recent gyrations prompted Pickering, a manager at a bicycle painting company, to jump in. "Where there are headlines," he says, "there tends to be more action and increased opportunity for profit."

The euro gets lots of headlines. Introduced at the beginning of 1999 at \$1.16, it peaked a few days later at \$1.18 and has slid since. What provoked the excitement in September was an effort by the central banks of Europe, the U.S., and Japan to halt the euro's slide and push the euro back up. On September 22, it shot from 85¢ to 90¢. A trader who bought 100 contracts on margin at 86¢ would've put up \$324,000 in cash and made \$625,000 within hours.

But then the euro turned back down to a low of 82.28¢ on Oct. 26. Traders now hope for another intervention. "Everyone knows it's coming," says Stephen M. Levin. By early November, the euro had nosed back to 85¢—up enough to keep traders like Metcalf and Pickering on the edge of their seats.

By Pallavi Gogoi in Chicago



Firestone



TOS

OLD ON—WHAT MAKE F ALTERNATOR IS THAT?

couraged by suppliers, consumers are starting to pay attention to auto parts brands

ob K. Parker hadn't heard of HomeLink when he bought his 2000 Acura 3.5RL just over a year. But the 45-year-old owner of a son City (Tenn.) mattress company he quickly came to love the control built into the sun visor, which he to open and close his garage door turn on the lights in his house. er says that whatever car he buys time around, HomeLink will be the top of his must-have list.

e's not alone. Parker is part of a ring number of consumers who are ing to pay attention to subbrands within their cles, from General Mo-Corp.'s OnStar naviga-systems to Motorola security systems. Sec-ry brands aren't new. makers have been ing up with consumer eters like Warner ., Eddie Bauer, and r to offer co-branded els for several years. ow auto suppliers are g to win their share of amers' consideration. d systems have the brand recognition, but e days, even basic com-ts like seats are be-g to form brand iden-. For parts makers, a g brand is a way to

fight back against constant price pres-sure from auto makers.

But along with that boost comes some risk, as the ongoing Ford Motor Co. and Bridgestone/Firestone finger-pointing shows. After all, Firestone would have had less to lose in the cur-rent tire recall if it hadn't been so suc-cessful in making consumers aware that their car tires were made by Firestone and not Ford.

Cars already carry a sprinkling of branded parts, and the trend is expect-ed to grow in the next several years.

Johnson Controls Inc., the leader in branded car parts and the maker of HomeLink, is promoting a slew of brand-name gadgets, including Travel-Note, a device for harried execs to record notes as they drive. The Mil-waukee-based company will soon add CargoMax, a flexible storage system for the back of minivans, and PSI, a remote device for checking tire pressure. It is working with backpack maker JanSport on a backpack system integrated into seats, with Lego on a minivan play seat, and with German racing seat maker Re-

caro. Automotive supply gi-ants Delphi Automotive Systems, Visteon, and Lear also are cautiously explor-ing branded parts. "It's the way of the future," says Linda Abele, who studies supplier branding for J.D. Power & Associates Inc.

But it didn't happen overnight. The groundwork was laid seven years ago. That's when JCI started do-ing its own consumer re-search to try to figure out directly from buyers what they wanted, says Bob El-lis, JCI vice-president of product marketing and brand development. Up to that point, JCI had been like most auto suppliers: invis-ible. Consumers were no

Car Parts: From No Name To Brand Name

Auto suppliers are using old-fashioned brand building to stoke demand among consumers. Here are some of their early efforts:

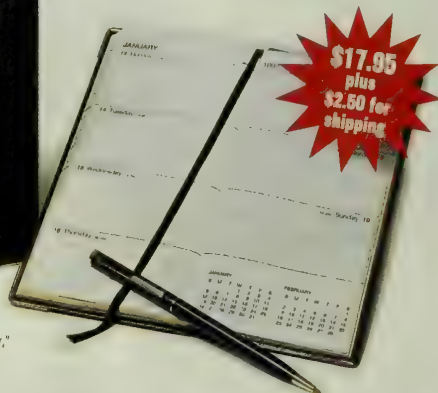
COMPANY	PRODUCT
JOHNSON CONTROLS	Its HomeLink garage door and light controller and TravelNote message recorder are available in more than 120 models. Soon to come: CargoMax space organizer, and seats and accessories co-branded with Lego, JanSport, and others.
DELPHI AUTOMOTIVE SYSTEMS	Monsoon Audio, a premium sound system, is available in various models from GM and Volkswagen. In discussion to introduce QuadraSteer steering system.
VISTEON AUTOMOTIVE	Negotiating with auto makers to deploy Mach audio, a premium sound system.

TIME MANAGEMENT DOESN'T HAVE TO BE A BIG JOB.

USA Credit card holders may call
TOLL-FREE
800-553-3575.
Ask for Dept BC31.
We honor
AmEx/Diners/Visa/
MasterCard



Gold blocking of
your full name add \$4.75.
Planner size 6 1/2" x 3 1/2" x 1/2"



Available in burgundy or black, the 2001 Business Week Pocket Planner is the handy way to keep on top of your schedule. Featuring a 13-month calendar, week-to-view appointment pages, and a useful business/travel information section, it's perfect for those who want to seize the week.

To order, make check payable to BUSINESS WEEK PLANNER and mail to Dept. BC31, P.O. Box 1597, Fort Lee, NJ 07024 U.S.A. Please enclose separate sheet with color choice, personalization requirements, and delivery details. New Jersey residents add 6% Sales Tax. Full refund if not completely satisfied.

For customization options and special discounts on larger quantities call Amanda Kane at 201-461-0040, or fax to 201-461-9808.

Marketing

more aware that JCI made their car seat than they would know who made the knobs on their home stereo. But armed with its research, JCI developed Trade Note, HomeLink, and other products. JCI now gets feedback from consumers like Parker on its Web site, where it plans to start selling some products directly to consumers. GM, meanwhile, aggressively promoted its OnStar navigation system, which it's selling to other auto makers, including Toyota Motor Corp.

CONSUMERS KNOW. And interest among car buyers is growing. About 44% of consumers say branded auto parts will play a role in their next auto purchase, up from 31.5% in 1999 survey by Planning Edge, a Farmington Hills (MI) consultancy that tracks supplier trends. A J.D. Power study confirms the same trend. It's not just the sound system. Consumers care about their seats, navigation systems, antilock brakes, security systems, and other more basic parts, says Michael L. Schmall, managing partner at Planning Edge. Although auto buyers, for example, were aware of high-end racing seats from Recaro; more important, they were willing to pay as much as \$200 extra for a seat to get them. "Two things are very clear. We see a growth in the number of brands in vehicles and we see consumers more aware of those brands," says Schmall.

The trend is not without risk. These days, for example, consumers are painfully aware of the brand of tires on their cars in light of the Firestone issue. When other components fail, it's easier for the supplier to get pulled into public scrutiny. Already, JCI's Lego child seat has been delayed while General Motors' Chevy division helps revise it for safety. "Branding does put you on the front line," Schmall says. You're not insulated by the original-equipment manufacturer anymore, he says.

Still most parts suppliers believe the branding efforts will continue because the rewards outweigh the risks. And auto makers agree. "Are business partnerships going to be a little more cautious going forward? Sure. But I think the power of what these things can do is more important," says Peter Langenhorst, brand manager for Chevy Venture minivan, which is working with JCI on the Lego seat. Will the lure of a branded child seat or stereo finding gadget do for auto parts makers what "Intel Inside" did for the computer maker? The answer to that is still a few miles down the road.

By Jeff Green in Detroit

*In nature
we see reflections of our children.*

The tree is the strong one.

The ocean, rare functions and untamed.

The sky, the absolute dreamer.

*And to choose the tree over the ocean
would be like choosing one child over the next.*

As impossibility as large as the world itself.

*The world's leading environmental groups are working together.
To find out how you and your employer can help,
please visit our Web site at www.earthshare.org.*

Earth Share
One environment. One simple way to care for it.

AOL Anywhere!

If you have access to the Internet, you have access to your AOL e-mail!

It's so easy! Exclusively for America Online members, AOL Mail on the Web lets you send and receive your AOL e-mail from any computer with a Web browser.

- ▶ Just go to AOL.COM and click Read My AOL Mail NOW!
- ▶ Type in your AOL screen name and password.
- ▶ Read, save, respond to and forward your AOL e-mail anywhere, anytime!



So easy to use,
no wonder it's #1

Sign Up Today!
1-877-480-6295



THIS

IS THE POWER OF

© 2000 Bowstreet.com, Inc. Bowstreet is a trademark of Bowstreet.com.





BUSINESS WEBS.

They said you were too slow.
Didn't understand the new economy.
But you waited.
Surveyed the scene like a field general.
And waited.
Saw the shakeout.
Maneuvered the troops.
They won't know what hit them.
This is the power of business webs.
This is Bowstreet.
www.bowstreet.com

CHA-CHING.



TAX LOSSES,
CONSUMER DATA,
HEALTH
BENEFITS

BusinessWeek Investor



Making the Best Of Your Clunkers

How to get the government to share the pain at tax time

BY LEWIS BRAHAM

This year, Apple fell far from the tree. So did a lot of other tech stocks. Dell, Microsoft, Yahoo!, and Amazon.com are all down more than 40% in 2000 (through Oct. 30). If you've owned the stocks over the multi-year run-up, you probably are still sitting on a pile of profits. If you bought them in the past year, you may be stuck with big losses.

Don't just let those losses sit there. Harvest them. They can have value when you file your income taxes next April. You sell the stock, take the loss, and use the loss to offset other capital gains. Don't have other capital gains? You can write off up to \$3,000 against ordinary income. If the losses are even greater, you can use the excess as deductions over the next seven years. "You might as well let the government share your pain," says Ed Slott, a Rockville Center (N.Y.) tax adviser.

Harvesting losses in the fourth quarter is a longtime Wall Street practice. But in the stock bull market of the last few years, there were fewer losses to reap. And the big losses aren't all in technology and telecom. Notable household names such as DuPont, Home Depot, McDonald's, Procter & Gamble, and Wal-Mart Stores are all down more than 22%.

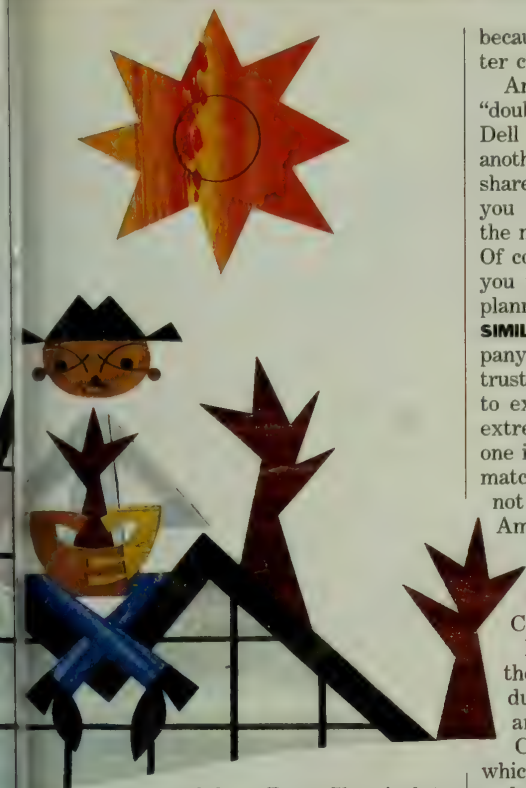
Many of these stocks will no doubt bloom again, and you may still want to own them.

Tax Planning

if you sell to take a tax loss, the Internal Revenue Service's "wash-sale" rule says you can't buy them back for at

least 31 days. That leaves you empty-handed for a month during which there could be a rally in the stock you're waiting to repurchase.

Fortunately, you can work around the wash-sale rule. One approach is substitution. You realize the loss in one stock and replace it immediately with a similar one. So you sell Du



and buy Dow Chemical to keep your hand in chemicals, or sell DaimlerChrysler and buy General Motors to stay with it. On the 31st day, you sell the substitute and buy the original holding.

Finding a good substitute isn't easy. The key to understanding how much of a stock's performance is industry-driven and how much is unique to that particular stock. "Substitution plays out in different types of industries such as oil and gas, health care," says Frank Morris, manager of the Fidelity Tax-Efficient Equity Fund. "It's a lot harder to do in technology, given the complexity of the sector's businesses."

One area of technology where substitutions are plentiful is personal computers, because PCs are essentially commodities. "Theoretically you can be selling your Apple, reaping your loss, and buying Gateway and Dell," says Morris. Performance at such companies is driven more by market factors such as chip pricing and demand than by anything unique to those companies. Chip stocks are also industry-driven, though less so than PCs. You can substitute Advanced Micro Devices, Intel, and National Semiconductor for each other.

And managers say some of the big market players are swappable. "I've been selling WorldCom and AT&T and buying Qwest Communications," says manager Terry Banet of J.P. Morgan's Aware U.S. Equity Fund. "I also sold Lucent for Nortel." But Banet sees the harvest as part of the portfolio rebalancing process as well. She's not planning to buy back Lucent Technologies

because, she believes, Nortel Networks is a better company.

Another way to finesse the wash-sale rule is "doubling down." Suppose you own 200 shares of Dell on which you have an unrealized loss. Buy another 200 shares, wait 31 days, and sell the 200 shares you bought at the higher price. That way you don't lose your exposure to the stock for the month and you still get to reap the tax loss. Of course, if the stock tanks during the month, you may have more losses than you originally planned.

SIMILAR CHANCES. Then there are Holding Company Depositary Receipts or HOLDRS. These are trusts issued by Merrill Lynch, which are similar to exchange-traded funds (ETFs). They may be extremely concentrated in just a few stocks in one industry. Some of the stocks in HOLDRS may match yours, but others are different enough to not trigger the wash-sale rule. You could sell America Online and Yahoo! and buy Internet HOLDRS Trust, which has a 49% weighting in these two stocks. B2B Internet HOLDRS has a 44% weighting in Ariba and 20% in Commerce One.

Regular ETFs offer similar opportunities, but they tend to be less concentrated and less industry-specific. To take losses in Wal-Mart and Home Depot, you can substitute the Cyclical/Transportation Select Sector SPDR, which is 35% invested in those two stocks. ETFs and HOLDRS generally have lower expenses than mutual funds, and they don't usually make taxable distributions. You don't want to be waiting out the 31 days in a fund, and get hit with a taxable distribution in the interim.

Some financial planners use other strategies. One is to sell a losing stock in a taxable account and buy the same stock back in an individual retirement account. Since an IRA is a separate legal entity held by a custodian on your behalf, you, the IRA beneficiary, aren't making the trade. The custodian, usually the brokerage firm, is doing it.

Moreover, the IRS doesn't usually look at IRA holdings. "No one is required to report transactions in an IRA," says Al Blomquist, a financial adviser in Franklin Lakes, N.J. "And the government isn't required to audit them." But that doesn't mean that the IRS wouldn't disallow the tax deduction if you should be audited. Since the strategy hasn't been tested in the courts,

Buying a stock in the same industry as one you are selling to reap a tax loss is one way to beat the IRS's wash-sale rule and hang on to the possibility of future gains

Trading for Tax Losses

IF YOU SELL...

CONSIDER SUBSTITUTING IT WITH...

Yahoo! (75.7% YTD loss*) Internet HOLDRS, America Online, Terra Networks

Lucent Tech. (71.3%) Broadband HOLDRS, Nortel, Corning

Apple Computer (62.4%) Dell Computer, Gateway, Compaq

AT&T (55.5%) Telecom HOLDRS, WorldCom, Qwest Communications

Home Depot (40.5%) Cyclical/Transportation Select Sector SPDR, Lowes Cos.

Wal-Mart Stores (36.7%) Cyclical/Transportation Select Sector SPDR, Target, Kohl's

*AS OF OCT. 30

DATA: BLOOMBERG FINANCIAL MARKETS

more conservative planners steer clear of it. "There is no proscription against the strategy in the law," says Beth Rodriguez, a wealth strategist at the private bank of J.P. Morgan. "But would the IRS attack it if they found out? We think yes."

Another gray-area strategy is having a relative purchase the losing stock after you sell it. According to tax analyst Mark Luscombe of CCH, a tax-law specialist, one spouse cannot sell to take a loss and the other repurchase it. That's because the IRS considers a married couple as a single entity. But it's O.K. if the repurchaser is a sibling or child, he says, as long as the child is over 14. Under that age, the tax status is an extension of the parents'.

But here again there is some debate. Under the wash-sale rule does not forbid such transactions, Section 267 of the tax code prohibits deducting a loss on assets that are sold to related parties, including siblings and children. The question is, if you sell a stock and your sibling buys it in the open market, can that be considered an indirect sale from one family member to another? To avoid this, the family member should wait 30 days to buy back the stock, or make the purchase of slightly greater or fewer shares than the original holding.

Whichever approach you take, the most important thing is to get it done. The 2000 tax returns need to be completed by Dec. 31, after which those tax-losses will be plowed under.



Keep Your Eyes On Consumers

Seemingly arcane data give warnings on the economy

BY KATHLEEN MADIGAN

This is the 10th in an occasional series showing how major economic reports can affect the stock and bond markets.

The consumer sector is the 800-pound gorilla of the U.S. economy. Household spending commands two-thirds of real gross domestic product, and in 1999 a surge in consumer purchases accounted for 84% of total economic growth. No wonder Wall Street, economists, and Federal Reserve Board policymakers avidly scrutinize the sector. The Fed cannot completely rest until the consumer calms down.

Fittingly, buyers are profiled in reams of data

(table). The most comprehensive is the Personal Income and Outlays report done by the Commerce Dept.'s Bureau of Economic Analysis. It's a scorecard of what consumers earn, pay in taxes, and spend each month. And its numbers on goods and services spending go directly into the GDP data. You can easily find the latest release at www.bea.doc.gov under "Personal Income and Related Data."

The personal-income report carries valuable information on three consumption patterns that can give you insight into economic growth, inflation, and monetary policy. But because of its limited coverage, the report is one of the last on consumers available for a month. As a result, Wall Street's reaction to the 8:30 a.m. data can be dramatic.

On Oct. 30, for instance, the BEA said that personal income rose 1.1% in September and consumer spending rose 0.8%, the financial markets had a little reaction. Wall Street paid closer attention to earlier consumer reports, including the Census Bureau's retail sales report (profiled in BW—Oct. 20, 1999) which provides the basis for the data on consumer spending in the income report.

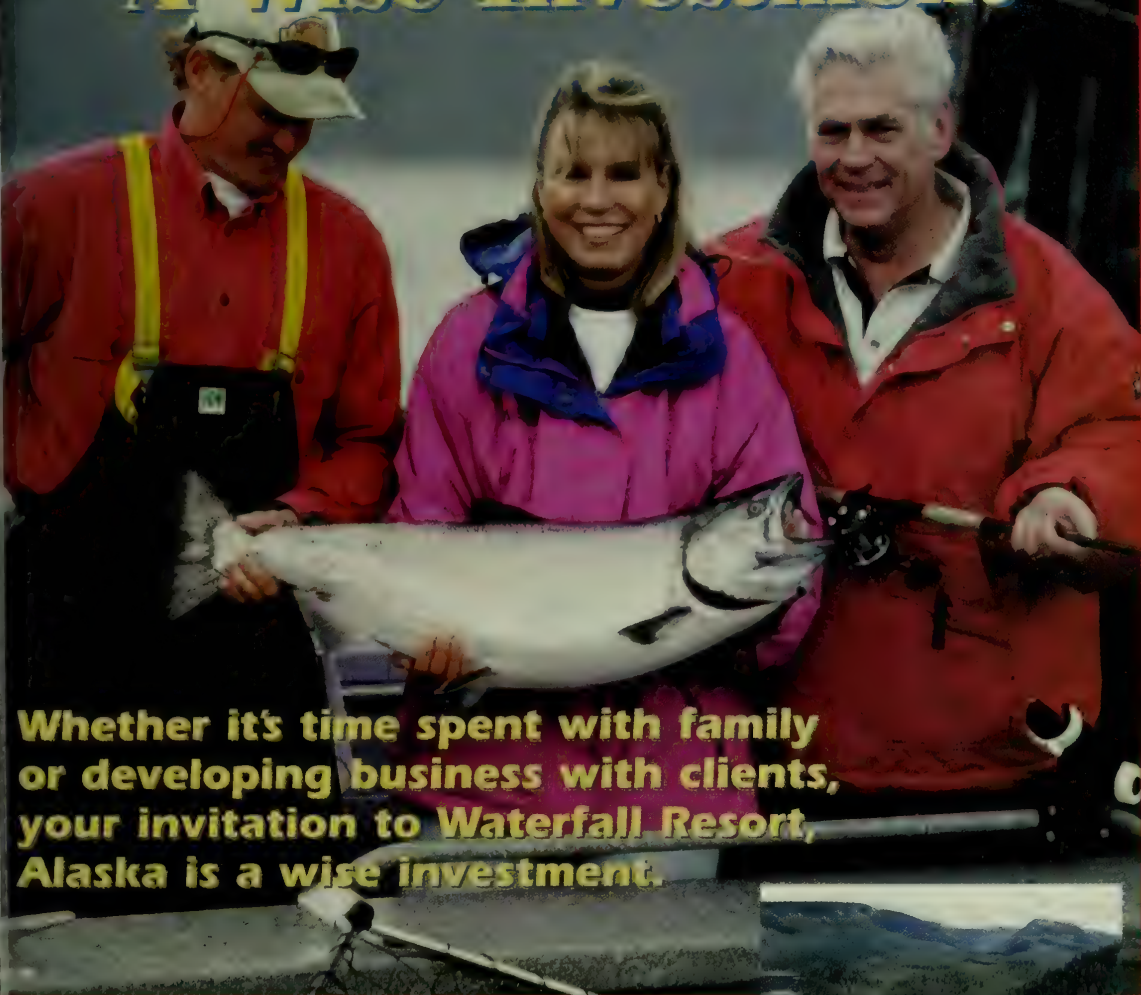
But the Street's indifference doesn't mean you should ignore the report completely. Keeping an eye on the income

report can help you protect your portfolio from interest-rate jitters and unexpected inflation trends that could harm bond holdings or stocks of rate-sensitive companies such as airlines and builders.

First, as its name implies, the income report covers all income earned by consumers. It runs the gamut from paychecks, rental income, dividends, interest, and government payments such as social security, farm subsidies, and

Alaska

A Wise Investment



**Whether it's time spent with family
or developing business with clients,
your invitation to Waterfall Resort,
Alaska is a wise investment.**

Name (print) _____

Company _____

Address _____

City _____ State _____ Zip _____

Area & Phone _____ Fax _____

Saltwater _____ Freshwater _____ Business _____ Pleasure _____

Number of Guests _____ Best Season: 2001 _____ 2002 _____ 2003 _____

Email Address _____



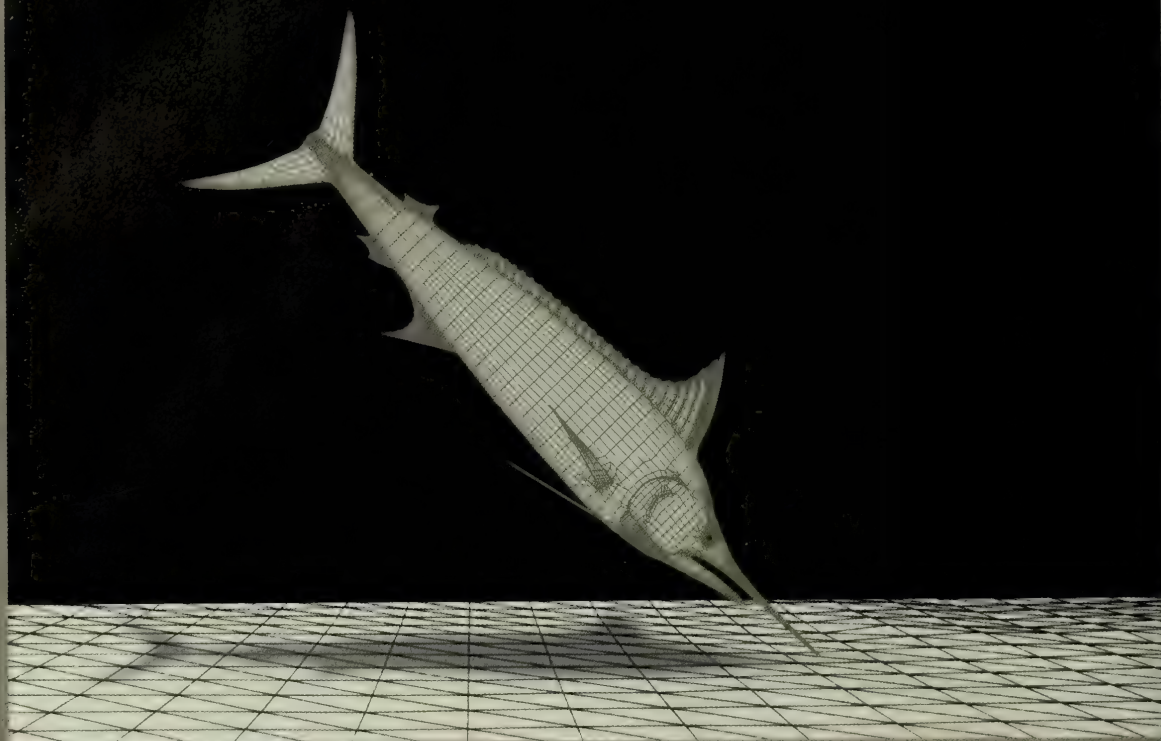
1-800-544-5125

Fax this page to 907-225-8530

(or email us at: waterfal@ktn.net) to receive a complimentary video and brochure

Visit our web site at www.waterfallresort.com

Legendary Sportfishing



**We don't know who discovered water,
but we're damn sure it wasn't fish.**

Managing a start-up means total immersion in it, with so much to do and so many decisions to make that often entrepreneurs don't see the obvious. That's why Bay Partners likes to be actively involved in our portfolio companies.

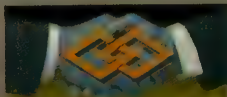
We can provide individual coaching about direction, growth, and execution problems because our partners have had decades of hands-on experience running technology firms of various sizes. Understanding the intricacies and requirements of each stage of development enables us to assist the entrepreneurs who run our portfolio companies in devising creative, flexible,

and realistic solutions to a broad range of business and personal challenges.

Plus, our exposure to many small companies gives us a wide perspective of emerging technologies and potential competitors. So not only do we know what is being done, we also know what isn't.

Brocade Communications (NASDAQ: BRCD), Informatica (NASDAQ: INFA), SonicWALL (NASDAQ: SNWL), and Exodus Communications (NASDAQ: EXDS) are just a few of our portfolio companies which have made a big splash.

We're always looking to explore uncharted waters.



10600 N. De Anza Blvd. Cupertino, CA 95014

BAY PARTNERS 408 725 2444 www.baypartners.com

data show that spending
with has slowed to stay in line
income gains, the Fed will
y that demand is too hot

the mid-1990s, consumers have been cashing in some of the windfall from their expanding stock portfolios or rising home values. This use of past capital gains for current spending is the "wealth effect," and the Fed is concerned that extra wealth has caused consumer demand to grow far faster than potential supply. In the long run, that's a prescription for accelerating inflation. The latest income report showed that real after-tax income was up 4% from the year before, but real consumer spending rocketed ahead at a 5.4% pace. Look to the income report to see if spending is slowing to a pace that relies more on income gains and less on wealth. Until that happens, the Fed will stay worried that domestic demand is too hot.

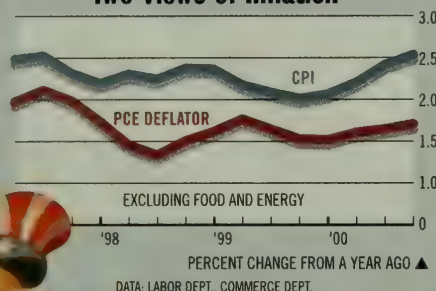
Policymakers and economists also check the service-spending data in the report.

fare checks. After totaling up personal income, the BEA subtracts taxes and then adjusts for price changes. The result is real disposable income, also known as real after-tax income.

Historically, real disposable income determines how much consumers can spend on goods and services. But since

"Services are an ever more important part of spending, and they can only be found in the income and consumption report," says Evelina Tainer, an economist at Econoday.com, an economic-information Web site. Services account for more than 56% of all consumer spending, and service jobs make up three-quarters of all private payrolls. You can check the income report to

Two Views of Inflation



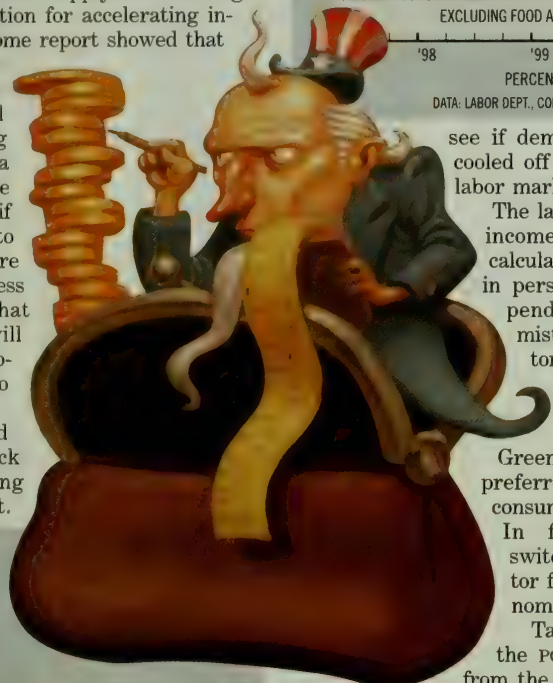
see if demand for services has cooled off enough to loosen the labor markets a bit.

The last crucial tidbit in the income report is the BEA's calculation of price changes in personal-consumption expenditures—what economists call the PCE deflator. This inflation tracker has grown in importance ever since Fed Chairman Alan Greenspan said it was his preferred measure over the consumer price index (CPI). In fact, the Fed has switched to the PCE deflator from the CPI in its economic forecasts.

Tainer points out that the PCE deflator is derived from the CPI data but is calculated differently, using a complicated system known as the chain-weighting method. Tainer says the deflator is a better cost-of-living measure because it more accurately reflects consumers' changing purchases of goods and services.

TWO TALES. Right now, the PCE deflator and the CPI are telling two different stories about core inflation, which excludes energy and food prices (chart). Core inflation, as measured by the CPI, has accelerated from 2% to 2.5% over the past year. But the PCE deflator has remained at about a 1.6% rate. In other words, Greenspan's pet inflation gauge isn't sounding any warnings bells yet, a good sign that rates will remain steady in coming months.

In today's investing jungle, you have to keep an eye on the consumer. Insights gleaned from the personal income report will help you do just that. Use its monthly data to see how the Fed is mollifying that giant gorilla.



Tracking Consumers' Income and Outgo

PERSONAL INCOME AND OUTLAYS

MONTHLY The U.S. Commerce Dept.'s tally of everything Americans earn and purchase. Personal income includes wages and salaries, government checks, rental and farm income, interest, and dividends. Personal-consumption expenditures include all new goods and services bought in the month. The data are adjusted for price changes and constitute two-thirds of real gross domestic product.

RETAIL SALES

MONTHLY The U.S. Census survey of 4,100 retail establishments.

CHAIN-STORE SALES

MONTHLY Reports on sales. Most important comparison: sales in stores open at least a year.

RETAIL SURVEYS

WEEKLY LJR Redbook Research and BTM/Schroder track sales weekly. Both reports compare percentage changes in the latest week with the previous week, and to the year-ago number.

CORPORATE LEADERSHIP ISN'T WHAT IT USED TO BE. IT'S MUCH MORE.

The technological advances of the past few decades have fundamentally transformed business. In the process, they have also rewritten the rule book on corporate leadership. What are the new rules? What techniques, knowledge, and personal qualities are essential to effective leadership today?

In February, 2001, BusinessWeek, Jim Taylor, Ph.D. and IBM will join forces to present BREAKTHROUGH: A CEO RETREAT. This invitation-only event, held at the exclusive Rancho Bernardo Inn outside of San Diego, California, will examine the changing face of leadership through themed discussions between CEOs and renowned technologists, scientists, and creative thinkers. Featuring an intensive, intimate environment designed to encourage attendee participation, Breakthrough will be a high-powered think-tank that helps to mold the corporate world's thinking on a cutting-edge topic.

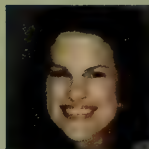
Please join us as we seek to transform today's uncertainties into tomorrow's conventional wisdom.

If you have received an invitation, we urge you to RSVP today. If you have not received one but believe you should attend, please contact us. Simply call Ms. Marsha Green, BusinessWeek at 212-512-3113.



A Division of The McGraw-Hill Companies

PROGRAM FACULTY



CANDICE CARPENTER
Co-founder and Co-chairperson
iVillage Inc.



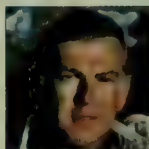
DEEPAK CHOPRA, M.D.
CEO and Founder,
The Chopra Center for Well Being



DENNIS CONNER
Four-time America's Cup
Champion



DR. RONALD A. HEIFETZ
Co-director,
The Center for Public Leadership
John F. Kennedy School of
Government, Harvard University



DR. DONALD C. JOHANSON
Director,
Institute of Human Origins;
Professor, Arizona State
University



SUSANNE D. LYONS
Chief Marketing Officer,
Charles Schwab & Co., Inc.



breakthrough

A CEO Retreat

presented by

BusinessWeek

and

Jim Taylor, Ph.D.

in partnership with

IBM Corporation

FEBRUARY 7-9, 2001

**RANCHO BERNARDO INN
SAN DIEGO, CA**

C O - H O S T



JIM TAYLOR, Ph.D.

Co-author,
The 500-Year Delta, and
The Visionary's Handbook

P R O G R A M F A C U L T Y



JONATHAN NELSON

CEO and Chairman of the Board,
Organic, Inc.



WILL RODGERS

Principal,
SHR Perceptual Management



GINNI ROMETTY

General Manager, Strategy,
IBM Global Services,
IBM Corporation



GEOFFREY S.L. SHAW

President, CEO, Chairman,
and Co-founder,
Global Commerce Systems



STEPHEN G. VETTER

President,
Eureka Communities

Picking a Health Plan: Inertia Can Be Costly

*You may find
that last year's
choice is not
your best bet*

BY KATE MURPHY

You should get it this month, if it hasn't arrived already—the dreaded benefits packet. This bulging envelope signals open enrollment, the annual opportunity for you to choose among your company-sponsored medical plans. You may think the easiest thing to do is stick with the plan you picked last year. Not so fast. "Health-care networks are constantly changing," says Randall Abbott, client strategy leader at benefits consultant Watson Wyatt Worldwide in Bethesda, Md. Make the wrong choice now, and you may not get the doctors or benefits you want. Then you have to wait a whole year before you can switch your coverage again.

If you work for a big company, chances are you can pick among health-maintenance organizations, which restrict you to a network of approved doctors; preferred-provider organizations, which have an HMO-like system but also give you the option to go out of network; and a traditional

cially when one partner can get insurance where," says Tracy Brown, an account executive at Madison Benefits Group in Houston. One time, it was common for professional couples to enroll each other and their kids on both companies' health plans so that one insurer covered what the other did not. But this is becoming more of a rarity, both because the higher premiums make such a move prohibitive and because employers now often refuse to extend benefits to spouses who are insured at their own jobs.

Even if your company's premiums have been steady, don't think your health expenses are rising. Most employers are adding restriction and incidental fees, says Joseph Marlowe, vice-president at Aon Consulting Worldwide, a Chicago human resources firm. For example, many policies are upping the co-payment to see a specialist. Paying \$15 to \$25 for a specialist visit is typical, while \$5 to \$10 will cover a visit to a primary-care doctor.

RANKING PLANS. Prescription coverage is also changing. With spending on

drugs rising at an average of 11% a year in 1992, more plans have formularies, a list of preferred medications. If you take a drug on the formulary, your co-payment will likely be \$5 to \$10. For nonformulary prescriptions you'll be shelling out \$30 to \$50.

Check whether providers you like are participating in your plan, because doctors and hospitals often move in and out of networks. If not, and if part of another plan on your company's list, you may have good reason to switch.

Abbott at Watson Wyatt advises people who don't fully understand their policy descriptions to seek clarification from insurer help lines and Web sites.

If you're not sure what to ask, the Employer's Quality Partnership (EQP), a coalition of employer organizations based in Miami, lists on its Web site basic things to consider (table). For example, Does the plan fully cover medical conditions that are important to you? Many don't cover—such as mental illness. To give you an idea of the limits, plans often will cover one visit a year to a psychotherapist, with a maximum benefit of \$50 a visit.

Other sites, such as the National Committee on Quality Assurance, tell how health plans rate for quality and customer satisfaction. Your state insurance department has information about complaints or legal sanctions against insurers. There are lots of resources. The onus is on you to open enrollment to take advantage of them.

Help in Reviewing Your Options

SITE	DESCRIPTION
EMPLOYER QUALITY PARTNERSHIP www.eqp.org	Suggests criteria and provides a scorecard for evaluating health plans
INSURE.COM www.insure.com	Good source of consumer information on health insurance
JOINT COMMISSION ON ACCREDITATION OF HEALTH-CARE ORGANIZATIONS www.jcaho.org	Provides quality information and performance data in such areas as payment of claims and treatment of chronic illnesses
NATIONAL COMMITTEE FOR QUALITY ASSURANCE www.ncqa.org	Its interactive Health Plan Report Card grades managed-care groups based on clinical quality and customer satisfaction

indemnity plan, which reimburses you no matter who you see. Generally, the more freedom of choice you have, the more you pay.

With companies projecting that their health-care costs will rise 10% to 12% this year, you can expect to see higher premiums for 2001. This is especially true if you want family coverage. Benefits consultants say steep hikes are an attempt to discourage you from enrolling your spouse and children on your plan. "It doesn't make sense for employers to carry the whole burden, espe-



What do the
world's largest
banks know about
antivirus?



Trend Micro.

A world class bank can't afford second-best virus protection. A virus infection could compromise vital data, shut down systems, and spread to customer systems—disrupting critical operations worldwide.

That's why many of the world's largest banks count on Trend Micro. Our InterScan VirusWall® stops viruses at the enterprise's border—the Internet Gateway. It integrates with the leading firewalls and with other Trend Micro products to provide a complete, highly scalable, easy-to-manage enterprise solution, backed by the industry's most responsive global support team.

Before a virus attack costs you big money, talk to Trend Micro. We'll show you why we're the leading choice of enterprises that know security best.

For a free copy of our "Safe Computing Practices" white paper and a free evaluation CD for Trend Micro antivirus and content-security solutions, call 1-800-238-9983 or visit www.trendmicro.com



A STREET LEGEND SETS UP SHOP ON THE NET



BY TODDI GUTNER

Muriel (Mickie) Siebert

BORN

1932, Cleveland

EDUCATION

Attended Case Western University; has 14 honorary doctorates

FAMILY

Lives with Monster-Girl, a long-haired chihuahua

RESIDENCE

Manhattan

BIGGEST ACCOMPLISHMENT

"Making the New York Stock Exchange co-ed on Dec. 28, 1967"

Muriel "Mickie" Siebert has spent her 46-year career breaking barriers in the clubby male world of Wall Street. Now Siebert, who owns a discount brokerage bearing her name, is turning her attention to helping other women break barriers to financial success. In mid-October, her Siebert Financial Corp. bought two Internet operations that offer investment education, advice, and services geared to women. Siebert hopes to use her acquisitions, Women's Financial Network and Herdollar.com, to create a one-stop Web site for a woman's business and personal-finance needs.

The existing Women's Financial Network site (www.wfn.com), which already has 40,000 members, will form the basis of the new WFN by Siebert. Launched six months ago by CBS Mar-



ketWatch columnist Jennifer Openshaw, WFN is designed to assist women with financial planning at different stages of life. It offers well-organized message boards with titles such as "Single & Striving," and "Financial Family." Herdollar, a financial education program for women being marketed to institutions, began in March. It was started by two Goldman Sachs alumnae: former equity analyst Tamara King and investment banker Mande Heller.

All three women have signed on with Siebert to help reconstruct and manage her site. "It would have been cheaper to build my own women and investing site, but I bought the tal-

ent," says Siebert, who paid about \$2 million for the two dot-com outfits and plans to spend more on marketing. That's a significant outlay for someone whose firm earned \$6.7 million in taxes in the first nine months of this year. "It was a big undertaking for me because I'm putting my name on [this venture]," says Siebert.

Siebert intends to raise the sophistication of WFN, and in fact, one of her first moves will be to get rid of the financial horoscopes. WFN will offer stock trading, mutual fund investing, bond buying, and continue the existing services of free checking and online bill-paying. She plans to target women entrepreneurs by helping them obtain financing and offering IRA and 401(k) programs for them and their businesses.

NO ADS. Siebert recognizes, like nearly every other financial-services provider, that it's risky not to take aim at the women's market. Women are making more money than ever, running businesses at nearly twice the rate of men, and expecting to inherit huge estates. But despite their growing wealth, women still dis-

trust their abilities and financial knowledge. In a recent survey, only 53% of women, vs. 81% of men, have confidence in their investing skills, according to a 2000 Investment Poll sponsored by Charles Schwab, which just rolled out its own website and investing program. The poll also found that women in their 20s and 30s are just as likely as their male counterparts to say investing is "scary for them."

To be sure, competitors on the Internet are trying to address these issues. Siebert vows her approach will be different. Most other women's financial sites depend on advertising. As Siebert sees it, the sites provide financial products—not because they are particularly good for women, but because they're sold by advertisers. What's more, the sites don't have close control of customers who buy on the products and then get ripped off and away to the financial providers.

By contrast, WFN won't rely on advertising dollars. Instead, Siebert will make money privately, as well as from transaction fees it generates. She makes it clear she will maintain the integrity of the site by closely monitoring the products it offers. "The real question is whether these women online are really doing business or are just surfing," says Siebert. Given her background and commitment, she will be in a better position to find an answer than others who've gone before her.

BusinessWeek online

For more on women's financial Web sites, or to participate in a discussion in our forum, see hers.online.a or www.businessweek.com/investor/

QUESTIONS? COMMENTS? E-mail hers@businessweek.com or fax (212) 512-2538



**MERE MORTALS
MANAGE PEOPLE
AND MONEY.**

**YOU MANAGE
THE KNOWLEDGE
OF THOUSANDS.**

When you can find the best person for the job in your global organization, that's knowledge management for e-business. When your company's best thinking is just a few clicks away, that's knowledge management for e-business. When you can bring all this together instantly, that's knowledge management for e-business.

How do you do it? With super.human.software that helps e-business people work together. To learn more, visit www.lotus.com/superhumansoftware

SUPER.HUMAN.SOFTWARE

Lotus.

An IBM Company



WHEN EMPLOYEES ARE HAPPY WITH THEIR 401(K) PLAN, IT SHOWS. They work harder and stay with you longer. We should know. As the nation's 401(k) leader, we've been helping growing businesses and their employees secure their financial futures for over 50 years. No wonder more companies choose The Principal® for their 401(k) plans.* Investment options, recordkeeping, loan services, plan member education and asset allocation—we've got what you need, plus personalized service and local support to make the process easy. What's not to love? If you'd like to hear what a 401(k) plan from The Principal can do for your employees, call 1-800-986-3343 (ext. 80080). One of our representatives will be happy to help, no matter what you're wearing. WE UNDERSTAND WHAT YOU'RE WORKING FOR™



www.principal.com

IS BETTER TO GIVE—REALLY



ROBERT BARKER

donor-
ed funds, you
void capital
, get a huge
e-tax break,
upport your
te cause

Bragging is never attractive, I know. Yet I can't resist telling you about my best portfolio move this year. In July, I gave shares in a mutual fund that was laden with such stocks as Intel and Cisco Systems to a donor-advised charitable fund. Not only have I escaped the 18% slide that the fund has since suffered, but I also stand to save \$6,500 on my next tax bill.

If you haven't heard of donor-advised funds, get ready. Eaton Vance opened one in June. T. Rowe Price started one in October. Others, such as Oppenheimer Funds and \$75 billion SEI Investments, which caters to institutions and the rich, are set to follow soon.

They're all popularizing a venerable, tax-smart way to make charitable donations. They're happy to accept donations of stock, bonds, mutual-fund shares, and other financial assets that have gone up in value. Some will even take such illiquid stuff as restricted stock or interests in private placements. Once they get control of the donated asset, they usually cash out. Donors can pick how the proceeds are reinvested, plus advise when and to whom charitable grants will be made. In other words, donors give up actual claim to the money but can suggest which qualified charities get it, when, and whether by name or anonymously.

Better yet, by giving appreciated assets, donors enjoy a twin tax break. Suppose you bought 500 shares of a stock at \$10 and now it's at \$40. If

you've held it more than a year, you're sitting on a potential capital-gains tax bill of \$3,000. By donating the shares, you erase the capital-gains tax and also get to deduct their full \$20,000 value on Form 1040. If you're in the 36% bracket, your tax bill would fall by \$7,200.

As with all things tax-related, there are exceptions. For one, deductions on donations of appreciated assets are limited to 30% of adjusted gross income in any given year—though the excess can be carried forward over five years. And the deduction is limited to what you donate to the fund, not what's given to charities later.

GIFT OF GAINS. Beyond tax breaks, what I find truly cool about these funds is how they offer a relatively painless way to rebalance a portfolio. I didn't donate fund shares because my heart suddenly grew soft. Instead, my stomach grew weak at the prospect that my big gains on the fund would evaporate in a bear market for growth stocks. I badly wanted to grab the gains, yet couldn't stand sharing 20% with Uncle Sam.

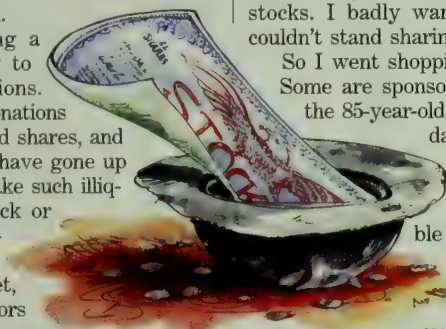
So I went shopping for a donor-advised fund. Some are sponsored by local groups, such as the 85-year-old California Community Founda-

tion, which serves my hometown, Los Angeles. Newer choices, such as Charles Schwab's Fund for Charitable Giving and Vanguard Charitable Endowment Program, looked better to me. In the end, I picked Fidelity Investments' Charitable Gift

Fund. Its fees are on the high side (table), but it permits unlimited grants in sums as low as \$250. That suits my decidedly five-figure account.

Fidelity's Web site really shines. From my computer, I can see all account activity, past and pending. I can ask that a grant be made to a charity and, if I want to make a further grant to that group, I can click on "regrant" and zip past the details. If I want to donate assets held in a regular Fidelity account, I can do that in a few clicks, too. The one grant I've asked for so far came through swiftly and flawlessly.

What could go wrong? If you give fund shares held by another institution, the transfer can drag on for weeks. Also, you can't ask funds to fulfill pledges you've already made to, say, your alma mater. And if one day you want your money back, forget it. Donations to the fund are irrevocable. Will I suffer donor's remorse? Perhaps. But I'm betting that a ready reserve devoted to charity will soften one hard heart.



Smart Charity: More and More Choices

	WEB ADDRESS / PHONE	MINIMUM INITIAL / ADDITIONAL DONATIONS	MINIMUM GRANT	TOTAL FEES*	VIEW ACCOUNT/ MAKE GRANTS ONLINE?
LES AB	www.schwabcharitable.org 800 746-6216	\$10,000/ \$1,000	\$500	1.07% - 1.13%	Yes / Yes
N E	www.charitablegifttrust.org 800 664-6901	\$10,000/ \$1,000	\$250	2.95%	No / No
ITY	www.charitablegift.org 800 952-4438	\$10,000/ \$1,000	\$250	1.45% - 1.69%	Yes / Yes
WE	www.programforgiving.org 800 690-0438	\$10,000/ \$500	\$500	1.16% - 1.27%	No / No
JARD	www.vanguardcharitable.org 888 383-4483	\$25,000/ \$5,000	\$500	0.65% - 0.75%	Yes / No

*Best accounts. Lower fees are often available with higher balances

BusinessWeek online

For barker.online, go to
www.businessweek.com/investor/
or AOL keyword: BW Daily

QUESTIONS? COMMENTS? E-mail barkerportfolio@businessweek.com or fax (321) 728-1711

EXPLORE

the way exchanges will create new business models

DISCOVER

how the mobile Net will drive business.

FORGE

new relationships with valuable content

FALL

off your chair laughing.

Dinner entertainment on December 5 featuring
Jay Leno, host of *The Tonight Show*

December 5-6, 2000

The Fairmont Hotel, San Francisco, California



GETTING DOWN TO BUSINESS:

THE B2B BOOM. DECEMBER 5-6, 2000

Exchanges will soon give your customers unprecedented power and leverage in negotiating prices. The mobile Net grants them anytime/anywhere access to global markets. Technology on Tap allows them to pay for applications as they use them. And the government is doing its best to keep it all under control. So how do you plan to harness these still-developing technologies in order to dominate the marketplace?

Come find out what the innovators are doing, and develop your own real-world strategies at BusinessWeek's Fifth Annual Digital Economy Conference. Join the technological elite for roundtable discussions, case studies and interviews focusing on this defining moment in B2B. Don't miss our exclusive keynote addresses by Larry Lessig, Richard Belluzzo and Robert Growney. And don't miss a good laugh on Tuesday night with Jay Leno.

To guarantee that this seminar is a valuable experience, reservations are extremely limited. So save the date, and reserve your seat today at this strategic, invitation-only event for top-level executives.

TO REGISTER:

Go to: <http://www.conferences.businessweek.com/2000/digital>

e-mail: digital_economy@businessweek.com

phone: 800-821-1329

fax on demand: 800-821-1329, document #220

ADDITIONAL CONFIRMED SPEAKERS:

- Scott Alexander, Chief E-business Officer, U.S., American International Group, Inc.
- Barry James Folsom, President and CEO, PlaceWare, Inc.
- Bill Gross, Chairman and CEO, idealab!
- Mark Hoffman, Chairman and CEO, Commerce One, Inc.
- Lawrence Lessig, Professor, Stanford Law School; Author, *Code: And Other Laws of Cyberspace*
- Scott Russell, Managing Director, Softbank Venture Capital



Richard Belluzzo,
Group Vice President
Consumer Group
Microsoft Corporation



Robert Growney,
President and COO,
Motorola, Inc.



Alan J. Kessler
COO, Platform and Products
Palm, Inc.



Ann M. Livermore,
President, Enterprise and
Commercial Business
Hewlett-Packard Company



David C. Peterschmidt,
Chairman, President and CEO
Inktom Corporation



Adrian Slywotzky,
Author, *Profit Patterns*
and the forthcoming
How Digital Is Your Business?

Presented by:



A Division of The McGraw-Hill Companies

In partnership with:



invent

Sponsored by: **Citrix • Computer Associates • Concert • E.piphany
Intira • Lucent Technologies • Netcentives Inc. • Novell
PlaceWare, Inc. • StorageTek**

With support from: **Commerce One • Corio
EC Cubed • Wharton Executive Education**

internet

address directory

Reach these Business Week advertisers on the Web:

AFLAC
www.aflac.com

Alcatel
www.alcatel.com

Amdahl
www.amdahl.com

American Electric Power
www.aep.com

American Express Financial Advisors
www.americanexpress.com/advisors

Art Technology Group
www.atg.com

Autodesk
www3.autodesk.com/dsk

Blue Martini
www.bluemartini.com

BMC Software
www.bmc.com

Bowstreet
www.bowstreet.com

BP AMOCO
www.bpamoco.com

Cadence
www.cadence.com

CDW, Computer Centers, Inc.
www.cdw.com

Charles Schwab
www.schwabwelcome.com

Charles Schwab
www.charlesschwab.com

Cisco
www.cisco.com

CIT
www.cit.com

CNF Transportation
www.freight.com

COMDISCO
www.comdisco.com

Commerce One
www.commerceone.com/

Compaq
www.compaq.com

Concert
www.concert.com

Concord
www.concord-watch.com

Covisint
www.covisint.com

Credit Suisse First Boston
www.csfb.com

Dell Computer Corporation
www.dell.com

Delphi Automotive Systems
www.delphiauto.com

Dubai Airport Free Zone Authority
www.dubaiairport.com

DuPont
www.dupont.com

eLance.com
www.elance.com

Embassy Suites
www.embassysuites.com

Entex IT Service
www.entex.com

Ericsson
www.ericsson.com

Ernst & Young
www.ey.com

eVIS
www.evis.net

e-Vis
www.e-vis.com/bw/web

eXcelon Corporation
www.exceloncorp.com

Fannie Mae
www.fanniemae.com

Fidelity Investments
www.fidelity.com

Ford Motor Company
www.ford.com

Framework Technologies
www.frameworktechnologies.com

Fujitsu
www.fujitsu.com

Genuity Solutions
www.genuity.com

Goldman Sachs
www.gs.com

Greenfield Online
www.greenfieldonline.com

Hampton Inn
www.hamptoninn.com

Hampton Inn & Suites
www.hamptoninn-suites.com

HP/Customer Center
www.hp.com

Hughes Corporation
www.hughes.com

Iberia Airlines
www.iberia.com

IBM
www.ibm.com

IBM
www.ibm.com/mindspan/solutions

IBM
www.ibm-siebel.com

Instinet
www.institnet.com

Intel
www.intel.com/

Kintana
www.kintana.com

LeadersOnline
www.leadersonline.com

Lincoln
www.lincolnvehicles.com

Lotus
www.lotus.com/
superhumansoftware

Lufthansa
www.lufthansa.com

Microsoft / WebTV
www.webtv.com

Microsoft Big Win
www.microsoft.com

MOTOROLA DIGITAL DNA
www.digitaldna.com

Movado
www.movado.com

NEC
www.nec.com

NetLedge
www.netledge.com

NetVendor Inc.
www.netvendor.com

One World Alliance
www.oneworldalliance.com

Oracle
www.oracle.com

Panasonic GigaRange
www.panasonic.com

Proxima
www.proxima.com

Redleaf
www.redleaf.com

Robertson Stephens
www.robertsonstephens.com

SAS
www.sas.com

Saturn
www.saturn.com

Savin
www.savin.com

Siemens I&C
www.siemensmobilebiz.com

Software Technology Corporation
www.stc.com

ST Microelectronics
www.st.com

Stonebridge Technologies
www.stonebridgetechnologies.com

Storage Networks
www.storagenetworks.com

Sun Microsystems
www.sun.com

Sybase
www.sybase.com/

Sybersay
www.sybersay.com

TellMe
www.tellme.com

Texas Instruments
www.ti.com

THE PRINCIPAL FINANCIAL GROUP
www.principal.com

The Timken Company
www.timken.com

Toshiba America Information Systems
www.toshiba.com

Toyota in America
www.toyota.com/usa

Toyota Motor Sales
www.toyota.com

Trend Micro
www.trendmicro.com

TUMI
www.tumi.com

United States Postal Service
www.usps.com

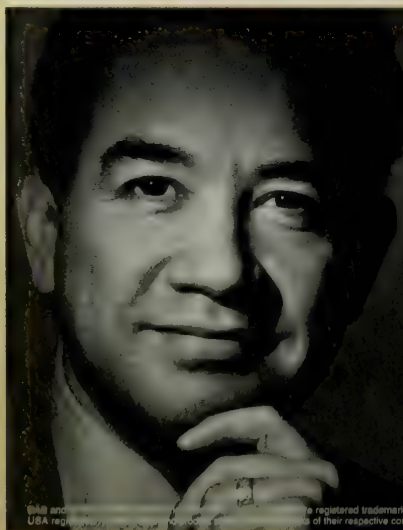
Visteon
www.visteon.com

Wall Street Journal
www.wsj.com

Williams
www.williams.com

Xerox Network Printers
www.xerox.com/officeprinting

BusinessWeek



Follow the technology leader...
to the Web & beyond

See and hear from the experts at
www.sas.com/webcast

The Power to Know.™

sas
e-Intelligent

SAS and e-Intelligent are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registered trademarks of their respective companies. Copyright © 2000, SAS Institute Inc. All rights reserved. 37538US 1100

SMITHFIELD: FAT CITY



GENE G. MARCIAL

ork packer
Smithfield Foods
pling. A sharp
drop at
could bring
out. And
say Sumner
Redstone is on the
for Midway

A good defense seems the best offense in the current market turbulence. So investors are on the prowl for "defensive" plays—companies with earnings that aren't subject to the economy's cyclical swings. One Big Board company that has attracted such players is Smithfield Foods (SFD), the world's largest hog producer and pork processor.

Smithfield is one of the few stocks that have bucked the market's downswing—rising from 20 in early May to 29½ on Nov. 1. Even so, Smithfield "still has a lot of upside potential based on its industry leadership and solid earnings growth," argues money manager Dennison Veru of Palisades Capital. He notes that the stock trades at a low price-earnings ratio of 9.6. And for a company with estimated sales next year of \$5.8 billion, Smithfield has a market cap of only \$1.5 billion.

Veru says the stock will be a big mover as it reaps a windfall from a recent contract from Wal-Mart Stores to supply pre-packaged meats. "Wal-Mart will be a huge customer as the giant retailer starts selling case-ready meats in all its stores," says Veru.

Smithfield CEO Joseph Luter figures that Wal-Mart will help triple Smithfield's sales of fresh-wrapped pork, to 75 million lb., in the year ending Apr. 30, 2001, up from 23 million lb. in 2000. Smithfield sells 2.8 billion lb. of fresh pork a year, mostly in bulk to grocers who do their own cutting and packaging.

Veru, who sees Smithfield's stock hitting 40 in 12 months, expects the company to earn \$3 a share in fiscal 2001 and \$3.80 in fiscal 2002, up from \$1.52 in 2000.

MIDAS IS MUFFLED—AND MAY DRAW BIDS

Midas (MDS) has yet to bestow the golden touch on its stock, which has skidded from 26 in June to 13½ on Nov. 1. Part of the reason: earnings disappointment, due to a delay in rolling out a program to transform the muffler chain into a national full-service one-stop auto-repair enterprise. The stock's drop has raised the possibility of Midas attracting a buyout.

"Management has become nervous about the sharp drop, because it makes Midas vulnerable to a takeover," says value investor Mark Boyar, who scouts for companies selling well below their intrinsic value. He thinks Midas, which

controls 2,700 franchised shops in 18 countries, is way undervalued, with a p-e ratio of 7, based on 2001's estimated earnings of \$1.75 a share. Midas has repurchased 2.8 million shares since 1999 and plans to buy a further 2.2 million.

Midas owns or leases nearly all of its locations and collects rent and fees from franchisees. Midas also sells its own branded products. "Midas has in place a recurring income stream," notes Boyar. Fiat paid Midas \$100 million in 1999 for the right to use the Midas brand in Europe, he says, and Ford has acquired repair shops there.

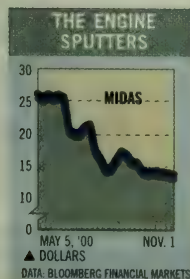
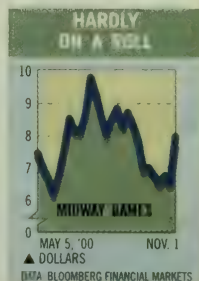
Boyar thinks Fiat, Ford, or a large auto-parts maker could seize on the stock's depressed price and make a move. In a buyout, he says, Midas is worth 30 a share, or \$450 million—more than twice its current market cap of \$212 million. That is cheap, since it would cost \$1 billion to replicate what Midas has, says Boyar.

'A CREEPING TAKEOVER' OF MIDWAY GAMES?

Is Sumner Redstone stalking Midway Games (MWY)? The company is a small player in video games: It designs interactive software played in coin-operated or home markets. Followers of Midway suspect that a big block of shares that traded at 7 a share on the Big Board on Oct. 31—exactly 1.2 million shares, or a 3.2% stake—was bought by Viacom Chairman Redstone. He already owns 28% through his holding company, National Amusements, so why more?

For one thing, Midway hit 24 earlier this year, so 7 is a bargain. The stock dived on disappointing third-quarter results partly due to the industry's slump. Some wonder why Redstone hasn't made a bid for the rest of Midway. But why pay a lot for what he can get for less? "It looks as if he's pulling a creeping takeover," surmises one money pro. Otherwise, it seems the logical time to make a bid, he adds. Midway's bigger rivals—THQ, Electronic Arts, and Activision—have rallied from their lows, while Midway has lagged.

Analysts say demand will skyrocket next year, when a new generation of players will be available. Apart from Sony's PlayStation 2, Microsoft is due out with its X-Box machine, and Nintendo will introduce GameCube. Leo Rishty, editor of newsletter *Unique Situation*, says Midway is ripe for a takeover, but won't sell below 20. Sega and Microsoft are also possible buyers, since both want to make games for their own players. Viacom's Carl Folta declined comment.



BusinessWeek online

Watch for Gene Marcial's Inside Wall Street Online column every Tuesday afternoon at www.businessweek.com/today.htm

BusinessWeek MARKETPLACE

Aviation/Fractional Ownership

A SMILE AND A FROWN SOUND EXACTLY THE SAME OVER A SPEAKERPHONE

Some things just can't be communicated over fiber optic cable. A Learjet® or Challenger® business jet from Flexjet enables the modern CEO to capitalize on the kind of face-to-face interaction that moves business forward. We offer the most complete range of latest technology aircraft available today. So while there may be other options to Flexjet, there can only be one choice. Flexjet. For more information on the many affordable benefits of fractional ownership and our unprecedented level of personal service and attention to detail, call **1-800-FLEXJET**.

**BOMBARDIER
AEROSPACE**

Flexjet is a Bombardier Aerospace program.

www.flexjet.com

FLEXJET
we build the aircraft



Legal Services

ASSET PROTECTION

Corporations, Ltd. Partnerships
Offshore Trusts, Corps., Private R
• Best Jurisdictions • Maximum
• Tax Savings • Estate Plan
Professional - Confidential

Steven Sears, CPA • Attorney
714-544-0622 • www.searsatt.com

Business Services

Need a Logo

mylogo Get a Prof
Custom D
LOGO T
Visa/MC/Amex
Toll-Free: 1-888-869-6
www.1800mylogo.com

Business Opportunities

OFFSHORE BANKING FOR SALE

Free Report

800-733-2

Men's Footwear

MEN: BE TALLER!!

Tired of being short? Try our quality footwear. **HIDDEN** height-increasing feature. **INSIDE** shoe. No **OVERSIZED** HEELS! Will make you **2-3" TALLER** depending on style. **OVER 100 STYLES AVAILABLE**. Extremely comfortable. Sizes: 5-12 Widths: B-EEE. In business over 55 years. **MONEY-BACK GUARANTEE**. Call or write for **FREE** color catalog.



ELEVATORS®

RICHLEE SHOE COMPANY, DEPT. BWON
P.O. BOX 3566, FREDERICK, MD 21705

1-800-290-TALL

CROSS TRAINERS FOR THE OFFICE.

Men's quality footwear
in Sizes 6-20,
AAA-EEEEEE widths,
Call 1-800-240-7463
for a free catalog.
Ask for dept. E430R.

E.T. Wright®
An American Tradition Since 1876

Ink Cartridges

INK CARTRIDGES

SAVE UP TO 70% ON CARTRIDGES FOR
EPSON® AND CANON® -- GREAT PRICES
ON OTHERS, TOO. DELIVERED BY FEDEX®
OVERNIGHT FOR ONLY \$5.00. TENS OF
THOUSANDS OF SATISFIED CUSTOMERS

FREE BLACK CARTIDGE VIA THIS LINK
WWW.CARROTINK.COM/BW

CARROT'S
INK CARTRIDGES

ALL TRADEMARKS ARE PROPERTY
OF THEIR RESPECTIVE OWNERS

Computer Equipment

Ted Dasher Inc.
Hewlett-Packard
Buy-Sell-Trade
LaserJet • ColorPro • DraftMaster • Deskjet
DraftPro • DesignJet • Ruggedwriter
Electrostatic Plotters
HP 9000/3000 Workstations & Personal Computers
Demo & Refurbished Equipment
800-638-4833
Email: sales@dasher.com

Mouse Pads

"Where the Heck Is Area Code 978?"

Area Code Mouse Pad puts up-to-the-minute U.S. area code info at your fingertips! Super-accurate, code-order directory, high quality, hard-top, fast-tracking pad. Time Zone info too!

Only \$7.99 + \$2. S&H
FREE Bonus Gift while supplies last!

The Product Works
PO Box 9004 Gaithersburg, MD 20898
www.theproductworks.com

MEN'S WIDE SHOES EEE-EEEEEE SIZES 5-13

- FREE catalog
- High quality
- 160 styles



HITCHCOCK SHOES, INC.

Dept. 55K Hingham, MA 02043
1-800-992-WIDE www.wideshoes.com

Travel

Discount Hotels & Condos

Up to 65% Off! Rooms for Soldout Dates!

hoteldiscount.com

1-800-964-6835

Most Major Cities

Corporate Gifts/Premiums

**Ok, so
we can't
imprint
everything ...**

But we can put your message on 100,000 products. Log on to PromoMart.com to buy imprintable business promotional products, free! Well, you get the picture.

PROMOMART

www.promomart.com

We put your logo on everything

Enter to win \$1000 in

For Ad Rates and Information
Phone: (312) 464-0500 Fax: (312) 464-0512

Education/Instruction

Meet Tomorrow's eStrategist

Prepare yourself by earning your graduate degree online. Get your MS in Information Technology, MS in Information Management, or MBA. Log on and you're there. Network with respected technology leaders and fellow professionals from around the globe.

Visit www.isim.edu, the award-winning, accredited online university. Applications are now being accepted for the Spring, Summer, and Fall terms. Call or email our admissions mentor, Robin, at: 303.333.4224 ext. 177 or free at 1.800.441.4746 ext. 177.

Colorado
Member DETC



isim university
eCreate Yourself

Doctor of Letters

London Campus of a private British
independent registered University is
offering a limited number of D.Litt.
Applicants should be leading
professionals in their field with published
work. For further information contact
Clements University
Tel: 44 207 404 2423 or
admin@stclements.edu

The Leader in Distance Learning for 20 Years

• Associate • Bachelor • Master • Doctor
Business (Mgmt, HRM, Health Care)

Management of Technology,
Psychology, Law

**Southern California University
for Professional Studies**

1840 E 17th St BW, Santa Ana, CA 92705
800-477-2254 www.scups.edu

ABSOLUTELY FREE EVALUATION

**Bachelor's -- Master's --
Ph.D. Degrees**

Based on life and work experience.
Confidential -- Fast -- Student
Loans. www.arcc.org

800-951-1203

Get Your MBA Through Distance Learning



**University of
Leicester**

- Prestigious British University
- World Leader in Distance Learning
- No GMAT required
- Local support center
- Flexible Education Financing available
- Work experience & qualifications considered
- Member of the Association of Business Schools
- Accredited by the Association of MBAs
- Offered under Royal Charter

800-874-5844
email: rdiusa@erols.com
www.rdi.co.uk

tdi

Corporate Gifts

Logo Tattoos!



or 2000 tattoos, only \$299

CALICO
800/225-4269 Fax: 707/446-8273
E-Mail: CalicoUSA@Yahoo.com (PC)
E-mail: Calicotattoos@aol.com (Mac)
Website: CalicoUSA.com

Gifts

FINE PORTRAITS OF HOMES, BUSINESSES & SPECIALTIES

Experienced professionals of **Paris Studios**. Gift certificates available as elegant alternative to shopping, beautifully customized & packaged, guaranteed to impress business associates, spouses & family.
Info/Samples:

www.parisstudios.bizland.com

Education/Instruction

Expand your horizons.

**London
Business
School**



**COLUMBIA
BUSINESS
SCHOOL**

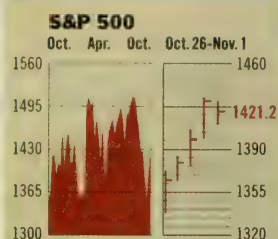
**Earn a top-ranked MBA without
interrupting your career.**

Columbia and London Business Schools join to offer the 20-month EMBA-Global, a new Executive MBA that drives managers on a unique route to global leadership. Classes start May 2001 in New York and London on a convenient, innovative schedule.

To learn more about Columbia's entire Executive MBA portfolio (EMBA-Global, Friday/Saturday and Friday Programs), attend an Open House and visit our Web site.

Call us at 212-854-2211 or visit us at www.gsb.columbia.edu/emba

STOCKS



COMMENTARY

Despite mixed moods and volatility, the market ended the week up. Leading the pack was the Dow, which gained 5.5% for the week as investors mostly poured money into blue chips and away from tech stocks. The S&P 500 came in second, gaining 4.1% and the Nasdaq Composite Index, though it staged a rally on Oct. 31, gained 3.2% for the week, finishing last.

Data: Bloomberg Financial Markets
Bridge Information Systems, Inc.

U.S. MARKETS

	Nov. 1	Week	% change Year to date	Last 12 months
S&P 500	1421.2	4.1	-3.3	5.0
Dow Jones Industrials	10,899.5	5.5	-5.2	2.4
Nasdaq Composite	3333.4	3.2	-18.1	12.3
S&P MidCap 400	520.6	5.2	17.1	30.2
S&P SmallCap 600	215.5	5.3	9.0	21.7
Wilshire 5000	13,252.6	4.1	-4.1	6.8

SECTORS

	Nov. 1	Week	% change Year to date	Last 12 months
Business Week 50*	1135.5	4.0	-12.7	2.3
Business Week Info Tech 100**	800.5	3.5	NA	NA
S&P/BARRA Growth	800.4	3.6	-9.8	1.4
S&P/BARRA Value	636.0	4.5	4.2	8.0
S&P Energy	940.4	4.6	12.7	14.6
S&P Financials	159.3	4.3	19.8	13.2
S&P REIT	81.2	1.5	10.4	8.7
S&P Transportation	669.4	11.9	12.1	5.9
S&P Utilities	331.6	6.4	45.9	35.9
GSTI Internet	339.8	4.9	-52.3	-28.0
PSE Technology	964.3	5.5	-0.8	44.8

*Mar. 19, 1999=1000

**Feb. 7, 2000=1000

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %	
Tobacco	23.4	Defense Electronics	193.7
Engineering & Constr.	19.2	HMOs	71.7
Specialty Appar. Retailers	18.5	Hospital Management	70.4
Commercial Services	18.0	Drug Chains	63.9
Forest Products	16.9	Natural Gas	61.5

GLOBAL MARKETS

	Nov. 1	Week
S&P Euro Plus (U.S. Dollar)	1386.7	6.4
London (FT-SE 100)	6457.6	1.4
Paris (CAC 40)	6409.1	2.1
Frankfurt (DAX)	7059.1	4.6
Tokyo (NIKKEI 225)	14,872.4	0.2
Hong Kong (Hang Seng)	15,349.0	1.9
Toronto (TSE 300)	9594.0	0.9
Mexico City (IPC)	6409.0	6.8

FUNDAMENTALS

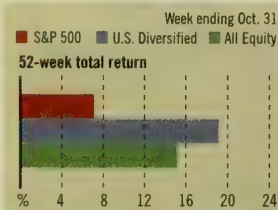
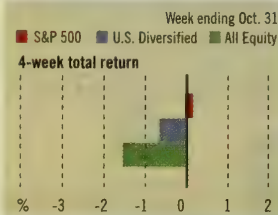
	Oct. 31	Week
S&P 500 Dividend Yield	1.12%	1
S&P 500 P/E Ratio (Trailing 12 mos.)	27.5	2
S&P 500 P/E Ratio (Next 12 mos.)*	22.9	2
First Call Earnings Revision*	-2.99%	-2

*First Call Corp.

TECHNICAL INDICATORS

	Oct. 31	Week
S&P 500 200-day average	1441.8	144
Stocks above 200-day average	53.0%	4
Options: Put/call ratio	0.61	0
Insiders: Vickers Sell/buy ratio	2.10	2

MUTUAL FUNDS



Data: Standard & Poor's

EQUITY FUND CATEGORIES

4-week total return	%	52-week total return	%
Leaders		Leaders	
Miscellaneous	2.7	Health	83.7
Mid-cap Value	2.0	Mid-cap Growth	37.4
Large-cap Value	1.9	Small-cap Growth	36.6
Small-cap Value	0.5	Technology	33.0
Laggards		Laggards	
Japan	-9.8	Precious Metals	-22.3
Diversified Pacific/Asia	-8.1	Japan	-15.9
Pacific/Asia ex-Japan	-7.2	Diversified Pacific/Asia	-13.5
Natural Resources	-6.0	Pacific/Asia ex-Japan	-4.5

EQUITY FUNDS

4-week total return	%	52-week total return	%
Leaders		Leaders	
Smith Barney Telec. Income	15.8	Dresdner RCM Biotech. N	222.0
Fifth Third Quality Gr. A	10.9	Munder Fram. Hlthcare. B	198.8
Fidelity Select Paper	10.6	Franklin Biotech. Disc. A	168.7
Kayne Anderson Small Cap	10.2	Schroder Cap. Mic. Cap Inv.	153.3
Laggards		Laggards	
Warburg Pincus Jap. Sm. Co.	-19.2	ProFunds UltraShort OTC	-67.1
Jacob Internet	-16.6	Apex Mid Cap Growth	-50.4
Grand Prix A	-14.3	Warburg Pincus Jap. Sm. Co.	-42.4
Pilgrim Sm. Cap Asia Gr. A	-14.2	Midas	-40.0

INTEREST RATES

	Nov. 1	Week
KEY RATES		
MONEY MARKET FUNDS	6.14%	6.14
90-DAY TREASURY BILLS	6.36	6.35
1-YEAR TREASURY BILLS	6.16	5.97
10-YEAR TREASURY NOTES	5.74	5.63
30-YEAR TREASURY BONDS	5.78	5.71
30-YEAR FIXED MORTGAGE†	7.76	7.69

†BancQuote, Inc.

BLOOMBERG MUNI YIELD EQUIVALENT

Taxable equivalent yields on AAA-rated, tax-exempt bonds, assuming a 31% federal tax rate.

	10-yr. bond
GENERAL OBLIGATIONS	4.74%
TAXABLE EQUIVALENT	6.87
INSURED REVENUE BONDS	4.89
TAXABLE EQUIVALENT	7.09

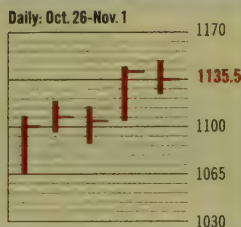
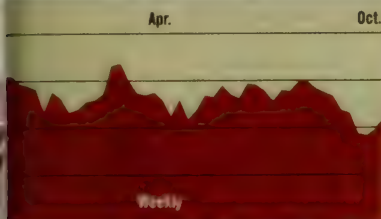
THE WEEK AHEAD

INSTALLMENT CREDIT Tuesday, Nov. 7, 3 p.m. EST ► Consumers probably borrowed \$9.5 billion more in credit than they paid off in September. That's the median forecast of economists surveyed by Standard & Poor's MMS, a division of The McGraw-Hill Companies. The use of installment credit has accelerated sharply in 2000. So far this year, debt increases have averaged \$11.5 billion per month, compared with a \$7.7 billion average for all of 1999. Despite the sideways movement in the stock market and some slow-

down in job growth, consumers feel optimistic enough about their individual financial circumstances to continue using credit for purchases.

EXPORT-IMPORT PRICES Wednesday, Nov. 8, 8:30 a.m. EST ► Prices of merchandise exports likely increased 0.3% in October, after a 0.5% advance in September. Meanwhile, another jump in oil prices means that total import prices probably jumped 0.7% last month after a 1.5% surge in September.

PRODUCER PRICE INDEX Thursday, 8:30 a.m. EST ► The S&P MMS forecast expects that the producer price index for finished goods rose 0.1% in October. That would follow a 0.1% rise in September, the result of higher energy prices and some auto prices. Excluding food and energy, the core PPI likely edged up just 0.1% last month, after a 0.3% gain in September. Thanks to energy, yearly inflation in all finished goods is up to over 2% in October, but the core rate remains a very



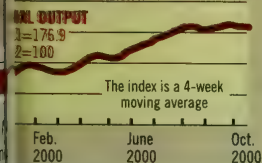
I well this week mostly due to positive earnings in several tech companies. Biggest winner: Lexmark, which rose 29.1% after beating third-quarter estimates and announcing a restructuring plan. And Tellabs also came in strong after beating estimates. Biggest loser: Amgen, which tanked 12.0% sales projections for two leading drugs.

COMPANY PERFORMANCE

Company	% change		Rank	Company	% change	
	Week	Since 3/1/00			Week	Since 3/1/00
Amgen	13.7	-23.3	26	Intel	8.6	-22.5
Boeing	8.5	-8.4	27	Tribune	1.4	-2.8
Cardinal Health	3.0	-20.8	28	Xilinx	9.2	-9.7
Exxon	-8.7	-12.2	29	Enron	9.4	20.7
General Electric	1.1	54.2	30	Lexmark International	29.1	-64.3
Johnson & Johnson	14.8	-78.1	31	Omnicom Group	6.2	-4.1
Merck	1.2	5.1	32	America Online	10.6	-8.8
Microsoft	4.0	-49.0	33	Guidant	-4.9	-22.6
Novartis	13.7	-64.4	34	MBNA	2.8	65.9
Oracle	14.8	14.6	35	Pfizer	-3.2	36.5
United Therapeutics	-2.5	8.1	36	Solectron	-7.5	23.2
Wal-Mart	6.8	-45.6	37	Gateway	6.1	-27.0
Wells Fargo	11.9	12.1	38	Wells Fargo	9.1	33.7
Xerox	14.8	-20.8	39	General Dynamics	3.2	66.1
Yield	17.6	-29.2	40	Texas Instruments	9.7	-43.1
Zell	22.2	-5.4	41	Capital One Financial	2.6	64.0
Alliance	-10.2	15.6	42	General Electric	2.8	24.3
Boeing	5.5	12.0	43	Kansas City Southern Industries	0.7	87.8
Cardinal Health	-12.0	-7.2	44	Wal-Mart Stores	1.6	-4.7
Exxon	14.5	-63.4	45	Paccar	7.7	-0.8
General Electric	5.1	-44.5	46	PE Biosystems Group	28.7	16.0
Johnson & Johnson	5.3	55.7	47	Merck	2.8	49.6
Novartis	11.8	-51.6	48	Adobe Systems	14.4	53.9
Oracle	15.5	-9.5	49	Reliant Energy	2.8	104.3
United Therapeutics	-6.5	-55.8	50	Citigroup	2.1	33.5

PRODUCTION INDEX

Change from last week: -0.1%
Change from last year: 13.6%



Index slipped again in the latest week as the sector remains the weakest part of the index. Before calculation of the four-week index dropped to 176.7 from 177.0. The seasonally adjusted output of steel fell sharply. Production of trucks, coal, and lumber also declined, as did rail-oil refining was the only industry increase.

If the index components is at www.businessweek.com index Copyright 2000 by The McGraw-Hill

ONLINE RESOURCES

BW50 Track the index and the companies in it all day long. Plus: our exclusive Info Tech 100 index.

S&P PERSONAL WEALTH Real-time market coverage, industry analysis, and personalized retirement advice.

MUTUAL FUNDS Search for funds, view BW ratings, and read Q&A's with fund managers.

COLUMNS Hot stocks, takeover plays, and the latest strategies for managing your money.

BusinessWeek online

For more investment data and the components of the production index, visit www.businessweek.com.

**"THE LITTLE
BUSINESS THAT
COULD..."**
-FORTUNE

*A Personal Guide to Finding Your Niche,
Conquering Your Market, and Taking
Your Company to the Top*

**EIGHT
GIANT STEPS
TO GLOBAL
DOMINATION**

KENN VISELMAN

Chairman, The itsy bitsy Entertainment Company

Marketing visionary and chairman of The itsy bitsy Entertainment Company, Kenn Viselman, shares the secrets of his success in *Eight Giant Steps to Global Domination*.

From Teletubbies to Eloise, Viselman's empire boasts some of the most recognizable and successful names in the entertainment industry. Now for the first time, Kenn reveals the unique marketing strategies behind itsy bitsy, and provides eight concise lessons to gain control in this out-of-control business world.



Available Everywhere Books
and eBooks Are Sold
Visit us at
www.ebooks.mcgraw-hill.com

A Division of The McGraw-Hill Companies

Index to Companies

This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

A

ABC (DIS) 92
Adams Harkness & Hill 14
Advanced Micro Devices (AMD) 116, 208
Aetna (AET) 66, 230
Alcan Aluminium (AL) 38
all.com 106
Alusuisse (AL) 38
Amazon.com (AMZN) 14, 46, 62, 112, 132, 208
Amdahl 70
American Airlines (AMR) 180, 192
America Online (AOL) 14, 35, 38, 46, 50, 69, 104, 132, 140, 144, 146, 180
AmeriTrade (AMTD) 140
Aon Consulting Worldwide 214
Apple Computer (AAPL) 106, 114, 208
Ariba (ARBA) 208
Arthur Andersen 196
AT&T (T) 34, 54, 60, 104, 132, 140, 171, 208
AT&T Wireless (AWE) 66
Audiofina 46

B

Bank One (ONE) 78
Barnes & Noble (BKS) 46
BellSouth (BLS) 54, 171
Belo (A.H.) (BLC) 92
Berkshire Hathaway (BRKA) 66
Bernstein (Sanford C.) 14, 46
Bertelsmann 46, 50, 52
Best Buy (BBY) 116
BET Holdings 66, 192
BeVocal 146
Big Planet 112
BioCryst (BCRX) 152
Black Entertainment Television 192
BMG Entertainment 50
Boeing (BA) 38
bol.com 46
Bridgestone/Firestone 20, 203
BroadVision (BVSN) 14
B2BWorks 56

C

Capital Across America 56
Caterpillar (CAT) 157
CBS (VIA) 92, 216
CCH 208
Cell Pathways (CLPA) 152
Centerpost 20
Chevron (CHV) 38
Ciena (CIEN) 140
Cisco Systems (CSCO) 171, 208, 219
CNET Networks (CNET) 140

C

CNGU 66
Coca-Cola (KO) 230
Commerce One (CMRC) 208
Compaq Computer (CPQ) 35, 60, 112, 116
Connectics (CNCT) 152
Continental Airlines (CALA) 192
Cox Broadcasting (COX) 92

D

DaimlerChrysler (DCX) 14, 38, 72, 208
Delaware Tax Efficient Equity Fund (DVXAX) 208
Dell Computer (DELL) 106, 116, 171, 208
Deloitte & Touche 20, 196
Delphi Automotive (DPH) 203
Delta Air Lines (DAL) 180, 192
Deutsche Bank (DBK) 72
DoCoMo (NTT) 66
Dow Chemical (DOW) 208
DuPont (DD) 208

E

EarthLink 125
Eaton Vance (EV) 219
eBay (EBAY) 62, 132, 171
EchoStar (DISH) 92
Econoday.com 210
Eddie Bauer 203
Electronic Arts (ERTS) 223
Eli Lilly (LLY) 152
EMC (EMC) 171
EMI Group 46
Emmis Communications (EMMS) 92
Ericsson (ERIC) 132
Ernst & Young 196
ESPN (DIS) 92
E*Trade Group (EGRP) 132
EXP.com 106
Expertcity.com 106
Exxon Mobil (XOM) 38

F

Fannie Mae 64
FedEx (FDX) 171
Fiat (FIA) 223
Fidelity Investments 125, 140, 219
First Union (FTU) 66
Ford (F) 20, 58, 66, 72, 78, 203, 223
Forrester Research (FORR) 132
Fox Entertainment (FOX) 92
Freddie Mac (FWG) 171
Fujitsu 70

G

GartnerGroup 138
Gateway (GTW) 106, 110, 116, 208

General Electric (GE) 38
General Motors (GM) 58, 66, 78, 125, 157, 203, 208
Geocast Network Systems 92
Gifts.com 16
Gilead (GILD) 152
Gillette (G) 230
Glaxo Wellcome (GLX) 152
Global Steel Exchange 20
Goldman Sachs (GS) 171, 180, 216

H

Handspring (HAND) 35, 125, 132
Hearst-Argyle Television (HTV) 92
Heidrick & Struggles 60
Herdollar.com 216
Hewlett-Packard (HWP) 69, 106, 116, 125
HeyAnita 146
Hitachi (HIT) 70
Holly Marine Towing 56
Home Depot (HD) 208
Honda (HMC) 58, 78
Honeywell (HON) 38
Host Marriott (HMT) 54
Hydro Environmental Technologies 56
Hyundai 74

I

iBlast Networks 92
IBM (IBM) 60, 106, 116, 125, 140, 171
InfoUSA (IUSA) 132
ING Barings (ING) 66
Integra (IART) 152
Intel (INTC) 54, 69, 171, 208, 219
International Data 56
Internet Holders Trust (HHH) 208
Internet Security Systems (ISSX) 62
inViso 16
Isuzu 58

J

Jacob International Fund 14
JanSport 203
Jardine Fleming Securities 70
JDS Uniphase (JDSU) 34, 208
Johnson Controls (JCI) 203
J.P. Morgan Tax-Aware U.S. Equity Fund (JPTAX) 208
Jupiter Media Metrix (JMXI) 132, 146

K

Kmart (KM) 171
KPMG 20, 196

L

Lear (LEA) 203
Lehman Brothers (LEH) 14, 54
Levi Strauss 138
Liberty Bank 56
Libra Motor Express 140
Lucent Technologies (LU) 60, 208, 230

M

Macromedia (MACR) 14
Madison Benefits Group 214
Major League Baseball 92
McDonald's (MCD) 208
McDonnell Douglas (BA) 38
McGraw-Hill (MHP) 92, 226
McKinsey 60
Merck (MRK) 38, 152
Merrill Lynch (MER) 14, 58, 72, 208
Metricom 122
Micron Electronics (MUEI) 106
Microsoft (MSFT) 35, 46, 62, 64, 69, 106, 112, 114, 122, 125, 140, 144, 171, 180, 208, 223
Midas (MDS) 223
Midway Games (MWY) 223
Miller (Herman) (MLHR) 78
Minstrel 125
Mitsubishi Electric 70, 140
Mitsubishi Motors 72
Morgan Stanley Dean Witter (MWD) 14, 42, 46, 54
Motorola (MOT) 132, 203

N

NameZero.com 178
Napster 46, 50, 52, 69
National Semiconductor (NSM) 208
NBC (GE) 92
NEC (NIPNY) 70
NetPD 52
Netpliance (NPLI) 35, 112
Netscape (AOL) 35
NetVision 74
Newell Rubbermaid (NWL) 66
New Internet Computer 112
NextBus Information Systems 140
Nextel Communications (NXTL) 104, 132, 144
Nintendo (NTDOY) 223
Nokia (NOK) 140
Nortel Networks (NT) 146, 208
Northwest Airlines (NWAC) 180
Novell (NOVL) 69
NTT (NTT) 66

O

Office Depot (ODP) 140
OmniSky (OMNY) 125, 144

Oppenheimer Funds 219
Oracle (ORCL) 112, 140
Orbitz 20
Oxygen 216

P

PaineWebber (PWJ) 152, 180
Palisades Capital 223
Palm (PALM) 112, 125
Paxon Communications (PAX) 92
PC-Doctor 106
PCSupport.com 106
Pearson (PSO) 46
Pechiney 38
Pfizer (PFE) 152
pFreight 140
Pharmacia (PHA) 171
Philip Morris (MO) 171
Philips Electronics (PHG) 138
Pier 1 Imports (PIR) 54
Pixelpark 46
Planning Edge 203
Poptel 178
Power (J.D.) 203
priceline.com (PCLN) 20
PricewaterhouseCoopers 60, 196
ProAct Technologies 178
Procter & Gamble (PG) 230
Procter & Gamble (PG) 208

Q

Qualcomm (QCOM) 34, 144
Qwest Communications (Q) 34, 54, 146, 208

R

Random House 50
RealNetworks (RNWK) 171
Register.com 178
Replay 92
Research in Motion 125, 144
Revlon (REV) 66
Rocket eBook 46

S

Salomon Smith Barney (C) 125
Samsung 132
SBC Communications (SBC) 54, 171
Schwab (Charles) (SCH) 140, 216, 219
Seagram (VO) 46
Sega (SEGNV) 223
SEI Investments (SEIC) 219
Siebert Financial (SIEB) 216
Smithfield Foods (SFD) 223
Snickelways Interactive 56
Sony (SNE) 46, 70, 116, 203, 223
SpencerStuart 60
Sprint (FON) 38, 122, 132, 180
Sprint PCS (PCS) 66, 140

Spyglass (SPYG) 38
Standard & Poor's 226
Starbucks (SBUX) 38
Suzuki 58
Sweet16.com 125

T

TellMe Networks 14
Texaco (TX) 38
Thomson Multimedia THQ (THQ) 223
3Com (COMS) 35
Time Warner (TWX) 46, 180
Tivo 92
Toshiba 70, 116
Toyota (TM) 72, 20
Tribune (TRB) 92
T. Rowe Price 219

U

UAL (UAL) 180, 19
United Airlines (UA) 180
United Paramount 66
US Airways (U) 180
USA Networks (USA) 196

V

Vanguard Airlines 180
Vanguard Group 2
VentureOne 66
VeriSign (VRSN) 17
Verizon (VZ) 122, 171

Viacom (VIA) 66, 2
ViaFone.com 140
Visteon 203
Vivendi 46
Volkswagen (VLKA) 17
VR Systems 157

W

Wal-Mart Stores (V) 208, 223
Warner Bros. (TWX)
Warwick Manufacturing Watson Wyatt World 214
Women's Financial 216
WorldCom (WCOM) 66, 122, 180, 20

X

Xerox (XRX) 60, 23

Y

Yahoo! (YHOO) 14, 140, 144, 146, 2
Yankee Group Res

Z

Zagat Survey 132, 2
ZDNet (ZDZ) 140

Business Week (ISSN 0007-7135) published weekly, except for one week in January, August, by The McGraw-Hill Companies, Inc. Executive, Editorial, Circulation, and Advertising: 1221 Avenue of the Americas, New York, N.Y. 10020. U.S. subscriber rate \$54.95/year; C\$69/year. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J.



Reach out at any moment and find
exactly what in the world is holding up
your 100 million-dollar product launch.

You know, real omnipotent-being type stuff.

From reviewing package designs and advertising creative, to collaborating on global promotions, if it has to do with marketing, you can do it better on magnifi.net. Control your efforts from anywhere in your universe with just an internet browser. But please, always use Magnifi for good, not evil.



magnifi.net

©2000 Magnifi, Inc. Call 800-301-0040 or visit www.magnifi.com.

Global marketing from a 12-inch screen.

WHY CEO CHURN IS HEALTHY

They're flying out of the corner office like quail being flushed out of cover. Only, in this case, the hunters are angry boards of directors turning their sights on CEOs who aren't fast or agile enough in today's competitive environment. Lucent, Xerox, Gillette, Procter & Gamble, Coca-Cola, and Aetna have all thrown out their CEOs within the past 12 months. And it's getting worse. All told, 103 chief executive officers left their jobs in September, according to Challenger, Gray & Christmas Inc. This is more than twice the rate of a year earlier. The job tenure of top executives is approaching half what it was in the '80s. G. Richard Thoman barely had a year at Xerox, and M. Douglas Ivester and Durk Jager had less than two at Coke and P&G, respectively. Corporations are experiencing a new phenomenon—serial CEOs. There's talk of a shortage of talent for the top. We don't buy it.

Begin with the hype. Ironically, in an era obsessed with teamwork and horizontal organization, the CEO is still portrayed as a Lone Ranger, able to ride into any corporation, shake it up, and send it on its way. Headhunters, board members, and even some executives portray CEOs as larger-than-life heros able to single-handedly transform Old Economy laggards into zippy New Economy high-performers.

The truth is something less. Many CEOs are barely in control of their companies' fate, much less their own. They may be leading the charge into the Information Era, but they are also being carried along with it and, at times, consumed by it. In the soon-to-be-published *The Mind of the CEO*, Yale School

of Management dean (and *BUSINESS WEEK* columnist) Jeffrey E. Garten says that it is increasingly difficult for CEOs to digest the flood of information out there, measure it adequately, and make the right choices.

Take the issue of competition. In the 1980s it came from one basic source—Japanese companies who had advanced manufacturing, inventory, and quality-control capabilities. American CEOs could examine the threat, understand it, and adapt. Very well, as it turned out. But today, Garten says, competition is for new products and new markets. Companies are in transition and often defined by technologies that are ever-changing. Business models come and go. The pace of change is faster, global integration is deeper, and the complexity of partnerships that have to be managed is greater than ever before. U.S. companies are not trying to play catch-up; they are pioneering, so there are no winners to watch. CEOs feel that navigating in this environment is not only risky and often treacherous, according to Garten.

Many fail, but not simply because there are too few good executives, as headhunters would have us believe. In the transition to the New Economy, it may be that CEOs can reasonably be expected to manage only a portion of the change before they fall victim to an unexpected trend or are overwhelmed by inadequate execution. A series of CEOs may be needed to get many corporations before they cross over to the 21st century—or fail trying. If that's true, so be it. No one said that destruction was easy, even on CEOs.

THE WISDOM OF ALAN GREENSPAN

As the nation goes to the polls, it may be instructive to listen to the most powerful nonelected official in America has—the chairman of the Federal Reserve, Alan Greenspan. In a recent speech at the libertarian Cato Institute in Washington, Greenspan reminded everyone that most of the prosperity of recent years is due to two things—a “once or twice-in-a-century surge in technology” and a political consensus that transformed a huge budget deficit into a surplus. This surplus, in turn, “helped fill the pool of saving that has fed productivity-enhancing and cost-reducing capital formation.” The Fed recognized these dramatic developments and altered U.S. monetary policy accordingly.

That's history. Looking ahead, Greenspan appears worried that accelerating productivity and growing fiscal surpluses cannot persist forever. But he is less concerned about productivity. This is important because the economy is clearly slowing down, and capital spending is off from its recent highs. In the third quarter, capital spending rose at a 6.9% annual rate, less than expected and sharply lower than the 14.6% rate of the previous quarter. Yet despite cyclical ups and downs, Greenspan doesn't see “any credible evidence

that the rate of structural productivity growth has stopped increasing.” Given the ability to boost productivity with high technology, he doesn't think corporations will trim capital spending all that much.

What really worries Greenspan is the erosion in the political consensus supporting the budget surplus. These surpluses were crucial in boosting national saving, keeping interest rates of capital low, and quickening the pace of productivity growth. Without saying so, Greenspan is wagging his finger at the current Congress for a spending binge certain to use up a significant portion of the surplus in years ahead. Plans to cut taxes and new entitlement programs by the President's candidates may well erase the surplus.

This would, of course, force the Fed to tighten its monetary policy. And that, in turn, could seriously curtail capital flow financing productivity growth. The cyclical capital spending that the U.S. is experiencing today could be followed by a more permanent decline in investment, slowing economic growth. The subtext of the Greenspan speech is don't take prosperity for granted. We don't. And neither should you.



REDLEAF

Where innovation lives.



That's the thing about extraordinary ideas.
They rarely turn up in ordinary places.

By comparing innovative ideas from all over the globe, we can
differentiate prodigy startups from tepid knock-offs.

It's comparative selection, and it's like no seed stage strategy on earth.

www.redleaf.com

Lending leadership for business leadership.



"Good rates can make you competitive, but to be a leader for over 90 years you've got to have specialized knowledge and experience. We give our customers more than a good deal, we provide the means to succeed." Albert R. Gamper Jr., CEO, The CIT Group, Inc.



©2000 The CIT Group, Inc.

www.businessweek.com

BusinessWeek

NOVEMBER 20, 2000

A PUBLICATION OF THE MCGRAW-HILL COMPANIES



BURLINGAME

NOV 15 2000

LIBRARY

BEDD*****5-DIGIT 94010
 2 1050111600# T01 0101 0000000083

0073
005

INGAME PUBLIC LIBRARY
PRIMROSE RD
INGAME CA 94010-4010

HOW THE NEW PRESIDENT WILL GOVERN

PAGE 36



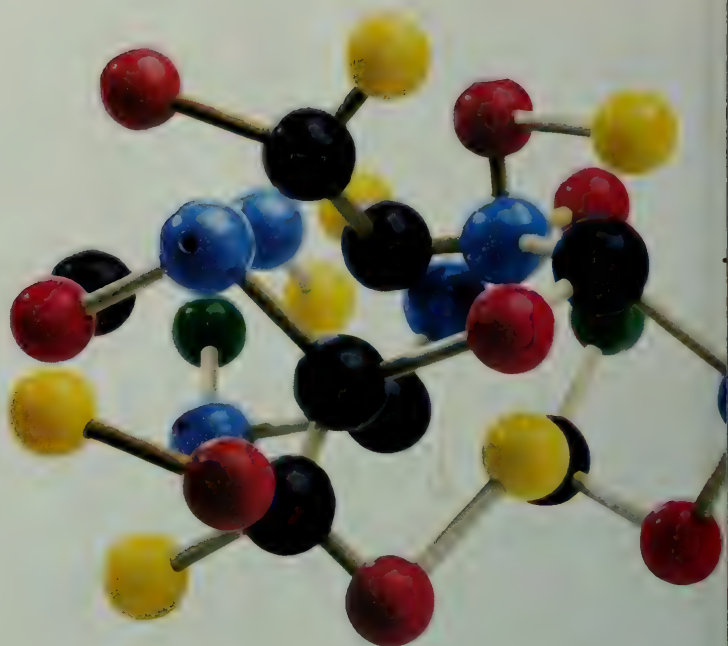
VEHICLE SKID CONTROL* A slick road. A blind curve. And in a split second, the Laws of Physics. Vehicle Skid Control (VSC) kicks in. Sensors monitor wheel speed, acceleration and deceleration to throttle down. And you breathe a sigh of relief as the curve is safely behind you. Avalon, with

*Available on XLS model only. **Claim based on five-star rating in the medium passenger car category for the rear-seat passenger in a side impact, in test conducted by the National Highway Traffic Safety Administration.



on you. Your stomach drops, your heart races, time stands still. But in that same split second,
tly, brakes pulse at rapid-fire speed to help prevent wheel lock-up. Signals command the engine
five-star government crash-test rating.** So much for physics.

 **TOYOTA AVALON**



432 Camino Realto Redwood City, CA 92292 650

Whether your work is splitting atoms or splitting hairs, nothing pushes the envelope on organization like FileMaker® Pro 5. A refreshingly intuitive application that's a paradigm of ease and simplicity. With its instantly familiar interface, you can quickly handcraft a database to the precise needs of your workgroup, as you alone know them best. Which means you can basically clone your mind.

GENEQUEST

INCORPORATED

CAROLINE JOHNSTON

BioOncology Product Manager

- and database pioneer

FAX 650.557.8895 c.johnston@genequest.com

your people can perfectly follow your lead: tracking, updating and otherwise micromanaging projects to their heart's content. And with nifty features like Instant Web Publishing, your customers around the world will be wowed by your efficiency. And inspired by your intelligence. Visit www.filemaker.com. *What's your problem?*[™]



emarks of FileMaker, Inc. The persons and companies listed in the example are purely fictitious, and any resemblance to existing persons and companies is purely coincidental



no woman is

Want to connect

STSN® is Marriott's preferred provider of high-speed Internet access.

© 2000 Marriott International, Inc.

land, unless she wants to be
new high-speed Internet service powered by AT&T?

Stay in touch. (47 e-mails since breakfast.)

Stay on top of things. (100 shares at 22.)

Stay in love. (Miss you, too.)

With so much on your mind, it helps to

have Marriott, Renaissance and AT&T

do a little thinking for you.

Like making all those connections

easier and 50 times faster.

All from the comfort of your room.*

So, you'll have time to think about

the one thing you never consider: you.

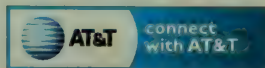
For more information and reservations visit
marriott.com or call your travel agent or 1-800-228-9290.

thinking of you



RENAISSANCE.
HOTELS • RESORTS • SUITES


Marriott
HOTELS • RESORTS • SUITES



High-speed Internet access is being rolled out
at all Marriott hotel brands around the world.



LOOK
THOROUGHLY
INTERESTED
AND CHECK
E-MAIL AT THE
SAME TIME.

BLACKBERRY
WIRELESS EMAIL SOLUTION



The ingenious new Compaq iPAQ™

BlackBerry™ is always connected to

your company network. So you can

receive or send e-mail anytime, from

just about anywhere. And since it fits

in your hand, it's as easy to check as

your watch. Welcome to the new IT.

Inspiration Technology from Compaq.

To find the nearest reseller call

1-800-AT-COMPAQ. To learn more

visit us at compaq.com/blackberry.

COMPAQ
Inspiration Technology



A LA CARTE
Zagat is catering to the Web's

global market
page 146

COVER STORY

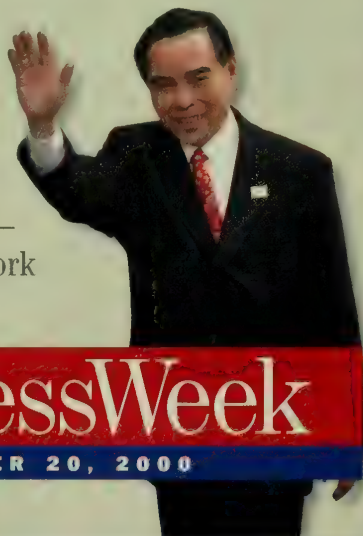
WHAT'S THE MANDATE?

A deep schism in voters' priorities: How will the new President govern?

page 36

NEW PUSH

Vietnam is trying again to attract foreign investors—this time it may work
page 56



BusinessWeek

NOVEMBER 20, 2000

Cover Story

36 WHAT'S THE MANDATE?

The clear and unequivocal message sent on Nov. 7: Americans want limited government. Or progressive activism. And they want to stay the course—but with a fresh start. For the new President, it's a mandate to govern incrementally and devote enormous energy to building a national consensus

41 WHY AN ELECTORAL COLLEGE?

It's an anachronism, but one that keeps rural states in the loop

42 CONGRESS: THE NEW MAJORITY

The real power lies with moderate Republicans and centrist Democrats

44 COMMENTARY: RALPH NADER

By staying his course, he cost Gore votes—and earned the enmity of Democrats

46 INITIATIVES: STATUS QUO PLUS

They mainly produced small changes

News: Analysis & Commentary

48 FLEXIBLE PRICING'S FLAWS

Despite all the hoopla when Priceline.com launched, dynamic pricing will not take over the world

49 COMMENTARY: PRICELINE

The right buyer for this dot-com? Priceline

50 AUTOS: THE INCENTIVES GAME

Although they're driving down their own profits, auto makers keep trying to lure consumers

51 COMMENTARY: TRANSMETA

Why the newly public maker of low-powered chips is too hot to handle

52 IN BUSINESS THIS WEEK

International Business

56 VIETNAM: FOREIGN INVESTMENT

With the U.S. trade pact expected to be ratified, Clinton is visiting Hanoi. Will investors follow?

57 VIETNAM: MARKETS

It's easy to underestimate the importance of this new bourse

58 COMMENTARY: SINGAPORE

The government is unloading an icon, NatSteel Electronics

59 COMMENTARY: BANKING

Why WestLB's loss would be a gain for German banks

60 COLOMBIA: COCA WARS

The cost to Washington may be far greater than anticipated

62 BRAZIL: TIMBER

Industrialists and greens team up to make forestry sustainable

64 INTERNATIONAL OUTLOOK

China: The politicking begins

Economic Analysis

30 ECONOMIC VIEWPOINT

Kuttner: What the victor gets

32 ECONOMIC TRENDS

What ails developing nations: gender wage gap, a new trend in U.S. mobility

33 BUSINESS OUTLOOK

U.S.: The soft landing looks good. Argentina: Bad numbers and bad news

150 STADIUM SUBSIDY LETDOWN

Taxpayers lose in this game

Management

69 ARBITRATION: IT ISN'T PERFECT

Lots of companies prefer it to litigation, but the system has flaws

Special Report

74 ARE WOMEN BETTER MANAGERS?

New studies show that female managers outperform men in almost every measure



**DETAILS,
DETAILS**
Barry
Sternlicht

goes to
great lengths
to make Starwood
stellar page 142



EARNINGS SCOREBOARD

Ominous signs
from corporate
giants page 90

VALUE IS BACK
It may make sense
to rebalance
your
portfolio
page 171



SPECIAL REPORT

New studies show
that female execs
outshine men page 74



COME ON IN
Employers want
easier entry for
immigrants page 129

AIR TAXI
Will the F1 prop
jet lure execs
weary of crowded
airports? page 134



ACHING MEN THE RIGHT STUFF
Consultants are popping up to help
le execs think more like women

onment

COMMENTARY: CLEAN AIR
Teen cars need friendly laws and
incentives

orate Scoreboard

CORPORATE SCOREBOARD
Companies will be hard-pressed to
match even their third-quarter
profit performance

BIGGER PAYROLL BILL
It may not hurt profits as much
expected

ment

WELCOME, WORKERS
Employers want easier entry and
resident status for immigrants

ce & Technology

TAXI! GET ME TO NEBRASKA
The F1 prop jet lets travelers avoid
overcrowded planes and airports
WINGS OF THRUST FROM THE NET
Now a supersonic car got backers

141 DEVELOPMENTS TO WATCH
Bouncier baseballs, healing with
stem cells, hot progress in fusion

People

142 THE CEO IS IN THE DETAILS
Barry Sternlicht's hands-on
approach pays off for Starwood

Marketing

146 ZAGAT: BEYOND SOUP TO NUTS
Its restaurant guides go multimedia
and multinational

Finance

154 WALL STREET'S KILLER PAY
Huge salary packages have put
brokerages in a precarious position

156 FINDING MIDCAPS JUST RIGHT
As small-caps crawl and large-caps
creak, the middle path looks good

158 COMMENTARY: BANKING
Bad loans? What bad loans?

160 COMMENTARY: CORPORATE CASH
What companies should do with
their cash hoard: Try dividends

BusinessWeek Investor

- 166 CARING FOR THE TERMINALLY ILL**
Comfort is the key to the rise of
palliative-care programs
- 169 BUDGETING FOR A NURSING HOME**
Planning now can help preserve
your savings
- 171 THE VALUE OF VALUE FUNDS**
They're a hedge against tech-heavy
portfolios and a long-term winner
- 178 THE BARKER PORTFOLIO**
Quicken finally joins its online
rivals at Web speed
- 181 MARCIAL: INSIDE WALL STREET**

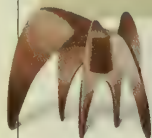
Features

- 14 UP FRONT**
- 18 READERS REPORT**
- 19 CORRECTIONS & CLARIFICATIONS**
- 23 BOOKS**
Lee: *From Third World to First*
- 26 WILDSTROM: TECHNOLOGY & YOU**
AOL vs. MSN: A question of style
- 182 FIGURES OF THE WEEK**
- 184 INDEX TO COMPANIES**
- 186 EDITORIALS**

BusinessWeek online

www.businessweek.com
America Online Keyword: BW

Updated every business day at **www.businessweek.com**



Winner of the 2000 National Magazine Award for General Excellence in New Media

VIDEO VIEWS

Digital streaming video featuring industry events and BW editors

■ SPREAD THE PAIN:

BW's Lewis Braham on how your stock losses can ease the tax man's bite over several years



■ IN THE MONEY:

Doug Hickey, Critical Path CEO, says his Net infrastructure company is nearly there



TOOLS

■ CAPITAL GAINS CALCULATOR:

Here's how to figure if you should hold, or sell and reinvest



■ **MBA SEARCH:** Which is the right business school for you and your needs?



■ **SALARY SURVEYS:** How much money should you be paying your staff?



■ YOUR PORTFOLIO:

Check on the health of your investments

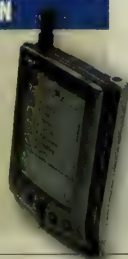


INTERACTIVE FORUMS

■ Join ongoing discussions on investing, info tech, B-schools, and more—or start your own

HANDHELD EDITION

Put us on your Palm! Get news from Daily Briefing, S&P data, and more. Powered by PricewaterhouseCoopers



Find quick links to everything on this page at the Nov. 20, 2000, issue's table of contents online, or go directly to www.businessweek.com/2000/00_47/online.htm

Election 2000

Follow BUSINESS WEEK's continuing coverage of politics and economic policy in the wake of one of the closest presidential races in U.S. history



DAILY BRIEFING

Business and investing news, commentary, and analysis

www.businessweek.com/bwd

ANALYSIS: Xerox' shares keep sliding, and even CEO Paul Allaire questions its financial model

STREET WISE: When your mutual fund bites the dust



INVESTING

Investing insights powered by S&P Personal Wealth

www.businessweek.com/invest

BARKER.ONLINE: Small-stock whiz Mike Fasciano on his decision to sell his fund to Neuberger Berman

SMALL BUSINESS

A resource for entrepreneurs

frontier.businessweek.com

FACTORY DAYS: When good reps go sour

FINANCE: With dot-coms falling by the wayside, banks are wooing entrepreneurs



TECHNOLOGY

State-of-the-art coverage of info tech

www.businessweek.com/technology

NEWS ANALYSIS: Are cyber elections the cure for low voter turnout?

PERSPECTIVE: How Info Age efficiency can weaken our connections



B-SCHOOLS

Business Week's exclusive rankings and profiles

www.businessweek.com/bschools

PART-TIME MBA: BW Online now has 250 in-depth profiles of part-time and distance-learning programs around the world

GLOBAL BUSINESS

In-depth coverage of Asia, Europe, and Latin America

www.businessweek.com/global

ONLINE ASIA: Why Yahoo! isn't worried about Beijing's Chinese Web

NEWS ANALYSIS: Gray skies for Italian mobile-phone company Blu

CAREERS

Advice and tools for upper-management job seekers

www.businessweek.com/careers

Q&A: When returning to a previous career, make sure that your old flame doesn't turn out to be a fizzle



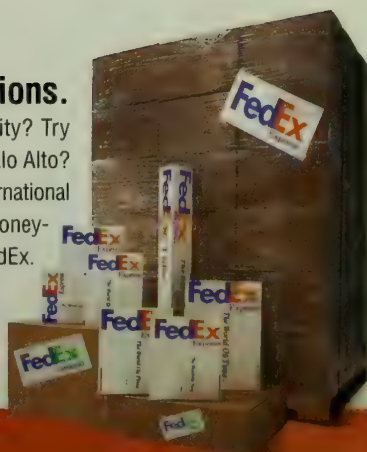
ONE-STOP SHIPPING.

FedEx offers the broadest range of shipping solutions.

Overnighting a box to Biloxi? Use FedEx Express. Sending a tube to Tuba City? Try FedEx Ground. A package to Pakistan? FedEx Express International. A pallet to Palo Alto? FedEx Express Domestic Freight. How about two tons of tuna to Taiwan? FedEx International Freight can handle it. With real-time tracking, delivery confirmation and a money-back guarantee. Need more information? Visit fedex.com or call 1-800-Go-FedEx.

Be absolutely sure.®

FedEx



A full-page photograph of an elderly couple swinging on a swing set in a park. The man, wearing glasses and a dark jacket over a sweater, is on the left swing, smiling broadly. The woman, wearing a light blue jacket and a matching hat, is on the right swing, laughing with her arms outstretched. The background is a dense forest of green trees under a bright sky. The text "See yourself succeeding." is overlaid in the center in a white, bold, sans-serif font.

See yourself succeeding.™



Pamela Gouws
Fidelity Investments
Representative

August 17, 2000
1:21 PM

Investor: We're calling for no other reason than to say thank you.

Fidelity Rep: That's a wonderful reason to call. Thank you.

Investor: My wife and I are truly enjoying our retirement and want to thank you for your wonderful assistance throughout the years.

Fidelity Rep: Well...that makes me feel great. And I'll pass that message along to everyone here.

Investor: Especially a Mr. David Coyne. Is he still with the company?

Fidelity Rep: Oh, yes. David's been with us for close to 30 years.

Investor: Well, he's a gem. He really is. He's the one that got us started.

Fidelity Rep: He's a very good man.

Investor: And Mr. Peter Lynch. We followed his principles faithfully.

Fidelity Rep: Many people have. But not everyone calls.

Investor: Well, I just want you to know that we feel very fortunate.

Fidelity Rep: Thank you.

Investor: No. Thank you!



1-800-FIDELITY Fidelity.com

Up Front

EDITED BY ROBERT McNATT



I-WAY PATROL

NAPSTER'S A GOOD THING. HONEST

THE GERMAN MEDIA GIANT Bertelsmann is moving fast to build on its alliance with the music file-sharing rebels at Napster. On Nov. 8, Bertelsmann—which owns No. 3 recording outfit BMG Entertainment—began talking with other major music companies in New York. It wants them to unite in order to market music and other forms of

UNITER? entertain-
Middelhoff ment to
Napster's
40 million users. If they agree, Napster could emerge as the technical standard for online entertainment.

But Bertelsmann insiders point to several sticking points. These include Napster's user fees, the earnings that record companies and artists will see from the arrangement, and the industry's hostility toward Napster, which is widely viewed as a copyright-infringement scheme. Even some of Bertelsmann's execs are miffed, though the company says the recent resignations of BMG's president and chairman weren't related to the Napster issue. CEO Thomas Middelhoff thinks he can unite the music companies. He was already calling them hours before announcing the Napster deal. *Jack Ewing*

THE LIST BUSY AT THE BIJOU

A trio of scantily clad Charlie's Angels pulled in \$40.5 million over the movie's Nov. 3-5 opening weekend. That is a box-office record for nonsummer openings. But the strongest weekend grosses in the past five years still come from summer blockbusters, which are usually male-dominated action or sci-fi flicks.

GUY THING:
M:I-2



TOP WEEKEND OPENERS

THE LOST WORLD: JURASSIC PARK	May, 1997		\$72.1 mil.
MISSION: IMPOSSIBLE-2	May, 2000		\$70.8 mil.
STAR WARS: THE PHANTOM MENACE	May, 1999		\$64.8 mil.
AUSTIN POWERS: THE SPY WHO SHAGGED ME	June, 1999		\$54.9 mil.
X-MEN	July, 2000		\$54.5 mil.
BATMAN FOREVER	June, 1995		\$52.8 mil.
MEN IN BLACK	July, 1997		\$51.1 mil.
INDEPENDENCE DAY	July, 1996		\$50.2 mil.

DATA: EXHIBITOR RELATIONS CO.

TALK SHOW "If we say somebody's carried the state, you can take that to the bank. Book it!"

—Anchorman Dan Rather, before CBS reversed a call on election night that George W. Bush had carried Florida

SPLITSVILLE

A SITE FOR SORE DIVORCEES

THREE YEARS AFTER HER bitter, high-profile divorce, in which she sought half the estimated \$100 million net worth of hubby Gary Wendt—then chief of GE Capital—Lorna Wendt has moved her crusade for spousal equity from the courts to the Web.

Wendt's 1997 divorce sparked national debate on the value women bring to executive marriages. She received a \$20 million settlement, and has spent \$2 million of that on the nonprofit Institute for Equality in Marriage, which aims to help people achieve just that. On Nov. 1, IEM launched its new Web site, equalityinmarriage.org. The site has info on living together,



pre-nups, divorce law, and suitability. One of the odder bits of advice: "Establish a love count and make regular deposits, positive experiences that provide your mate end and security." The site's tors, not surprisingly, mostly women, many whose marriages unraveling.

The site mentions Wendt's settlement.

THE WENDTS
Still sparring

which is still an appeal. Wendt, was on vacation

unavailable for comment. She wants more money. Executive Director Ellen Saks says IEM's approach covers "not just the financial and legal issues but also the emotional, spiritual, self-esteem ones." That's good. But the money helps. *Diane Br*

CORPORATE COUPLINGS

THE TURBOCHARGED SNEAKER

THE AUTOMOBILE DESIGN studio that developed the hot-selling Audi TT sports car now brings you a tread of a different flavor: Los Angeles Lakers superstar Kobe Bryant's new shoes.

The folks at Adidas, maker of the Kobe, were looking for a non-traditional sneaker design in 1999. They spotted their inspiration in the TT, asked the car-maker for help—and got it. Audi doesn't mention any of that in its TT marketing. It shuns endorsements featuring jocks, whose hijinks could generate bad publicity. But Audi is still getting marketing mileage from the deal. Adidas will spend \$10 million

to promote the new \$100 shoes, including a Web site heavy with Audi references. The TT is also shown in a Kobe Bryant poster given every buyer of the shoes.

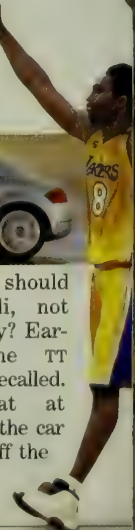
If Bryant seems to soar a bit easier in his new footw

VROOM!
Audi TT,
Lakers
superstar



maybe he should thank Audi, not Adidas. Why? Early on, the TT coupe was recalled. Seems that at high speeds the car would rise off the pavement.

Jeff Green



THE EPITOME OF PERFORMANCE.



ANNOUNCING HIGH-PERFORMANCE PROJECT COMMUNICATION SOFTWARE.

... us one hour. We'll show you how ActiveProject®, our high-performance Web-based project communication software, enables world-class companies to communicate with external partners at extraordinary speed—
... er than any traditional method. And we'll demonstrate how it helps you deliver your
... ducts to market faster. In return for your time, we'll give you an extraordinary chance to win a **ActiveProject®**
... i-performance Porsche® 911™ Carrera® worth \$82,290 (MSRP). Visit www.frametech.com/AA
... all 888.311.9138 to schedule your private product presentation. You must complete your live demo
... re November 30, 2000 to enter the sweepstakes. Contact us now—your commute may never be the same again!



AMEWORK
CHNOLOGIES

DE PROJECTS VIRTUALLY ANYWHERE™

Sweepstakes available only to program managers and above in selected manufacturing companies. You must complete a live presentation/demo by Nov. 30, 2000 to qualify. No purchase necessary. Void in Florida. View complete rules at www.frametech.com/rules. PORSCHE and CARRERA are registered trademarks. 911 is a trademark, and the distinctive shapes of PORSCHE automobiles are trade dress of Dr. Ing. h.c. F. Porsche AG. Used with permission of Porsche Cars North America, Inc. Porsche Cars North America, Inc. and Dr. Ing. h.c. F. Porsche AG are not affiliated or associated with this contest in any way.

©2000 Framework Technologies Corporation. All rights reserved. 44

Up Front



ZEN AND NOW

THIS 'IRON LUNG' IS A BATHING BEAUTY

TOO TIRED—OR TOO LAZY—TO take a bath? Then let someone else, or something else, do it for you. After two years of development, Avant, a cosmetics company in Kyoto, Japan, has introduced what it calls the world's first body-washing machine, the Sante Lubain 999.

Santes are marketed mainly for women, who use them

SPA TREAT: in salons that *Cleansing* also serve tea, give massages, and offer other spa-like delights. The customer lies in a bullet-shaped capsule resembling an old iron lung. Rollers inside gently sway her back and forth to the sounds of New Age music, while she gets a shower, a warm rinse, a short sauna, and a lotion and perfume spray. Cost: \$14 for a 20-minute treatment. And Avant will introduce a shampoo function in 2001. The company operates 20 machines at three salons, including a much-visited site in Tokyo's plush Ginza district.

Pending government O.K., Avant also seeks to benefit from Japan's aging populace by selling the \$167,000 machines to old-age homes and hospitals, says Managing Director Takao Masuda. Sorry, America. There are no plans right now for sales in the U.S. *Tomoko Takahashi*

DEEP THINKERS

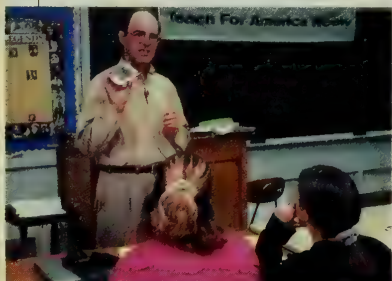
UNEASY LIES THE HEAD...

PITY POOR MICHAEL CAPELLAS, CEO of Compaq Computer. He has reinvigorated the largest PC company in the world and is worth millions. But he still can't find peace

nonprofit outfit that seeks out college grads for teaching stints at public schools in poor areas. Capellas talked about the Internet, mused about the digital divide, and encouraged the kids to surf the Web on school PCs. Said Capellas: "I worry about kids that don't have access to the Internet. They are going to be at a real competitive disadvantage."

And then, responding to a student's question, Capellas talked a little bit about the disadvantages of being a CEO of a world-famous corporation. "It's become like being a rock star," said Capellas, who, bespectacled and buttoned-down, hardly conjures the image. "Sometimes I just want to enjoy my dinner without strangers interrupting me to talk about their computers."

No one told him that—if that's what he wants—maybe he should teach high school instead. *Kate Murphy*



CAPELLAS: Woes of a CEO

and quiet when he wants it. Recently, Capellas lectured a class of students at the largely poor and Latino Robert E. Lee High School in Houston, at the invitation of Teach For America, a

DRAWN & QUARTERED



UNION DUES

HOLLYWOOD SQUARES OFF WITH WRITERS

NOW THAT THE SCREEN ACTORS Guild (SAG) has negotiated an Internet payment clause in its tentative Oct. 22 agreement with the ad industry, other entertainment unions are building on the precedent.

In a major coup, SAG won the ability to negotiate payment for actors in ads appearing online. Now, the 11,000-member Writers Guild of America, whose contract expires on May 2, 2001, has put Internet payments on its agenda for a comprehensive contract. The WGA introduced

a stand-alone contract early this year solely for online work. It mandates employer benefit contributions and negotiated payments when work appears online. The companies have used the contract so far. The WGA declines to name them.



SCRIBES: Online clout

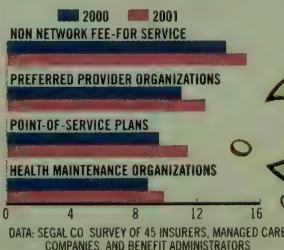
But the face-off over Net comes May, when WGA squares with the Alliance of Motion Picture & Television Producers, ABC, CBS, and NBC.

Says Cheryl Rhoden, WGA assistant executive director: "Regardless of the medium, our concern is to get our members paid fairly." As of yet there's no sign, however, how fair the industry was to be. *Birgitte Ra*

THE BIG PICTURE

PROGNOSIS FOR MEDICAL COSTS: OUCH!

For the fourth year in a row, the cost of medical plans is projected to rise. Even costs for the less expensive HMOs are far outpacing inflation, forcing businesses to confront sharply higher premiums.



Surprisingly, to become one of the largest e-business companies in the world, you don't have to deal in books or collectibles.



Fannie Mae's home office

For over 30 years, you've known Fannie Mae as the private company with a public mission to expand the dream of homeownership. Despite our traditional look, we've also been a leader in developing innovative technology solutions that help our lender partners serve more borrowers and qualify more families. So it's only natural that we're putting this expertise to work by making our technology more widely available on the Internet to help our mortgage industry partners offer consumers the best possible low-cost mortgage experience.



www.fanniemae.com

Last year alone, we conducted about \$170 billion in business through our proprietary e-business network. Now we are moving all of our business services to the Internet, enabling us to do \$300 – \$400 billion of business online each year.

Which explains why we're more than just the world's largest source of mortgage funds. We're rapidly becoming one of the world's largest e-businesses.

Fanniemae.com. It's how we do business. Period.

EDITOR-IN-CHIEF: Stephen B. Shepard
MANAGING EDITOR: Mark Morrison
CHIEF ECONOMIST: William Wolman
ASSISTANT MANAGING EDITORS:
 Joyce Barnathan, Frank J. Comes, Robert J. Dowling, G. David Wallace
ART DIRECTOR: Malcolm Frouman
CHIEF OF CORRESPONDENTS: James E. Ellis
SENIOR EDITORS: Bob Arnold (New Media), Rick Green (Frontier), Neil Gross, Mary Kuntz, Jeffrey M. Laderman, Christopher Power, Kathy Rebello, Jane A. Sasseen, Ciro Scotti, John Templeman, Lee Walczak (Washington), Elizabeth Weiser, Seymour Zucker
EDITORIAL PAGE EDITOR: Bruce Neussbaum
SENIOR WRITERS: Catherine Ernst, Robert Barker, Aaron Bernstein, Anthony Bianco, John A. Byrne, Peter Elstrom, Gene G. Marcial, Otis Port, Paul Raeburn, Gary Weiss
ECONOMICS: James C. Cooper (Sr. Economist/Bus. Outlook ed.), Kathleen Madigan, Michael J. Mandel (Economics ed.), Peter Coy, Charles J. Whalen, Gene Koretz (Trends ed.), Christopher Farrell (Contributing ed.)
INTERNATIONAL: Patricia Kranz (European, Latin American Editions ed.); Michael S. Serrill (Sr. ed.); Pete Engardio, (Sr. news ed.); Rose Brady (Sr. writer); Sheridan Prasso (Asia), Cristina Lindblad (Latin America), Julia Luchitblau (Int'l. finance)
ASSOCIATE EDITORS: Dan Beckue, Amy Dunkin, Mike France, Toddi Gutner, Steve Hamm, Ira Sager, Eric Schine, Fred Strasser, Marcia Vickers
PICTURE EDITOR: Lawrence Lippmann
MANAGING ART DIRECTOR: Jay Petrow
SENIOR ART DIRECTOR: Steven Taylor
INTERNATIONAL ART DIRECTOR: Christine Silver
DEPARTMENT EDITORS: Books: Hardy Green. Computers: David Rocks. The Corporation: Diane Brady, Nanette Byrnes. E-Business: Timothy J. Mullane. Finance & Banking: Emily Thornton, Debra Sparks, Heather Timmons. Frontier: Larry Kanter, Robin D. Schatz. Industrial Management: Adam Aston. Internet: Spencer E. Ante. Management: Louis Lavelle. Markets & Investments: Mara Der Hovanesian. Media: Tom Lowry. News: John Potts. People: Susan Berfield. Personal Finance: Susan Schreier, Anne Tergesen. Science: Ellen Licking. Scoreboards: Frederick J. Jespersen. Technology Strategies: Marcia Stepanek. Telecommunications: Steve Rosenbusch. Up Front: Robert McNatt. Working Life: Michelle Conlin
CONTRIBUTING EDITOR: Mark Hyman (Sports business)
STAFF EDITORS: Dennis K. Berman, Lewis Braham, Jeanette Brown, Heather Green, Jennifer Merritt, Joan Olick, Kimberly Wiles
COPY EDITORS: Prudence Crowther, Harry Maure, Marc Miller (Deputy), Jim Taibi (Asst. chief), Tim Belknap, Aleta Davies, Jack Robbins, Doug Royalty (Sr.), Giles Blunt, Joy Katz, Barry Maggs, Anne Newman, David Pengilly, Malka Percal, Monica Roman, Lourdes Valeriano.
RESEARCHERS: Maria Chapin, Gail Fowler, Aida Rosario
PRODUCTION COPY EDITORS: Lawrence Dark (Chief), Céline Keating, Robert J. Rosenberg (Deputy chiefs), Alethea Black, Sarah B. Davis, Hallberg Hallmundsson, Robert S. Norman, David Purcell, Victoria Rubin
ART: Don Bessa, Alice Cheung (Assoc. dir.), Jamie Ellis, Edith Gutierrez, Peter Marshutz (Asst.). **Graphics & New Media:** Arthur Eves (Creative dir.), Joan Danaher (Graphics dir.), Rob Doyle (Deputy graphics dir.), Jaime Beauchamp, Laurel Dauris Allen, Alan Baseden, Joe Calviello, Matthew Kopit, Alberto Mena, David Rudes, Ray Vella (Illustrators); Eric Hoffmann.
IMAGING: James Leone (Mgr.), Alan Bomzer (Asst.), Rich Michiel, Leo Nietzer, Joseph Rhames
PHOTO EDITORS: Scott Mlyn (Deputy); Ronnie Weil (Sr.); Cynthia Carris Alonso, Bettina Baudoin, Paula Gillen, Kathleen Moore, Anne Murray, Andrew Poppa, (Assoc.), Sarah Greenberg Morse (Asst.); M. Margaria Eiroa (Traffic mgr.); Lucy Conticello, Mindy Katzman (Researchers); Burke Hughes (Researcher/Librarian)
EDITORIAL OPERATIONS: Susan Fingerhut (Director); Ken Lockwood (Mgr.), Karen Butcher, Francisco Cardoza, Thomas R. Dowd, Stephen R. Lebrun, Jody A. LoGrasso, Jose L. Martin, Peter K. Niceberg, Jane M. Perkinson, Laura Reissman, Karen Turok, Ilse V. Walton, Barbara Wilhelm Mark Lang
EDITORIAL TECHNOLOGY: Thomas L. Morgan (Director), Christopher Amado, Richard Balestrino, David Bandler, V. Steve Ben-Ari, Amanda Chan, Lawrence Crowe, Beth Higgins, James Kutz, Neil MacLeod, Mar Marubio, John Navarro, Juan Rodriguez, Marta Skrelja, Mauro Vaisman, Julian Wong
BUSINESS WEEK ONLINE: Michael Mercurio (Managing, ed.), A. Peter Clem, John A. Dierdorff, John Johnsrud; Heather Barry, Stefani Eads, Sam Jaffe, B. Kite, Jessica Loudon, Joseph Mandel, Tzyh Ng, Patricia O'Connell, Margaret Poppa, Alex Salkever, Michael Schneider, Amey Stone, Kathy Vuksana
CORRESPONDENTS: Atlanta: Dean Foust (Mgr.), Charles Haddad, Aixa Pascual. Boston: William C. Symonds (Mgr.), Norm Aleser, Rochelle Sharpe, Geoffrey Smith. Chicago: Joseph Weber (Mgr.), Michael Arndt, Robert Berner, Roger O. Crockett, Julie Forster, Pallavi Gogoi, Darnell Little, Connecticut: Pamela L. Moore. Dallas: Wendy Zellner (Mgr.), Stephanie Anderson Forest. Detroit: Kathleen Kerwin (Mgr.), Jeff Green, Joann Muller, David Welch. Los Angeles: Ronald Grover (Mgr.); Larry Armstrong, Christopher Palmer (Sr. correspondents); Steven V. Brull, Ariene Weintraub. Philadelphia: Amy Barrett (Mgr.). Silicon Valley: Linda Himmelstein (Mgr.). Peter Burrows, Ben Elgin, Jay Greene (Seattle), Joan O'Cl. Hamilton, Robert D. Hof (Sr. correspondent), Jim Kerstetter, Louise Lee, Andy Reinhardt, John Shinal. Washington: John Carey, Paula Dwyer (News eds.), Howard Gleckman, Mike McNamee (Sr. correspondents), Rich Miller (Sr. writer), Amy Borus, Dan Carney, Laura Cohn, Stan Crook, Richard S. Dunham, Paul Magnusson, Nicole St. Pierre, Christopher H. Schmitt, Stephen H. Wildstrom (Tech. & You), Lorraine Woellert, Catherine Yang, Douglas Harbrecht (Online: Sr. News ed.), Beth Belton (Online: News ed.). Beijing: Dexter Roberts (Mgr.). Bombay: Manjeet Kripalani (Mgr.). Brussels: William Echikson. Frankfurt: Jack Ewing (Mgr.), David Farland, Christine Tierney. Hong Kong: Mark L. Clifford (Mgr.), Frederik Balfour, Bruce Einhorn. London: Stanley Reed (Mgr.). Kenya: Kenya City: Gen Smith (Mgr.). Moscow: Paul Starobin (Mgr.). Paris: John Rossant (Mgr.). Stephen Baker, Carol Matlack. Rome: Gail Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Shari (Mgr.). Tokyo: Brian Bremner (Mgr.). Robert Neff (Contrib. ed.), Ken Belsion, Irene M. Kumi
EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fontaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), Susan Rutledge (Research mgr.), John Gady (Technology mgr.), Laura Kristensen (Tech. mgr.), Fred Katzenberg (Mgr.), Orelia, David Polek, Susan Zegel. Office Manager: Roselyn Kopit. Readers Report: Yvette Hernandez. Reprint Permission: Wendy Hernandez. Special Asst. to Editor-in-Chief: Christine Sumserson

BITING INTO THE KRISPY KREME DEBATE

Recent hype presents this company and the tasty doughnuts it purveys as a new phenomenon ("Krispy Kreme: A dozen hot questions," BUSINESS WEEK Investor, Oct. 30). But Krispy Kreme has been around for decades. The chain has had years to prove itself—and did not do so. New management, new marketing, and franchised outlet expansion can only do so much to reinvigorate an average performer, at best.

Unfortunately, ever since the demise of the corner bakery of yesteryear (crushed by Dunkin' Donuts), the average person has no idea what a good doughnut should taste like. Thus the upsurge in popularity of Krispy Kreme's warm, sugary offering. It has people yearning for a simpler, purer time when doughnuts were more of a morning breakfast staple.

The cracks in the armor will come when year-over-year same-store sales demonstrate underperformance. You can only open so many new outlets before you have to be accountable for same-store performance and growth. I suspect that when Krispy Kreme stock tumbles, a white knight like Starbucks may be in the wings to keep it out of the deep fryer.

M. J. Macedonio
Coppell, Tex.

The days of political correctness are about over, thank God. Give me stuff that tastes good: Screw the calories and fiber content. Krispy Kreme stock will fight the \$100 ceiling for a while but will hit \$120 before the end of the year and never look back. Rightly or wrongly, it will continue to outperform the market for the foreseeable future.



As for profitability, it has unlimited potential. It is the darling of the donut sector right now. If you don't own the stock, be prepared to spend the next five years writing articles about why it shouldn't be worth what it is. You might be right, but that and

Doug Mo
Ped

People have lost the connection that when you buy stock, you are buying a share of the company's earnings. When you buy stock in an ordinary company for a price-earnings ratio of 50 to 1, you can expect a 1% to 2% return on your investment. The rest is blue sky.

No one would become a partner in a business that expected a return on investment that low, but they buy the same deal on stocks every day. It's investing. It's gambling that the next person is even stupider than you are and will accept an even lower return. It's like a chain-letter pyramid scheme. People ever wake up and discover that there is no way to get their money back except by the whim of the market, a market more than Krispy Kreme will crash.

David Brad
Des Moines

Doughnuts have been around for a long time. In fact, they are made from

SR. VP. OPERATIONS: Gary B. Hopkins
SR. VP. ASSOCIATE PUBLISHER: Constance E. Bennett
SR. VP. MARKETING & BUSINESS DEVELOPMENT: Keith L. Fox
SR. VP. BUSINESS WEEK ONLINE: Gregory J. Zornian
VP. CONSUMER MARKETING/CIRCULATION: Thomas Masterson
VP. U.S. ADVERTISING SALES DIRECTOR: Joanne K. Bradford
VP. STRATEGIC PLANNING & PRODUCT DEVELOPMENT: Kimberly Greer

PRESIDENT & PUBLISHER: William P. Kupper Jr.

VP. SALES: Karen Christiansen (Southeast reg.), Robert H. Kelly (Northeast reg.), Gary London (Midwest region), Michael Dace (Western region), **VP. MANAGING DIRECTOR:** Alan Lamm (Asia), Paul Maravaglia (Europe), **VP. TECHNOLOGY/NEW MEDIA:** Christopher C. Rousseau
VP. CONTROLLER: Kevin P. Pascale
VP. ADVERTISING BUSINESS & PRODUCTION: Linda F. Carval
VP. ACCOUNT DEVELOPMENT & RESEARCH: Charlene Trentham
VP. STRATEGIC PROGRAMS: Jim Richardson

Business Week

A Division of The McGraw-Hill Companies

NUMBER 27, 1998 (ISSN 0007-7135) 3708**
 Published weekly, except for one week in January and one in August, by The McGraw-Hill Companies, Inc. Founder: James H. McGraw (1860-1948).
 Executive, Editorial, Circulation, and Advertising Offices: The McGraw-Hill Companies Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone: 212-512-2000. Telex: Domestic 127031; Intl. 2340127031. U.S. subscription rate: \$4.15 per year; 2 years: \$7.95; 3 years: \$10.95. Single copies: \$3.50. Back issues: \$5. Write for rates in other countries. Subscriber Services: 1-800-455-1200. TDD: 1-800-554-1579.
 Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J. 08520. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Canada Post International Publications Mail Product Sales Agreement No. 246484.

Registered for GST as The McGraw-Hill Companies, Inc. GST #R12307. Copyright 1998 by The McGraw-Hill Companies, Inc. All rights reserved. registered in U.S. Patent Office. European Circulation Center, McGraw House, Maidenhead, Berks, England. Telephone: 01228-2431; Telex: 2431.

Officers of The McGraw-Hill Companies, Inc.: Harold W. McGraw III, Chairman, President, and Chief Executive Officer; Kenneth M. Vittor, Executive President and General Counsel; Robert J. Bahash, Executive Vice President, Chief Financial Officer; Frank D. Perglione, Senior Vice President, Director of Operations.

PHOTOCOPY PERMISSION: Where necessary, permission is granted to photocopy any article for personal or internal reference use without express permission of The McGraw-Hill Companies, Inc. is prohibited. Address reprint requests to Business Week Reprints, 1221 Avenue of the Americas, New York, N.Y. 10020 or call 212-512-3148. ISSN 0007-7135/98 \$4.15. PRINTED IN THE U.S.A.

CORRECTIONS & CLARIFICATIONS

Nothing mellow at Yellowwave," (News: Analysis & Commentary, Oct. 23) should have stated that Israel Digital Broadcast Corp. subsidiary NewS@t qualified for a license to broadcast satellite TV but was not yet paid for that license. Also, it was Prosper Abitbol and Eric Benhamou who were reunited in 1998, not Ron Oren and Benhamou. Finally, the statement about Benhamou's role being disputed in court filings should have read: "Benhamou's role is but one of several issues on which Prosper Abitbol and [Laura] Ballegeer have with Benhamou." Benhamou is not party to this lawsuit.

Equities: Up from the bottom," (Finance, Nov. 6) incorrectly stated that JDS Uniphase and Ciena had earnings shortfalls. In fact, JDS recently reported a fiscal first-quarter profit, and Ciena has yet to report its latest quarter.

Who is the fairest guru of them all" (Upfront, Nov. 13) should have said that Lehman Brothers' Net analyst Holly Becker was downgraded Amazon.com on July 26.

Basic staples, flour and sugar. So, as people have a sweet tooth, there will be doughnuts.

Crispy Kreme's founder, Vernon Rudolph—my father—built the company on basic principles: good product, good service, good price, led by a good team. For me, when it comes to a good Kreme, I always see the doughnut, not the hole.

Beverly Rudolph Shaw
Winston-Salem, N. C.

THE WEST IS MORE DEPENDENT ON OIL THAN EVER

A common fallacy in the press—and repeated in "Earth to America: The World won't go away" (Economic Analysis, Oct. 30)—is that the developed economies are now less dependent on oil. There is no need to be concerned about the tripling of petroleum prices, says the argument, because Western society obtains more gross domestic product per barrel of oil. Oil efficiency is the answer.

This logic is absurd. First, Western society is not less dependent on oil. In 2000, North America consumed 16 million barrels a day, Western Europe 12 million barrels, and Japan 4 million. Today, those three numbers are 22 million a day, 15 million, and 6 million. This is not reduced reliance on oil; it is greater reliance.

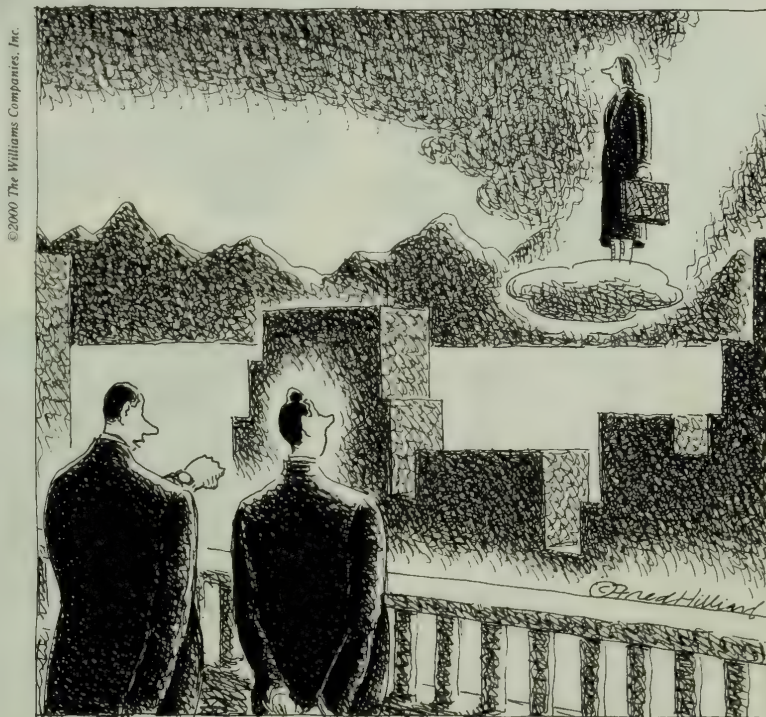
Second, the observation that we con-

sume less oil per unit of GDP is a theoretical irrelevance. We no longer have the lifestyle or the incomes of our parents' generation. Nowadays we consume far more goods, and we travel more than they did, and therefore end up using far more petroleum. Western society is more dependent on oil than at any other time in history.

Andrew Oswald
Professor of Economics
Warwick University
Coventry, England

IN THIS CASE, SELF-REGULATION WAS NOT ON TRIAL

The use of unsubstantiated allegations in a frivolous lawsuit as a pretext to attack self-regulation in the accounting profession did a disservice to the profession, our firm and our former general counsel, Howard Krongard, and your readers ("The Big Five's credibility gap is getting wider," Management, Oct. 30). If your reporter had waited just a few days to hear the evidence in the case—which



"As much as I'd like to stay and see what this means, it's almost time for the weather update on EnergyNewsLive.com."

www.EnergyNewsLive.com. Where energy professionals see long range predictive weather modeling, in real time, on their desktop. All from the only realtime energy news network. It's not weather for everyone. Just everyone in energy.

Williams
ENERGY

www.EnergyNewsLive.com

1-800-WILLIAMS • NYSE: WMB & WCG



How we look at every Five Star retailer.



Now there's a process that puts dealers under the microscope so you don't have to. Five Star. With audits and customer satisfaction scores determining initial certification as well as annual recertification, it basically redefines the way cars and trucks are sold and serviced. With exacting standards that scrutinize what each retailer does and how they can do it better, only our very best make the grade. Take a closer look at a Five Star Certified Chrysler, Plymouth, Jeep, or Dodge retailer. For the one nearest you, call 1-800-677-5-STAR or visit us on the Web at www.fivestar.com. We're sure you'll really like what you see—but only where you see the Five Star sign. **Five Star. It's Better. We'll Prove It.™**



Readers Report

nothing to do with self-regulation—would have learned that the judge blew out the plaintiff's case because he had there was no evidence of any improper conduct by our firm or Mr. Kronold. Similar charges had already been dismissed by courts in Pennsylvania and New Jersey. The subject of self-regulation is an important one to the accounting profession. This commentary added nothing constructive to the discussion.

David M. Crutcher
National Director
Marketing and Communications
Deloitte & Touche LLP
New York

ONLINE BILL PAYMENT COULD BE MORE ELECTRONIC

You missed the boat in "The check is the e-mail" (Information Technology, p. 30). The real reason online bill pay-



hasn't lived up to its potential is that electronic payment systems have a little more than glorified checking services. To be a real help to customers, payment needs to be an instant electronic transfer from their bank accounts to the payee.

Until recently, I lived in Canada, where this has been the norm for years. As able to pay all my bills electronically—credit cards, utilities, and local federal taxes. The bills arrived in mail, but I paid them electronically instant funds transfer from my bank to the payee's bank. The best feature is "post-dated payment," which allowed me to schedule payment of the bill on its due date, keeping my money in my account right up until the last possible moment. These features are offered by all the major banks in Canada. By contrast, the "electronic bill payment" offered by my new banks requires me to pay bills five days before the due date to allow them time to process the payment, because in many cases they are simply mailing a check on

my behalf. They also take up to two days just to set up a new payee. Online bill payment won't take off until it is a completely electronic process, without these time delays.

Bob Andrews
Coppell, Tex.

E-BOOKS WON'T STAND THE TEST OF TIME

E-books could be lifesavers for those who need access to hundreds of pages of product or technical information ("Will e-books be real page-turners?" Media, Oct. 23). And I would rather carry one e-book with 10 novels in it than take the same number of paperbacks on a long trip.

But I can lend real books to multiple friends, multiple times, donate them to libraries or hospitals, or sell them in used-book stores. (Indeed, much of my library consists of used books.) Except for a minor investment in reading glasses, I will be able to read my real books without needing annual software or hardware upgrades. Finally, I don't have to worry about the size, shape, format, type of paper, or font. If a real book is written in English, I will be able to read it.

We can, today, read hieroglyphics, the Dead Sea Scrolls (2,000 years old), the Julius Work Calendar (circa 1020)—indeed, everything written on papyrus, paper, stone, or other material since the dawn of writing. E-book users will be lucky if they can read today's e-books on 2005 equipment. There is no chance that today's e-books will be readable 50 years from now, let alone 100 or 1,000.

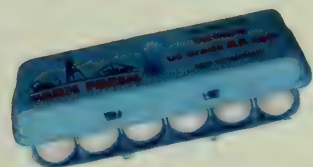
Diane Danielle
Berkeley, Calif.

HOW TO EMPOWER HEALTH-CARE CONSUMERS

Most health-maintenance organizations do such a poor job that concerned employers may well try contracting with doctors or otherwise getting directly involved in meeting workers' health-care needs ("What comes after managed care?" Social Issues, Oct. 23). Well-run companies venture outside their core business only reluctantly but find that such employee advocacy can pay off in happy, productive workers.

Unfortunately, many employers who sponsor health benefits are unwilling or unable to devote the necessary resources to the task. The losers—mostly small business and public-sector employees, but also some at large companies—lack an effective program at work but can't buy health services on their

Items you
should check
to see that
they're certified:



If you had the choice, wouldn't you feel better choosing the product that's been certified? Our retailers are subjected to a grueling process that examines every aspect of what they do before they can earn Five Star certification. And they must maintain high customer satisfaction. So, before you choose a retailer—be sure to check the label.



Five Star. It's Better. We'll Prove It.™

For more information, call us at 1-800-677-5-STAR or visit www.fivestar.com. Jeep is a registered trademark of DaimlerChrysler.

Readers Report

own without losing the tax break for job-based benefits.

Why stop at cutting out managed-care intermediaries? Providing equal tax treatment for privately purchased health services would empower health-care consumers, give workers more choices, and relieve employers of a burden many would gladly relinquish.

Thomas Campbell Jackson
Institute for SocioEconomic Studies
White Plains, N.Y.

IT NEVER PAYS TO OFFER LOUSY SERVICE

Poor handling of less profitable customers can backfire ("Why service stinks," Cover Story, Oct. 23). Rather than bolstering a company's long-term value, it can spawn sagging profits—the very opposite of what it is supposed to do.

Of course, plum accounts should usually be pampered. But identifying and then alienating less-profitable customers—especially those who were wooed with offers of rock-bottom discounts—does not reflect strong strategy. Often, it is the "me too" approach now popular following a failed approach of soliciting everyone, getting as many customers as possible (frequently at deep discounts), expecting to retain them at higher prices, and wishing for eventual heavy cross-selling. Eliminating unprofitable accounts would not seem so necessary if companies had better strategies for attracting customers they want to keep.

Phyllis Ezop
La Grange Park, Ill.

Declining service springs naturally out of our current maximum-profits-this-quarter-no-matter-what business model. A classic MBA way of thinking about things is to measure what each customer costs right now. I call this quantification-of-all-things approach the MBA Syndrome.

Since our MBAs don't expect to stay where they are for very long, the most important thing is to reduce overhead for this moment. Of course, our MBAs do this only because they are encouraged by ineffective senior management. Interestingly, no one is thinking about how to make these low-rent customers more profitable. When businesses focus on cutting costs rather than increasing revenue, that is a sign of poor management.

I have had an account with a national bank for many years. I liked the convenience of its many branches, drive-up banking with real tellers, and friendly, helpful staff. Of course, that was then. This is now: drive-up tellers replaced by

automated teller machines, branches closed, staff cut, tempers frayed, and the surviving staff tired and overworked. I'm leaving that bank for a smaller one that actually appears to want my business. Will losing my business hurt their bottom line? Probably not, but they are not just losing my business. They're also losing my children's future business—they are losing business from the many people who are in contact with me. Every customer lost takes away future potential business as well.

Bruce Phillips
Bellingham, Wash.

It's no secret that hotels, restaurants, and stores give better service to their regular customers. But this sidesteps the real question: How did these customers become regular in the first place? Probably because they were happy enough with that vendor to return for more.

And if vendors are now, as a deliberate business practice, giving first-time buyers lousy service, it seems reasonable enough that many customers will never return after the first visit. So where will the future regular customers come from?

But wait: Maybe we're on the verge of producing a whole new class of even higher-profit customers, who come back loyally again and again despite getting lousy service. And when they do, why bother to give them excellent service? In my business, all the new customers who appear are treated like the most important customer in the world—until they show themselves to be deadbeats.

Norman Linton
St. Petersburg

It is important for companies to realize that providing extraordinary customer service at all levels of the business is a real possibility—and it can be cost-effective at the same time. In fact, failing to provide the same effective service consistently across the board can be extremely detrimental to an organization in the long term.

All customers have the potential to be top-tier. Corporations that don't see a return on investment and continue to buy into the notion of providing the best service only to the most "profitable" customer are putting themselves at a disadvantage. Under this notion, corporations are not considering the overall reputation of a company; the cost required to obtain new customers vs. maintaining customers; and how effective customer service plays into overall competitive advantage.

There are technologies available today

that give corporations the capability to empower every customer-service representative with the knowledge of the best agent and/or have the customer receive answers through assisted or self-service. There are two options: buy your business by providing all customer great service all of the time, or gamble on those few "best" customers.

Massood Zarrab
CEO and President
Services
Natick, Ma

I've been in the retail business for most six years, and customer service has always been taught as the backbone success. Every sale is an important one for it ultimately affects a company's bottom line. To give minimal service to those who spend less than others seems absurd. Opportunities for rewards and perks for spending should be offered to everyone. Companies need to be honest with consumers. They should be told from the front that they might receive only minimal customer service if they spend only a certain amount. Customers are then responsible for their own actions, and must decide where to spend their money. Customers may appreciate the honesty more than finding out in BUSINESS WEEK how unimportant they really are.

Brett Bernano
Danbury, Conn.

BusinessWeek online

The full text of Business Week, the Business Week Daily Briefing, and five years of BW archives are available on the World Wide Web at:

www.businessweek.com

and on America Online at Keyword: BW.

HOW TO REACH BUSINESS WEEK

LETTERS FOR READERS REPORT

All letters must include an address and daytime and evening phone numbers. We reserve the right to edit letters for clarity and space and to use them in all electronic and print editions.

Mail: Business Week, 1221 Avenue of the Americas, 43rd floor, New York, NY 10020

Fax: (212) 512-6458

Internet: bwreader@businessweek.com

America Online: readersbw

SUBSCRIBER SERVICES

For individual subscriptions, corporate subscriptions, renewals, changes or problems, and single copies.

Phone: (800) 635-1200 or (609) 426-7500

Fax: (609) 426-7623

Internet: bwcustsv@businessweek.com

Library fee-based services: (212) 512-6704

REPRINTS AND COPYRIGHT PERMISSIONS

For custom reprints (minimum order of 1,000) contact (212) 512-3148

Fax: (212) 512-2337

Internet: www.businessweek.com/reprints/

For permission contact:

Phone: (212) 512-4801

Fax: (212) 512-4938

FROM THIRD WORLD TO FIRST
The Singapore Story: 1965-2000
Lee Kuan Yew
HarperCollins • 729pp • \$35

SINGAPORE'S GODFATHER MAKES HIS CASE

Two kinds of images have stayed with me from the years I spent in Southeast Asia back in the late 60s. One is of vibrant, fecund, ram-nctious villages and cities, with ounds of peppers in the markets, loud gs in backyards, spicy foods, sewage ells, and crowded, busy streets. The er image is of a little girl, deathly in my arms, in a dank hovel in a nila slum. Her mother had sold her edicine so that her sisters and broth- could get food and clothes to go to a school I taught in as a Peace Corps lunteer.

I had these dueling images in head when I arrived in Singapore at the end of my ian stay. I was struck by w sterile it appeared mpared with Malay and ai societies. There was ler, public cleanliness, d a touch of fear in the . I hated it. A puritanical, thortarian state had reuced the rich Southeast ian tapestry. But some- else was also absent— ject poverty. There were starving children. So I ve Singapore a "pass," the id of ends-justifies-the-means ration- zation for which Lee Kuan Yew, nder and father of Singapore, makes strong case in his fascinating memoir, *From Third World To First*.

Lee is perhaps the greatest Asian ategic thinker of the modern era. He derstands the ballet of big-power re- ions, the rise and fall of nations over e, and, most important, the role of e U.S. in stabilizing the global scene, ecially in Asia. In such matters, only nry Kissinger rivals Lee, who has rticipated in virtually every major ian event of the past 40 years, medi- ng, triangulating, teaching.

There are a number of revealing surprises. During the Asian financial crisis of 1997, Lee met with Indonesian President Suharto's oldest daughter, Siti Hardiyanti Rukmana (Tutut), and urged her and her siblings to abandon their huge business privileges. Lee knew international fund managers wanted them out. Tutut said she would not be able to get her brothers and sisters to change their ways. The rupiah collapsed, and with it the Suharto government.

Lee served as a mediator between China and Taiwan, and China and the U.S., over the years. He encouraged the U.S. to get China into the World Trade Organization, Taiwan to reduce its independence rhetoric, and China to be patient about reunifying with Taiwan.

Lee has always been ambivalent toward America, recognizing its power but being critical of its mores. This volume shows that Lee's mixed feelings may have personal roots. In 1965, following years of anti-Chinese race riots, Malaysia decided to expel Singapore. At this time, Lee's wife became seriously ill. The top specialist for the disease was an American doctor then in Switzerland. Lee asked the U.S. government for help in persuading the specialist to come to Singapore. "They were unhelpful," he writes. "Either they could not or would not help." Lee became so angry that he gave a TV interview in which he embarrassed Washington by disclosing that the CIA had tried to spy in Singapore.

Of course, Lee's most pointed critique of America concerns values. Time and again, he has argued that Asia has certain group ideals that suit it better than American individualism would. But the book reveals that Lee is very selective

in his choice of Asian values, clearly favoring the values of the educated Confucian class of which he is a member (his father was a doctor). In the city-state's formative years, he expressed pure contempt for the traditional rural, farming values of most of its people (values they shared with 80% of Asia's population at the time).

Lee's noblesse oblige authoritarianism and distrust of popular democracy may very well reflect his British upper-class education as much as his Asian background. Certainly corporal punishment and caning in particular, while common in the British upper-class private schools are hardly "Asian" practices. Lee says in the book that the British practiced both whipping and caning before the war in Singapore and his new government adopted the caning.

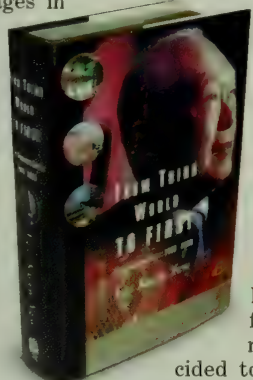
British elitism also appeared to extend to issues of race and culture with Lee. When he was at Harvard in 1968, learning about American society, Lee was struck by the fact that "no scholar was prepared to say or admit that there were any inherent differences between races or cultures or religions. They held that human beings were equal and a society only needed correct economic policies or institutions for government to succeed." Such assertions were naive, according to Lee.

Lee doesn't trust the market, either. In the book, he says that a market economy quickly devolves into a winner-take-all society because of peoples' unequal abilities. That, in turn, leads to social tensions and political instability. So Lee concludes that the nanny state, run by an elite, is the proper Asian model. Never mind that Korea, Taiwan, and Japan have evolved from authoritarian states to democracies.

At 77, Lee stands as one of Asia's great modern leaders, in part because of his intolerance of hypocrisy. Americans, he writes, "want to promote democracy and human rights everywhere, except where it would hurt themselves, as in the oil-rich Arabian peninsula." Ouch.

Yet it is every bit as hypocritical to defend state authoritarianism in a prosperous, highly educated, and secure Singapore. Lee's powerful memoir reveals a great deal—perhaps even more than the author intended.

BY BRUCE NUSSBAUM
Nussbaum is editorial page editor.



WITH MOST OF ASIA MOVING TOWARD DEMOCRACY, LEE STILL DEFENDS AUTHORITARIANISM

Somebody's going to profit
from all this e-commerce data.
Will it be you?



Boom! Just when you thought that your company's information systems couldn't get any more complicated, along comes the e-commerce revolution. And, with it, an explosion of new data. Facts about online customers and their buying habits. About suppliers and global supply chains. As the world leader in data warehousing and e-Intelligence, SAS transforms this data into the knowledge you need. To optimize customer and supplier relationships. To reveal unseen opportunities for cross-selling and for enhancing customer loyalty. To turn your e-commerce operation into an e-profit machine. For more details on e-Intelligence solutions from SAS, call 1-919-677-8200 or stop by www.sas.com.

The Power to Know[™]



BY STEPHEN H. WILDSTROM

tech&you@businessweek.com

AOL vs. MSN: A QUESTION OF STYLE



Both have just updated their sites. Picking one depends on what you want from the Web

In the flighty world of the Internet, America Online has been a rock. While others have flitted from fad to fad, AOL has followed a course of gentle evolution that has allowed it to dominate the industry in size and, more important these days, profitability. AOL 6.0, the latest version of its basic software, makes some important improvements. But the Internet giant made them in a way that won't upset its 23 million users, many of whom chose the service because it is safe, simple, and predictable.

On the same day that AOL released the new version, Microsoft served notice that it is still very much a player in this game. After five years of fits and starts, online also-ran Microsoft Network released MSN Explorer, the first really worthy competitor to AOL. And as is often the case with effective competition, consumers will be the real winners in this struggle.

The bottom line is that both AOL 6.0 and MSN Explorer are excellent packages that make it easy to get on the Internet. The choice is more a matter of preference than the inherent superiority of one over the other.

FRAMED. The home screens of the two services are a good example. MSN opens a modified version of the Internet Explorer browser full-screen. A row of buttons across the top offers choices such as mail, favorites, and chat. A panel on the left side of the screen offers personalized features such as My Calendar and My Stocks. And the rest of the screen is given over to the familiar, if rather busy, msn.com home page. As you go to features of the service or to Web pages, these menus remain as a frame around the content, which appears in a single window.

AOL favors multiple windows. On startup, you see at least four after the obligatory ad or two: the day's welcome window, a list of content channels, an instant message buddy list, and a promo for AOL Plus streaming-video content, which barely works over a broadband connection, let alone a dial-up line. Together

with a complicated set of menus across the top of the page and a separate browser window that opens when you go to a Web site, it makes for a messy screen. But AOL has always done this way, and 23 million customers seem to like it.

AOL e-mail, long a laggard, has become a plus. MSN's decision to use a version of Microsoft's free, Web-based Hotmail puts it at a disadvantage. Web-based mail makes your address book and your messages (and also your calendar) available from any computer that can reach the Internet. But you can only read or write mail while connected to the Net.

AOL's latest improvement on its longstanding approach gives you the best of both Web- and PC-based mail. The new version offers to complete an address as you start to type, and your address book and calendar are now stored on a server to give access when you are away from your own machine. AOL also offers full access to your mail, address book, and calendar from a browser at www.aol.com.

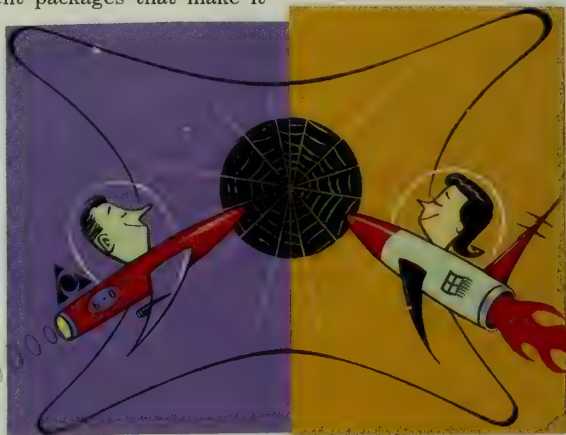
CRITICAL DIFFERENCE. Although both aim to appeal to relatively unsophisticated users, AOL and MSN also appeal to more dedicated techies by offering e-mail and instant messaging on wireless phones. In theory, you can use them on any Web-enabled phone, but AOL makes it tougher to set it up with carriers other than its partners, AT&T Wireless and Sprint PCS. Microsoft makes it easier to use the carrier of your choice, but

works best with phones—like Nextel's—that put MSN Mobile on the menu.

That is the critical difference between the AOL and Microsoft approaches. AOL provides a more controlled environment. Many AOL subscribers get everything they want from the Web—shopping, travel information, new

sports, chat, message boards, mail—without leaving the cozy confines of AOL's own content. Parents worried about what their children might do on the Internet get built-in controls. MSN is much more an open portal that allows—even requires—users to explore on their own.

One advantage of MSN is that if you already have Internet access, the software, downloadable from www.msn.com, and the Web site are free. Internet access from Microsoft costs \$21.95 a month. AOL requires a subscription at between \$4.95 and \$21.95 a month to use its service. Both have matured into good services that appeal to new and experienced users alike. The choice is mostly a question of style.



BusinessWeek online

FOR A COLLECTION OF PAST COLUMNS and online-only reviews of technology products, go to Technology & You at www.businessweek.com/technology/

IT'S THE DAWN OF A NEW ERA IN BUSINESS

Have you seen the light? Success in Wave II of the Digital Revolution goes far beyond connectivity. In the new era, you will transform the fundamental way your business operates. Using strategy as a beacon to light the way, technology as an enabler, and innovative web design and implementation as a vehicle, BoozAllen & Hamilton is working today with international clients — the Fortune 1000, Internet innovators, and government agencies — to change the world.

We have a global incubator network for new e-commerce and technology ventures, with powerful partners including Lehman Brothers in the U.S. and Europe, Nordstjernan AB in Scandinavia, and Rothschild's in Australia.

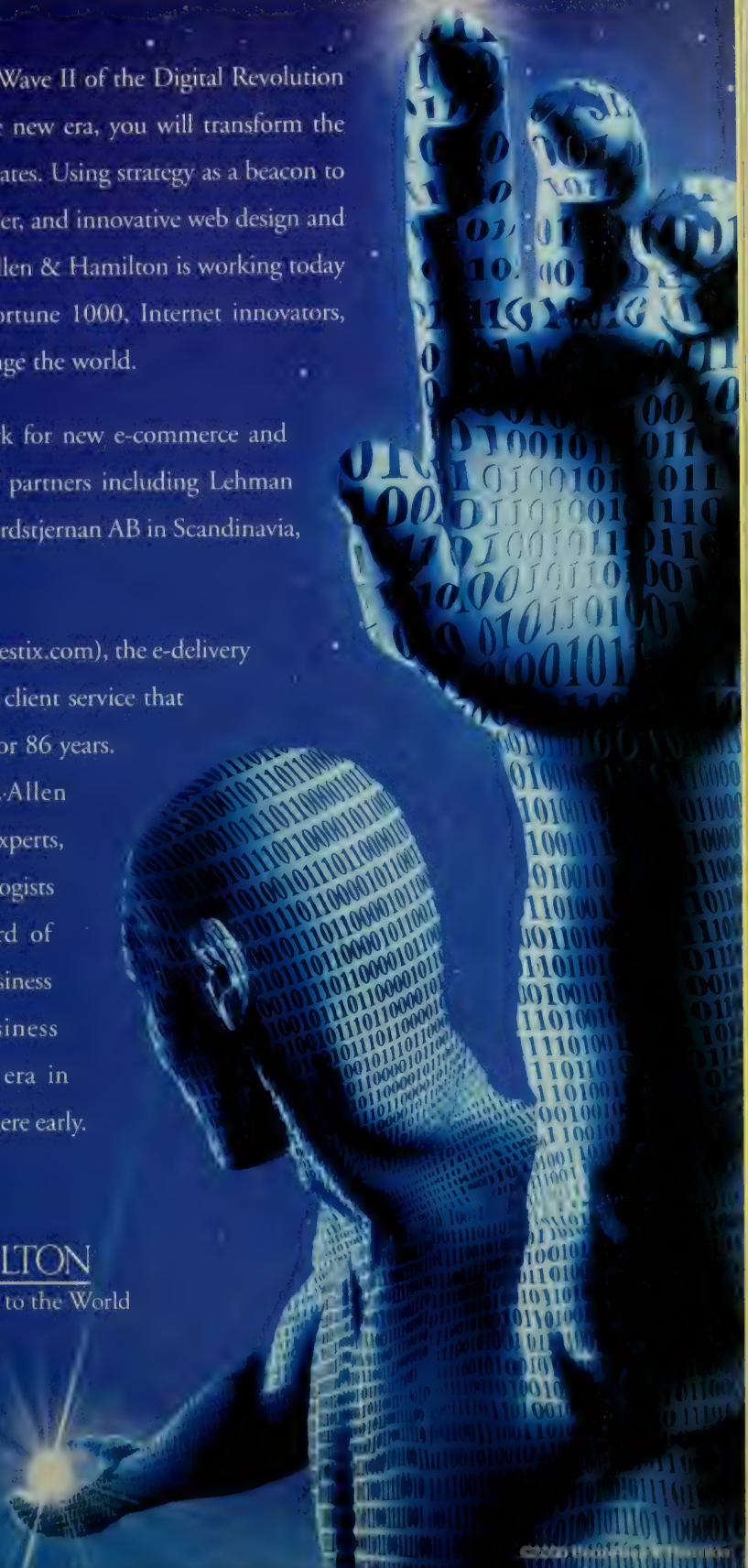
And we are launching Aestix (www.aestix.com), the e-delivery company with the same passion for client service that has been a hallmark of BoozAllen for 86 years.

Working seamlessly with BoozAllen industry strategists and functional experts, Aestix web developers and technologists already have a proven track record of transforming our clients' overall business strategies into profitable e-business realities. It's the dawn of a new era in business. And we can help you get there early.

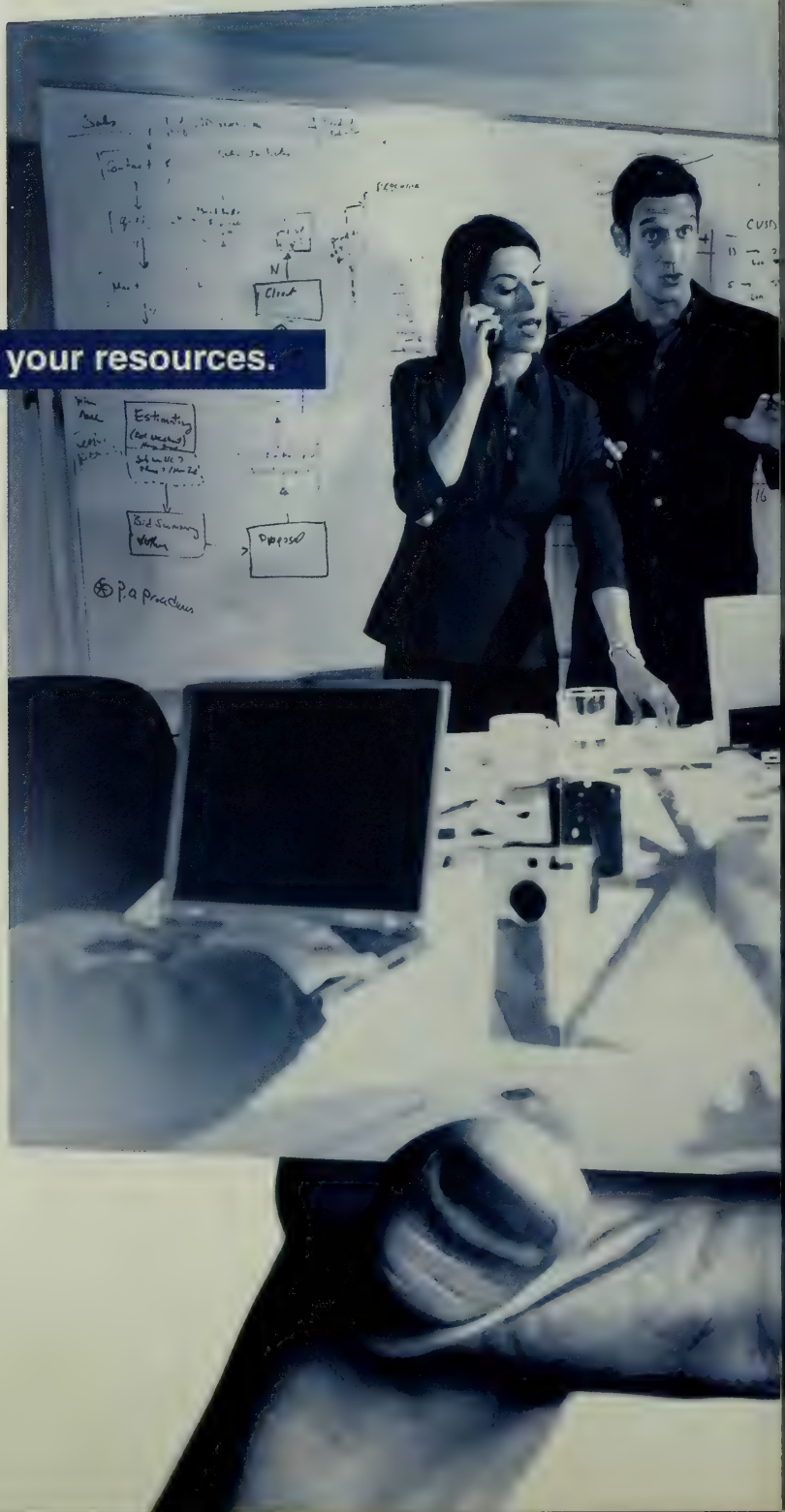
BOOZ·ALLEN & HAMILTON

Management & Technology Consultants to the World

www.boozallen.com



● **Make more of your resources.** ●





Networking solutions that make more of life.

Resources. Human. Physical. Information. You've got them all. The hard part is getting them working together. Reaching the point where one and one equal a lot more than two. Toshiba understands, and responds with a range of networking solutions that help you share information seamlessly to leverage all your resources. Our NAND flash memory products are one good example. More than just a storage medium for digital cameras, digital audio players and next-generation mobile phones, NAND is increasingly becoming a "media bridge". Enabling free data exchange between a wide range of devices and supporting new methods of content distribution in the video and music industries. Connecting people to people and business to business. It's just part of what we do at Toshiba to help you make more of life.



Demand More

In Touch with Tomorrow
TOSHIBA

For more information, visit www.toshiba.com/taec

BY ROBERT KUTTNER

TO THE VICTOR GOES A BOOM THAT'S LOOKING SHAKY



FRAGILE:
Duplicating
Clinton's
economic
success
won't be
easy, but
absent
a Fed
misstep,
prosperity
could well
continue

The Clinton Administration led a charmed economic life. Will the new Administration face rougher going? For starters, the growth rate has apparently slowed somewhat, inflation has been ticking upward, the great bull market is looking like a more normal market, and many analysts are saying that the 10-year budget surplus forecast of \$4.2 trillion was always overly rosy. Also, the collapse of so many dot-coms suggests that the techno-euphoria of the late 1990s has been tempered and the business cycle appears to be moving, finally, toward a down phase. The boom seems to be living on borrowed time.

A period of slower growth or recession would mean more painful political choices for the new Administration. It would not be so easy to have it all—the tax cut, the paying down of debt, the shoring up of social insurance, and the commitment of new funds to education. If President Clinton looked like an economic sorcerer, his successor could seem an economic goat.

Yet irrational exuberance should not give way to irrational pessimism. While the dot-com mania was riding for a fall, that correction was merely a financial-market phenomenon. The productivity gains of the Information Economy are real and show no sign of slacking. And in the end, it is productivity that drives economic growth.

Productivity gains reflect everything from streamlined production processes to automation of clerical functions. As long as something in the financial sector doesn't slop over into the real economy, this decade could well build on the growth rates of the 1990s.

What could go wrong? The economy could be derailed by a foreign financial crisis, by hostilities in the Middle East, or by Federal Reserve miscalculations. As to the latter, it is worth recalling the experience of the last one-term administration, that of George Herbert Walker Bush.

Bush, you may remember, was enjoying unheard-of 90% approval ratings in early 1990, thanks to the easy U.S. victory in the Gulf War. Better-known Democrats were passing up the 1992 Presidential race, leaving the field open to second-stringers like Arkansas Governor Bill Clinton. But a credit crunch caused by cascading bank failures, compounded by a spike in oil prices, drove the economy into a mild recession in the winter of 1990-91. Federal Reserve Chairman Alan Greenspan, in one of his rare serious missteps, failed to respond in time and didn't ease monetary policy.

In early 1991, Greenspan came under intense pressure from the White House and Congress to

cut interest rates. But he would not concede that the economy was really in recession. Characteristically, Greenspan was worrying more about inflation. By the time the Fed grudgingly eased rates slightly, a shallow recession was giving way to a slight recovery. But the damage had been done to Bush's Presidency.

ONE SERIOUS RISK. Greenspan, of course, had learned a lot in a decade. Yet a misstep by the Fed remains the single most serious risk to durable prosperity—and by extension to the fortunes of the new Administration. For the most part, Greenspan deserves immense credit for being ahead of the curve in his understanding of the New Economy. While his colleagues were still fretting that anything below 6% unemployment could set off inflation, Greenspan was willing to test the economy's real potential.

The resulting full employment has achieved what no social program could do. It has dramatically improved the prospects of minorities, has belatedly lifted living standards for the bottom two-thirds of the population. And it has put politicians in the happy position of being able to claim both fiscal prudence and programmatic generosity. This is an extraordinary achievement that should not be trifled with. Yet the Fed today remains overly inflation-phobic, more than the economic circumstances warrant. The boom is slowing, thanks to the Fed's six rate hikes. The goal is a "soft landing," but the Fed could overshoot and push the economy into recession.

A recession would make more contentious and difficult to resolve all of the policy issues fought over during the Presidential campaign. With a closely divided Congress, there will be fierce partisan debate about how much should be spent on Social Security, public entitlements, debt paid down, and tax cuts. If the new Administration wants to keep prosperity strong, its top priority should be outlays for education and training. Only one factor is constraining the economy's capacity to grow: a shortage of competent workers.

It would be hard for the incoming Administration to duplicate the remarkable economic record of its predecessor. The economy may already be entering a phase of slower growth. And it is inconceivable the stock market will repeat its roaring 1990s. All of this will make for difficult policy choices.

For prosperity to continue, the new Administration will require one part luck and one part sensible policies. History will record that the Clinton Administration had more than its share of both.

Robert Kuttner is co-editor of *The American Prospect* and author of *Everything for Sale*.

Philip Morris Introduces PaperSelectTM

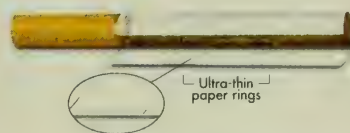
Now Featured on Merit Cigarettes.



Cigarettes made with PaperSelect may be less likely to ignite certain fabrics.*

PaperSelect features ultra-thin paper rings that work like speed bumps, causing the

cigarette to burn slower when the lit end crosses over them.



It may even put itself out when resting in an ashtray. You still get the same rewarding taste,



only now with our patented cigarette paper.

Look for Merit cigarettes now made with PaperSelect.

rettes made with this paper were evaluated under a laboratory test method designed by the National Institute of Standards and Technology to measure the likelihood that cigarettes will ignite the three test fabrics specified in this test method. Under this testing method, these cigarettes produced fewer ignitions of the three test fabrics as compared to the same cigarettes made without the special paper. It is important to note that the test fabrics are not necessarily representative of the kinds of fabrics one might find in a particular home or elsewhere. These cigarettes are not "fire safe." Do not handle or dispose of cigarettes made with this special paper with any less care than other cigarettes. Anything that burns, including cigarettes or cigarette ashes, can cause a fire if handled carelessly.

SURGEON GENERAL'S WARNING: Smoking Causes Lung Cancer, Heart Disease, Emphysema, And May Complicate Pregnancy.

© Philip Morris Inc. 2000

For more information about PM USA and its products, visit www.philipmorrisusa.com or call 1-877-PMUSAWEB.

Ultima: 1 mg "tar," 0.1 mg nicotine—Ultra Lights: 5 mg "tar," 0.5 mg nicotine—Lights: 8 mg "tar," 0.6 mg nicotine av. per cigarette by FTC method.

BY GENE KORETZ

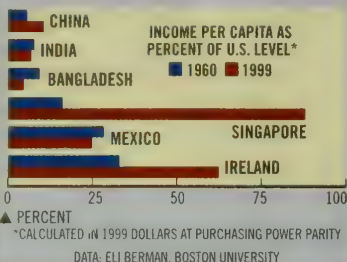
SOLVING A GLOBAL GROWTH ENIGMA

What holds poor nations back?

It's a question that has long perplexed economists: Why do some nations remain so much poorer than others?

In an intriguing new study, economist Eli Berman of Boston University suggests that part of the answer lies in the nature of technological change. Since the early 1960s, he notes, a small group of nations (notably in East Asia) has made spectacular progress. But on

CATCHING UP WITH AMERICA: A SPOTTY TRACK RECORD



average, per capita incomes in the developing world have grown no faster than those in advanced nations, which means the gap between the two has continued to widen in absolute terms.

That reality flies in the face of standard growth theory. A common view, developed by Nobel laureate Robert M. Solow, attributes low national output to workers' low levels of skills and physical capital. Because such resources are subject to the law of diminishing returns—the more one already uses a factor, the less one gains from added increments—poorer nations get far larger payoffs from investing in skills and capital than richer ones. And since they can also import technology, national incomes should tend to converge over time.

The big question, of course, is why this hasn't happened. Most economists point to poorer countries' lack of institutions that protect property rights and enforce the rule of law. While he doesn't disagree, Berman suggests another cause: the fact that technological progress in recent decades has been notably dependent on more educated work forces equipped with high levels of physical capital.

Citing substantial research in the U.S. and elsewhere attributing the widening wage gap between poorly educated and well-educated workers to the growing demand for skilled labor generated by new technology, Berman theorizes that nations with high levels of skilled workers and capital should grow faster than those with lower levels of such resources. To find out, he looks at the productivity growth rates of 28 manufacturing industries in 19 countries from 1980 to 1990.

Berman focuses on multifactor productivity, which reflects the contribution of technical progress to productivity growth above and beyond any increases in labor and capital resources. He finds that industries starting with high levels of skill and equipment per worker in 1980 posted far larger multifactor productivity gains over the 1980s than those with lower levels. Doubling the ratio of such resources to labor, he estimates, subsequently increases multifactor productivity growth by about 1.5% a year.

In sum, one reason poorer nations have trouble catching up with advanced nations is that the latter have resources that allow them to benefit disproportionately from technological change. That's the bad news.

The good news, says Berman, is that poor nations that act to substantially raise education levels and boost capital investment (as Korea, Singapore, and others have done) will reap a double dividend: faster income growth from the rapid accumulation of physical and human capital—and from an enhanced ability to utilize new technology.

THE GENDER GAP IN TOP BRASS PAY

It's a lot smaller than it seems

How large is the gender gap in compensation for top executives of U.S. companies? To find out, Marianne Bertrand of the University of Chicago and Kevin F. Hallock of the University of Illinois at Urbana-Champaign looked at data on total compensation for the top five executives of all companies in the Standard & Poor's 500, MidCap 400, and SmallCap 600 stock indexes from 1992 to 1997.

Notwithstanding the small number of women in the sample, the two economists found that on average they received about 45% less in pay, bonuses, and options than males in the top brass

group, or about \$900,000 a year, vs. \$2 million. About 75% of this gap seems reflect the fact that women tend to manage smaller companies and are much less likely to be a CEO, chair, or president. Another 20% seems due to their tendency to be younger and have less seniority than men.

The good news is that the glass ceiling appears to be cracking. The number of women in top ranks grew from 1.3% in 1992 to 3.4% in 1997, and the fraction of companies with at least one woman among the five highest-paid executives jumped from 5.4% to 15%. Moreover, their average pay rose to 73% of the male average in the sample in 1997, as more women joined the top ranks of larger corporations.

MOBILITY, AMERICAN-STYLE

The decline will abate for a while

America's falling mobility rate will slow or stabilize in the next few years, says Toni Horst of Economy.com Inc., an economics research firm. Since the 1960s, the share of the population changing residences annually has gradually declined from 20% to less than 16%. But Horst spies several developments that should slow or even halt this downtrend temporarily.

Among these are the nation's shifting industrial base toward industries associated with greater mobility, and a coming short-term rise in the share of highly mobile twentysomethings. In the long run, however, mobility is expected to resume its gradual decline due to the general aging of the population, the rise in dual income households, a growth of telecommuting, and increased home ownership.

Of course, the actual number of Americans moving each year will continue to rise due to the ever-expanding population. And U.S. mobility should remain high by international standards, a trait that bodes well for the economy's ability to respond to demand shocks by shifting labor supply to where it is needed.

MORE STAYING PUT



**Nearly 60% of training budgets are
spent on things other than training.**



Kendall Dean, VP and GM Enterprise Services
Bob Sanregret, VP Distance Learning
Global Knowledge

With Centra, we're changing that.

We are Global Knowledge, the world's largest independent IT training company. With an extensive catalog of classroom and computer-based training programs, Global Knowledge delivers technical skills to thousands of business professionals each day, in 21 countries and 16 languages.

We needed a way to help customers build IT skills, while reducing the cost of travel to training centers. A live virtual classroom that allows learners to interact with instructors, peers, and applications in realtime. And a way to grow our business by extending services to more people, in more places, more often.

We expect a real-time Internet solution that lets our instructors and students focus on education, not software. A system that ensures a high-quality learning experience every time. And a company that grows with us as our needs change.

We got a flexible live eLearning solution that helps our customers tackle the demand for IT skills. The ability to extend and grow our education business on the Internet. And, the opportunity to let customers spend more of their training dollars, well...on training.

We chose Centra.

**Solutions for live eLearning and
Internet business collaboration.**



Centra®

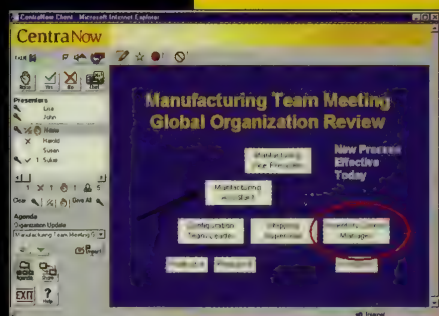
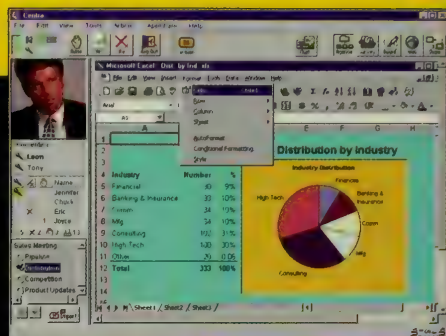
Solutions for live eLearning and Internet business collaboration.

At Centra, we believe that live eLearning is more than education. It's a way to connect business people online using a Web browser to interact in realtime, delivering information and skills more efficiently and with better results than ever before. And without the time, delays, and expense of business travel.

Only Centra offers a complementary suite of enterprise software and Internet services that enable the delivery and exchange of integrated voice, video, presentations, and applications for secure virtual classrooms, online presentations and Web meetings. With Centra, your workforce is more knowledgeable, your customers are more loyal, and your products and services get to market more quickly.

For more information, visit **www.centra.com**, or call 1-888-547-6300.

And deliver some big results of your own.



Centra meets every business need with software products and Web services for interactive virtual classrooms, online presentations and Web meetings.

Microsoft Certified
Solution Provider



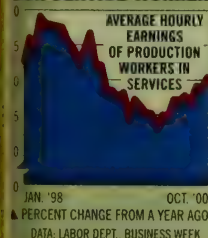
BY JAMES C. COOPER & KATHLEEN MADIGAN

SHH! DON'T WAKE UP THE SOFT LANDING

The Fed must tiptoe in 2001 amid slower growth and higher inflation

U.S. ECONOMY Amid all the twists and turns and last-minute uncertainties about the historic 2000 Presidential election, two things are clear about the economic outlook: Since any fiscal policy changes will not be enacted for another year, the path of the economy will not be any different from what was expected prior to the Florida recount. And even a year from now, the lack of any real mandate for sweeping changes in fiscal policy will limit the new administration's ability to influence the economy. For now, at least, these two factors work in the Federal Reserve's favor. It has already pulled back on the throttle in an attempt to slow the economy from a breakneck pace to a safer cruising speed. Tighter financial conditions are already tempering demand by both consumers and businesses. The latest data from job growth to factory orders to retail activity leave no doubt that the economy has slowed a notch—or two.

FATTER PAY HIKES FOR SERVICE WORKERS



But outside of the malaise in manufacturing, where Fed tightening always hits hard, there is no evidence that the overall economy is anywhere near weak. Indeed, even though job growth is clearly slowing, as shown by the October employment data, labor markets remain exceptionally tight, and workers' compensation is growing at an ever-ster rate, especially in services (chart). That means 2001 is shaping up to be a period of both slower growth and rising core inflation. In the coming year, tight labor markets will have the potential to lift inflation pressures, while at the same time, soft-output gains mean short-term productivity growth is likely to slow considerably. All this creates a very delicate environment in which the Fed will make policy, even as the financial markets are beginning to bet that the Fed's next move is a rate cut.

GOING FURTHER OUT, THOUGH, the Fed has to consider the uncertainties over how much and when any new fiscal boost will be forthcoming. A substantial fiscal boost could come just at the wrong time and severely complicate the Fed's job of engineering a soft landing. The Fed might feel it necessary to counteract a big dose of fiscal stimulus with higher interest rates.

That's not a problem for 2001. The new Administration can do little to interfere with the Fed's control of the economy between now and fiscal year 2002 beginning next October. And even then, the White House must still cope with a high squabble factor on Capitol Hill, given the near-even partisan split in Congress.

For now, most signs suggest that the soft landing is proceeding as the Fed—and the markets—hope it will. However, despite the economy's downshift, there is as yet no sign that the labor markets are loosening up in a way that will take upward pressure off labor costs.

True, payrolls added 137,000 workers in October, less than the average monthly rise of 187,000 during the first nine months of the year. But other data point to a labor market stretched thin. The jobless rate held at 3.9%. The percentage of unemployed workers who voluntarily left their last job jumped to an expansion high of 15.3%. Since August, the duration of unemployment has averaged 5.9 weeks, close to an expansion low. Moreover, 64.4% of the working-age population is employed. That's down a bit from the recent peak, but it's higher than the 1999 average.

A further sign of tight labor markets is the speedup in hourly earnings of production workers. So far in the second half, pay is growing at a 4.2% annual rate, up from 3.9% in the first half and from a 3.2% pace in the second half of last year.

The pickup has been especially noticeable in the private service sector, which employs 77% of all private-sector workers. So far this year, the 12-month growth rate in service pay has sped up from 3.3% to 4%, and shows no sign of slowing. Indeed, the jobless rate in the service sector is still falling. It hit 3.7% in October.

THE ACCELERATION IN PAY GAINS raises the question of how much of the slowdown in job growth reflects the cooler pace of demand in the economy and how much is due to a dwindling supply of workers. For the total labor market, both sides of the equation appear to be at work, but a shrinking labor pool seems to be the chief reason for the recent slowdown in job growth for managerial and professional workers (chart).

New employment for managers and professionals,

IS IT WEAKER DEMAND, OR A WORKER SHORTAGE?



about 30% of all jobs, has stalled over the past year, as job growth from a year ago is down to almost zero. However, the unemployment rate for this same category of workers, at 1.8% in October, has not risen, and compensation for managerial types accelerated in the third quarter. That suggests that the sharp falloff in job growth is not due to layoffs or any weakening in demand. So hopes of holding pay growth in this sector in line with productivity gains may be misplaced.

One area where labor markets are loosening up is manufacturing. Factory payrolls were flat in October, and so far this year the sector has lost 116,000 jobs, on top of 210,000 net layoffs last year. The factory jobless rate rose to 4.1% in October, the highest in two years.

A KEY FACTOR complicating the outlook for inflation and Fed policy next year is productivity. Although third-quarter output per hour rose at a strong 3.8% annual rate from the second quarter, the four-quarter growth rate slowed to 4.9% from 5.4% in the second quarter. Even if the quarter-to-quarter rate is 3% in the final quarter, the yearly pace will slip to 3.7%.

While the structural trend in productivity growth has clearly shifted up, maybe to as high as 3%, the cyclical slowdown is sure to continue next year since, in the short run, productivity growth tends to follow the pace of the economy. However, compensation growth is already growing faster than the long-term growth of

productivity, and it is likely to speed up next year. The measure of compensation in the Labor Dept. productivity report rose at a 6.4% annual rate from the second quarter, and it's up 5.1% from a year ago (chart).

Unit labor costs, which have been tame during the past year, are starting to feel some upward pressure. Consequently, the overall rise in prices in the third quarter failed to keep pace with unit costs, squeezing the profit margins of some companies. That could be why inflation in the service sector is picking up. Service providers have more pricing power to cover their costs than goods producers have, since services typically face little international competition.

A key point here is that the economy is in transition. The past few years have been nothing but blue sky as roses for growth, employment, inflation, profits, and stock prices. The new Administration inherits an economy whose limits are now more clearly visible. The President-elect might do well to realize that any attempt to pump up the economy in the next couple of years will most likely be met with higher interest rates by the Federal Reserve, as the Fed tries to hold the economy within those limits.



ARGENTINA

BAD NUMBERS AND BRIBERY, TOO

As if the sagging Argentine economy did not have enough problems of its own, the country's Senate scandal is now affecting fiscal decisions.

President Fernando de la Rúa has sent his 2001 budget to the lower chamber of Congress. How quickly it passes is seen as a test of Rúa's political strength amid a bribery scandal that led to the resignation of his vice-president in early October.

Quick passage is also needed to meet the requirements of the International Monetary Fund's emergency credit line of \$7.2 billion. In particular, the budget calls for spending cuts of about \$700 million in order to shrink the 2001 budget deficit to

\$4.1 billion, another IMF target.

Argentina has been in a recession for almost two years, with few signs of recovery. Real gross domestic product fell 3% in 1999, and in the first half of 2000 it was

up just 0.6% compared with the same period in 1999 (chart). Monthly data show that real GDP probably grew little, if any, in the third quarter. And at the start of the fourth, October vehicle production fell 10% compared with its year-earlier level.

One measure of investor wariness toward Argentina was the Nov. 7 auction of Treasury bills. The entire issue of \$1.1 billion was sold, a small sign of investor confidence. But the yield was the

highest so far this year, suggesting Argentine securities still carry a big risk premium.

Despite the recession, exports are doing well, rising 3% in the first half. The strength of foreign shipments negate any arguments that Argentina's woes stem from the country's decision to link its currency to the strong U.S. dollar. So far, that link has not made Argentine exports uncompetitive, and it has helped to lower prices. Consumer prices were down 0.5% in October from a year ago.

Deflation, though, has a drawback: It is curbing pay raises and limiting profit growth. And lower income means a drop in tax receipts. So, Rúa has few options but to push through his spending cuts—and quickly—in order to secure needed credit for Argentina's slumping economy.



 EXODUS has agreed to acquire Global Crossing's GlobalCenter Inc. Pending	 CORNING has acquired Netoptix Corporation May 2000 has agreed to acquire Pirelli S.p.A.'s stake in Optical Technologies Pending	 COBALT NETWORKS has agreed to be acquired by Sun Microsystems, Inc. Pending	 inktomi has agreed to acquire FastForward Networks Pending	origin Philips' IT Services Subsidiary has agreed to merge with Atos Pending
\$1,200,000,000  ANALOG DEVICES Convertible Subordinated Notes September 2000	 NUANCE \$87,975,000 Initial Public Offering April 2000 \$363,000,000 Common Stock September 2000	\$264,500,000  CoSine COMMUNICATIONS Initial Public Offering September 2000	 TURNSTONE \$100,050,000 Initial Public Offering January 2000 \$200,000,000 Common Stock September 2000	 webvan has acquired Homegrocer.com, Inc. September 2000
\$73,600,000  MICROTUNE Initial Public Offering August 2000	\$96,600,000  RESONATE Initial Public Offering August 2000	\$219,500,000  Lattice Semiconductor Corporation Common Stock July 2000	\$56,350,000  webex Initial Public Offering July 2000	 E-TEK DYNAMICS has merged with JDS Uniphase Corporation June 2000
\$279,450,000  StorageNetworks Storage Services for the e-Economy Initial Public Offering June 2000	\$103,500,000  MARVELL Marvell Technology Group Ltd. Initial Public Offering June 2000	 ArrowPoint COMMUNICATIONS \$170,000,000 Initial Public Offering March 2000 has been acquired by Cisco Systems, Inc. June 2000	\$230,000,000  ONI Systems Initial Public Offering June 2000	\$132,250,000  Sonus NETWORKS Initial Public Offering May 2000

Leading technology companies share something in common.

For innovative financings and strategic advice, premier technology companies consistently turn to Goldman Sachs. Clients draw on our investment banking expertise, industry knowledge and first-class research to take them where they want to go. From IPOs to convertibles to M&A advisory, we work with clients to structure and implement the solutions they need.



UNRELENTING THINKING

On Nov. 7, just over half of America's registered voters streamed to the polls and rendered a mighty judgment for...your favorite name here.

In one of the closest, strangest contests in modern times, the Presidential race between Democrat Al Gore and Republican George W. Bush deadlocked just shy of an electoral majority. While Gore appears to have won the popular vote, the electoral outcome hinged on a recount in Florida—a state where Bush was clinging to a tiny lead. But even as the votes were sifted in the Sunshine State, with platoons of Gore poll-watchers on the alert for bal-

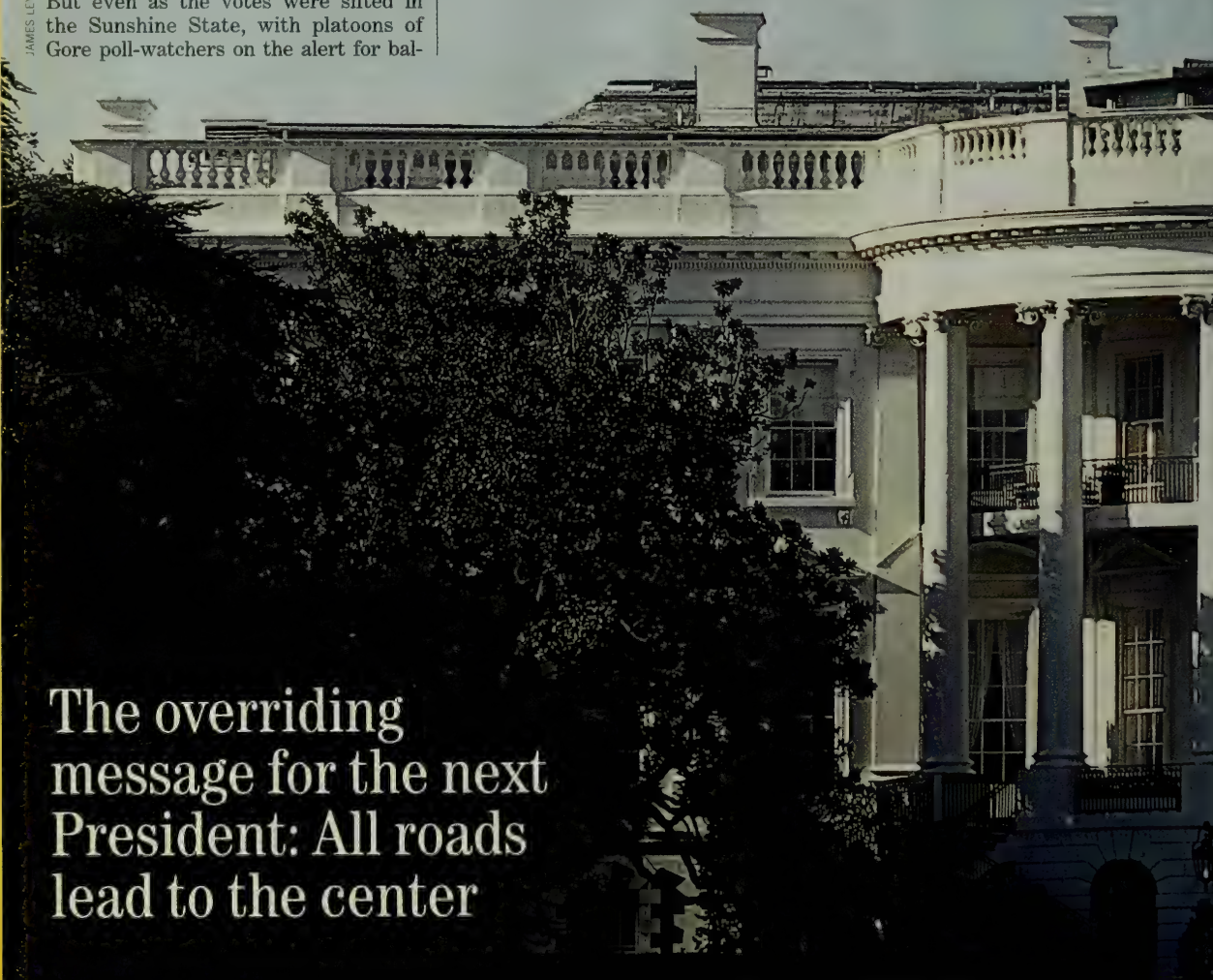
lot-box shenanigans, it was becoming clear that Campaign 2000 was an election like no other, a millennial muddle of epic proportions.

That's because the signals from the citizenry were so contradictory. Everywhere pollsters looked, they found schizoid splits. Americans liked Bush's vision of limited government—and Gore's brand of progressive activism. Roughly a third thought that strengthening Social Security was top priority. But by only slightly smaller margins, others chose tax cuts or paying off the

national debt. They enshrined free enterprise and individual initiative yet felt the tug of populist appeals to curtail the power of big corporations and wealthy elites (page 44). They longed for change but found comfort in the cushy, 10-year economic boom. According to ABC News exit polls, 56% of voters wanted the country to stay the current course, while 41% favored a "fresh start."

In the Presidential race, this riot of swirling sentiment gave neither side a commanding lead but may have

JAMES LEVINE/SABA



The overriding
message for the next
President: All roads
lead to the center

WHAT'S THE

and up delivering a slight edge in popular vote to Gore. On the strength of heavy union turnout and intense grassroots support from liberal whites and minorities, he won many of heartland's big industrial states. But he countered with a cunning small-state strategy, picking off redoubts considered Democratic turf—states such as Kansas, West Virginia, and even Gore's home state of Tennessee. Although victory remained just out of reach as BUSINESS WEEK went to press Nov. 8, the Texan managed to come

as close as he did because his "compassionate conservative" appeals made inroads with blue-collar Democrats and independents, among them suburban women who have been hostile to GOP candidates in the past.

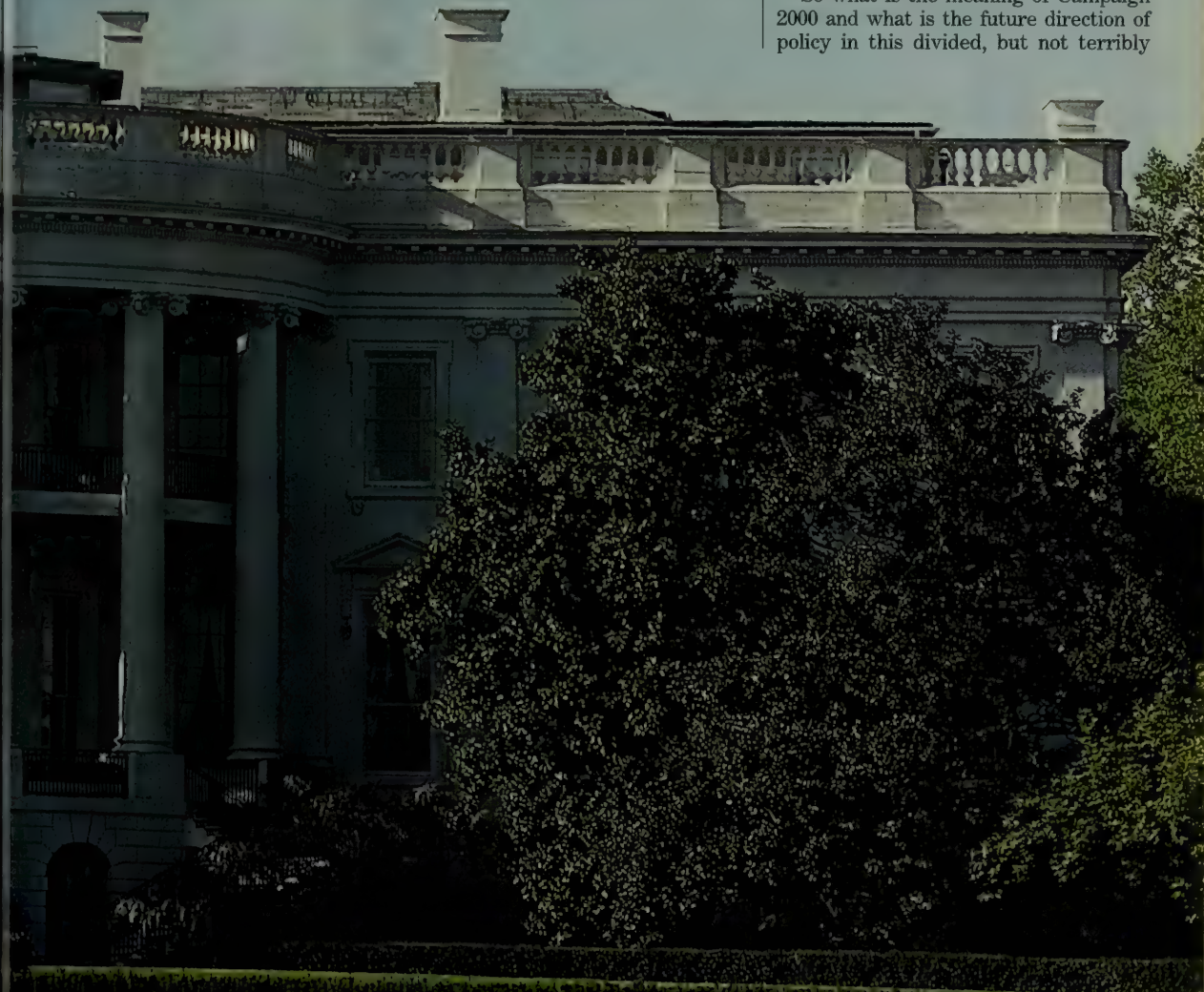
In the battle for Congress, the currents ran in the other direction, and Republicans lost ground. Many House Republicans stole their opponents' scripts and waged campaigns that promised to improve education and health care. As a result, Democrats made little headway in pick-

ing up the six seats they needed to regain control of the House. As of Nov. 8, the net gain was two, with two slots undecided. The shocker was the Senate, where Hillary Rodham Clinton led a cadre of Democrats that managed to

Cover Story

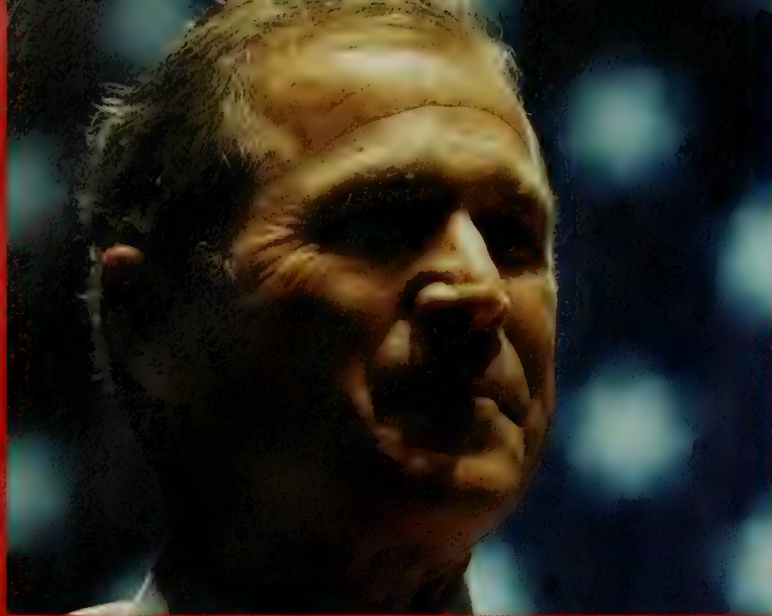
gain at least three seats, a showing that puts the party within a heartbeat of control (page 42).

So what is the meaning of Campaign 2000 and what is the future direction of policy in this divided, but not terribly

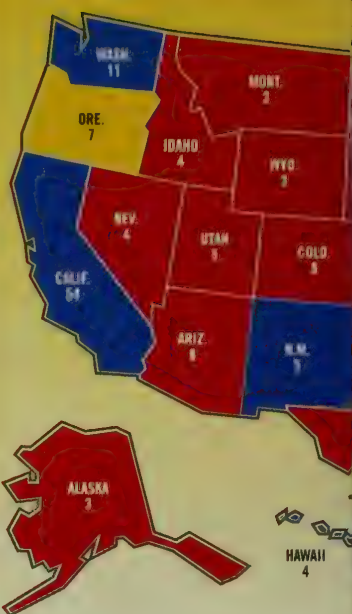


MANDATE?

ELECTION
2000
THE PRESIDENCY



SUPREME TEST: Any right-wing court picks by Bush aren't likely to fly



discontented, nation? All roads lead to the center. Given the split verdicts, neither party can claim a sweeping mandate. Although either a victorious Bush or Gore would put up a brave show, insisting that a win is a win, reality is far different. The lack of national consensus forces whomever is declared the

same ... and that has been a good environment for the markets."

Naturally, partisans in both the Bush and Gore camps continue to insist that victory, even the razor-thin variety, is tantamount to validation. "If we win with a majority of both houses of Congress, of course there's a mandate," insists one Bush economic adviser. "Voters who went for Bush knew they were endorsing tax cuts and some form of entitlement reform."

If that's the case, not a lot of business leaders are acknowledging it. "I don't know many people who went for Bush because of his tax cut," says former Netscape CEO James Barksdale, who supported the Texan. "It's because he backed off some of the harsh, right-wing rhetoric of four years ago and took issues away from the Democrats."

When the fog of confusion in Florida

finally clears, we'll have a winner—winning under such extraordinary circumstances makes victory bittersweet. Job One for the new President-elect reaching out to opponents and pledging a mild form of coalition governance. Either Bush or Gore might be tempted to soothe partisan passions by putting few opposition members in the Cabinet.

Washington cognoscenti speculate the Texas Governor could seek out conservative Dems such as former Georgia Senator Sam Nunn, Representative Charles W. Stenholm of Texas, or Washington superlawyer James C. Langford Jr., an old Midland (Tex.) buddy, for Cabinet jobs. Since Gore is considered more of a partisan and would have to deal with a GOP-controlled Congress, he would face even more clamor to reach out. He might consider Republicans such as ex-New Hampshire Senator Warren

Cover Story

victor to govern incrementally, devoting enormous energy to consensus-building while trying to avoid the traditional post-election tendency to reward base voters with red-meat legislation and controversial appointments.

Concludes Stephen Wayne, a Presidential scholar at Georgetown University: "The voters' message is: 'Speak softly and pursue a more bipartisan approach.'" In the view of many veteran business lobbyists, that means the new President may have to concentrate more on the bully pulpit to create a sense of national unity than on the traditional 100 Days sprint to put legislative points on the board. "This may be one of those years when there is no honeymoon," says Robert Stovall, senior vice-president of Prudential Securities Inc.

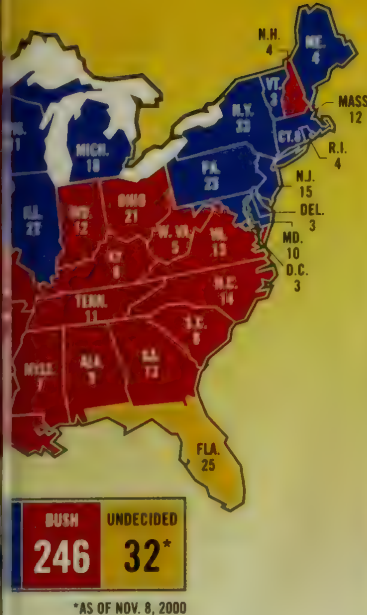
Although caution and gridlock are dirty words in some quarters, that's not necessarily the case on Wall Street. Already, some money mavens are viewing the current stalemate in cautiously upbeat terms. "Whoever is the victor, they're winning a narrow mandate," reckons Martin D. Sass, CEO of New York money-management firm M.D. Sass Group. "With no clear majority in Congress, it suggests more of the

WHAT THE NEW PRESIDENT MAY ACCOMPLISH



EDUCATION Congress may be able to pass legislation that includes testing for students and teachers, additional funds for new schools, and teachers' pay. But GOP-backed school vouchers will be sent to the back of the class on Capitol Hill.

HEALTH CARE A modest patient of rights, which gives managed-care enrollees a limited right to challenge health insurers in court, could be a peacemaking overture in a polarized Congress. Both Republicans and Democrats could unite around the is



TOUGH ROOM: *Republicans will probably whittle down Gore's agenda*

man and former Missouri Senator Danforth, a pair of straight-aways with a bipartisan streak. The forced move toward the center could also compel the next President to refocus his agenda on less controversial items that could stand a chance in a Congress near political parity. The writing point is clear: Both Bush and Gore made education reform their top campaign issue, and the differences between the parties on schools aren't immense. Democrats favor more money for school construction and hiring new teachers. Republicans stress accountability, parental choice, and more local experimentation. The major sticking point is a call for private-school vouchers. But after pro-voucher initiatives were crushed in California and Michigan (page 46), the cause has lost steam in Washington. "Educa-

tion will be the great healer issue," predicts former Republican Representative Bill Paxton of New York, and both Bush and Gore aides agree. Business couldn't be happier. "The closer the election, the better," says John Kernan, CEO of Lightspan Inc., a San Diego-based educational software maker. "Both parties want to spend more on education."

Business reps also think that after GOP House members' success in appropriating the health-care issue on the stump, it will offer another avenue for bringing warring sides together. Even before the election, Congress was edging toward accord on legislation that would give enrollees in managed-care plans more clout against HMOs and insurance companies. If Bush is President, he's likely to sign a measure that grants HMO members a limited right to sue. He accepted similar legislation in

Texas when the political winds shifted. Gore would prefer a bill with more teeth but would have a hard time getting it past a deadlocked Senate. The result, says Thomas A. Scully, president of the Federation of American Hospitals: "You will probably get a moderate patients' bill of rights" in 2001.

Similarly, both candidates embraced a new drug benefit for seniors, and Congress tried but failed to enact such a measure earlier this year. Democrats favor a new drug-purchase plan under Medicare, which would provide a limited benefit for all seniors. Republicans would rather have the government subsidize drug purchases through private insurance—especially for low-income seniors.

If Bush rules the White House, he would be tempted to win friends and influence people by finding a middle ground. The solution: "It will have to be some kind of hybrid government-private program," says a pharmaceutical industry lobbyist. Conservatives still hope to use the benefit as the incentive for broad-based Medicare reform. But the votes for that may not be there in a gridlocked Congress.

Normally, you wouldn't think that tax cuts might be considered a unifying issue in the 107th Congress, but the gulf between Republicans and Democrats will narrow in the wake of the election. Both Bush and Gore proposed big reductions, there's money in the federal till to finance a significant cut, and the need for fiscal stimulus may be growing as the economy slows from the combined effects of Federal Reserve interest rate hikes, costlier oil, and sinking stocks.

Bush's \$1.6 trillion proposal to slash rates and provide targeted relief for

SCRIPTION DRUGS Since both parties candidates campaigned on private insurance, Congress may enact a plan that gives seniors government subsidies that will rely on a mix of traditional Medicare and private insurance.

SOME Some middle-class tax relief assured. Key elements: marriage penalty and estate-tax relief and breaks for education, health insurance and long-term care. The price tag scaled back from Bush's \$1.6 trillion. But if the economy slumps, even modest rate cuts improve.

DEFENSE Both parties seem ready to increase Pentagon spending for military pay and readiness. But a costly new Star Wars antimissile program will have a hard time getting off the ground.

TOUGH SLEDDING The new President will lack the clout to deliver Social Security reform based on private investment accounts. Also in doubt, broad-based Medicare reforms using stringent cost controls, major new trade expansion, and polarizing social issues such as strict abortion curbs and expansion of family leave.

married couples, charitable giving, education, and long-term care looks like a nonstarter—though he would be obligated to fight for it for awhile. Why? Memories of the “read my lips” flip-flop that crippled his father’s Presidency. Gore, for his part, sought \$500 billion in

more than Gore. But a new hemispheric trade pact and restoration of the President’s authority to negotiate “fast-track” deals could face tough sledding in a Congress cast in cement. Fast track “is a nightmare of an issue,” says Steven Rattner, managing principal of New York-based Quadrangle Group, an equity fund. “I wouldn’t count on it happening right away.”

The biggest losers in the current deadlock are the ideological core groups who believe they were responsible for their champions’ White House win. Their prize: a Presidential pen and a nice pat on the head. Religious conservatives now are unlikely to gain more

Fair enough. But to America’s foreign allies, a U.S. leadership vacuum and political paralysis are not cheerful prospects. Some government leaders may wonder whether a hobbled President and Congress can muster the political will for a continued U.S. leadership role abroad, particularly since Bush has talked about pulling U.S. troops out of NATO peacekeeping missions and Gore has scared foreigners by sounding like a labor-own protectionist.

But some mellow Europeans sound just like U.S. business execs who they speculate that America’s move toward the center will prove beneficial by rubbing the rough edge off of either Bush’s or Gore’s agendas. “It means [U.S. leaders] will have to start from a basis of consensus,” says Klaus Barthel, a Social Democratic member of the German parliament. “They can’t polarize.”

Still, what if a foreign adversary, such as Iraq’s Saddam Hussein, decides to take advantage of the U.S. political impasse by testing the sanctions on his regime? By mistake, says Marc C. Ginberg, a senior foreign-policy adviser to Gore: “Saddam should have his head examined if he thinks a close vote somehow suggested the Republicans and Democrats are not united against him.”

While officials in foreign capitals puzzle over the political Balkanization in Washington, the capital’s legion of nervous lobbyists, misfiring pundits, and assorted hangers-on remain on tenterhooks. The most relaxed people in this scenario are the voters, who seem odd at peace with the split ve-

dict they have delivered, and those business execs who think a hamstrung Washington is the perfect accompaniment to Thanksgiving turkey. “There has been a lot of rhetoric, but you see more compromise,” says top Democratic fund-raiser Eli Broad, CEO of insurer SunAmerica Inc. “The republic will survive.”

By Lee Walczak, Richard S. Dutram, and Howard Gleckman in Washington with bureau reports

Cover Story

targeted tax breaks for nearly everything that moved.

The possible compromise? Enacting marriage-penalty and estate-tax relief, which almost became law this year and which both candidates back. “The new President will find leftovers on his plate,” says corporate rep Kenneth M. Duberstein, chief of staff for Ronald Reagan. “These things, rather than new items, will take up most of the tax focus.”

In the end, new tax breaks for charitable giving, education, and health insurance, along with relief from the Alternative Minimum Tax might make it into a 2001 bipartisan package. And if the economy heads south, modest rate relief could also be included. Total pricetag of a new tax package: in the \$600-billion-to-\$800-billion range. That’s not going to make supply-siders happy, but with divided government, that may be the best they can get.

What bites the dust in such a narrowly focused agenda? Many things of importance to the parties’ true believers. For instance, a President Bush might have to forgo his grand scheme for private Social Security investment accounts. A new Presidential commission would provide options for partial privatization, but votes may be lacking on a divided Hill. He could get a modest increase for military readiness and a pay raise but lacks the muscle to snare additional billions for a Star Wars anti-missile system.

Gore, for his part, could expect Congress to deep-six many of his new entitlements, such as his Retirement Savings Plus plan, which gives middle-class workers both a tax-free savings account and a government match. The Veep has proposed some 200 new microprograms during the campaign, and they would be whittled down to a nub by Republicans and leery conservative Democrats. Both candidates are free-traders, Bush

A DIVIDED ELECTORATE

Asked about their concerns, voters split fairly evenly, giving the eventual winner little direction on what to tackle first.

Which one issue mattered most in determining your vote?*

ECONOMY/JOB	18%
EDUCATION	15%
TAXES	14%
SOCIAL SECURITY	14%

What should the new President do first?

IMPROVE EDUCATION	30%
CUT TAXES	26%
STRENGTHEN SOCIAL SECURITY	23%
CURB PRESCRIPTION DRUG PRICES	11%

What should be the top priority for the budget surplus?*

STRENGTHEN SOCIAL SECURITY	35%
CUT FEDERAL INCOME TAXES	28%
REDUCE THE NATIONAL DEBT	24%

Which do you agree with more?*

THE COUNTRY NEEDS TO STAY ON COURSE	56%
THE COUNTRY NEEDS A FRESH START	41%

*May not add up to 100% because of omitted answers and nonresponses
DATA: ABC NEWS EXIT POLLS

than a token gesture on tough new abortion curbs. As for the Supreme Court, a President Bush would “not get right-wing appointments through the Senate,” says Emory University political scientist Merle Black.

Gore’s can’t-do list is even more daunting. His debts to labor include everything from paid family leave to legislation barring permanent replacements for striking workers.

To some in the business world, the prospect of creative gridlock is hardly distressing. “We have become comfortable with a Washington unable to do a thing,” says Daniel E. Laufenberg, chief U.S. economist for American Express Co.

BusinessWeek online

For more election coverage, see the Nov. 20 issue at www.businessweek.com

WHY THE ELECTORAL COLLEGE LIVES ON

ELECTION 2000 THE PRESIDENT

It is one of the most obscure colleges in America. It has no professors and very few cheerleaders. But it has complete

control over who leads the most powerful nation in the world. It's the Electoral College, which reemerged from obscurity this November to play a pivotal role in the selection of the 43rd President.

For the first time since 1888, the Presidential candidate who appears to have the most popular votes, Vice-President Al Gore, may not get the keys to the White House. Excluding Oregon's 7 electoral votes, if Texas Governor George W. Bush maintains his narrow election-night lead in Florida, he will become President with 278 electoral votes, despite tallying fewer popular votes.

STRIKE THREE? The electoral fluke is reviving a century-old debate over whether the college should go to the scrap heap. Why have a rickety institution that has thrice made a popular-vote loser the Presi-

dent? Unabashedly elitist, the Electoral College was created by the founding fathers in 1787 as a counterbalance against too much democracy and to protect states from encroaching federal power.

Here's how it works: Each state gets a number of electoral votes equal to its total representation in the House and Senate. So a state like California, with 52 House members and 2 senators, gets 54 electoral votes. The problem? Small- and midsize states have a louder voice in selecting a President. For instance, the 22 smallest states together have less than California's population but nearly twice as many electoral votes. To win, a candidate must take 270 of the 538 electoral votes.

Critics condemn the system as an 18th century anachronism. Among its foes: investment banker Sanford R.

Robertson, a partner in Francisco Partners, a San Francisco leveraged buyout firm. "Just a few thousand votes can swing the Electoral

College one way or another," he says. "Maybe this is the event that could finally force its elimination."

Indeed, there have been periodic crusades to abolish the college. But they failed to win much support from many states. And for good reason: If the Electoral College were abolished, candidates would have little incentive to visit less populated states. Nominees would concentrate on big cities and population states, mainly in the Northeast and California. "Their time would be better spent in places like Brooklyn," says Senator Robert Torricelli (D-N.J.). As a result, the college "keeps us from having a regional Presidency," says Senator Kay Bailey Hutchison (R-Tex.).

It also has strong backing from powerful interests such as farmers and gun-rights groups. Because of their concentration in such less populated, rural places, it magnifies their power in swing states like Iowa and Tennessee. What's more, both parties back the Electoral College. Because of the winner-take-all-aspect of almost every state's electoral votes, third parties

don't stand a chance. In 1992, Ross Perot received 19% of the popular vote but did not get a single electoral vote. **TOUGH JOB.** Even with this year's drama, backers of Electoral College repeal have their work cut

out. They would have to get a constitutional amendment passed. And aside from obvious logistical problems, "you would have to have a groundswell of popular support, like votes for women," says James A. Thurber, an American University political scientist. "People must feel aggrieved. And I don't see that now."

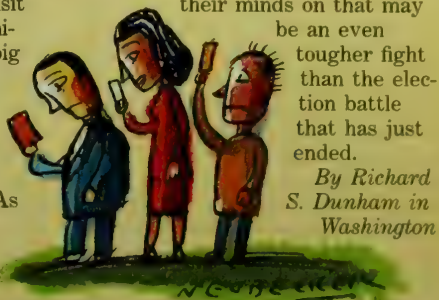
Of course, that could change if a split between the popular and electoral vote brings a crisis of legitimacy for the incoming Administration—or if the thousands of disputed Florida votes provide Bush his margin of victory. Indeed, Senate Minority Leader Tom Daschle (D-S.D.) predicted on Nov. 8 that the 2000 results "could generate and trigger a very good and healthy debate on how we view elections." Adds Marshall Wittmann, a senior fellow at the Hudson Institute, an Indianapolis-based think tank: "The question is now whether the body politic can accept the wisdom of the founding fathers." Getting voters to make up

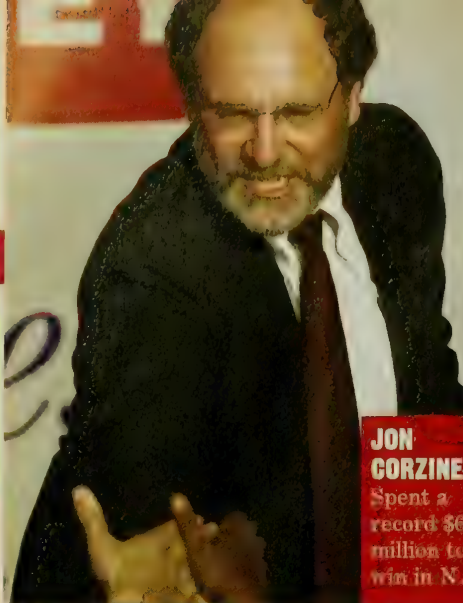
their minds on that may be an even tougher fight than the election battle that has just ended.

By Richard S. Dunham in Washington



It's an anachronism,
but one that keeps
rural states in the
political loop





JON CORZINE
Spent a record \$60 million to win in N.J.



HILLARY RODHAM CLINTON
The first First Lady to win office

WHEN THE CENTER IS A MOVING TARGET

The President will rely on Congress' centrists. But they won't be the same for every issue

ELECTION 2000 THE CONGRESS

As the Florida recount put the outcome of the Presidential race on ice, cliffhanger elections in the House and Senate also had Capitol Hill Republicans postponing their revelry. The GOP, at least on paper, maintains its control in Congress. But even if George W. Bush wins the White House, the party's hold on Washington has been seriously weakened. Once the votes are all in, Senate Democrats and

Lady Hillary Rodham Clinton, who beat Rick A. Lazio for a Senate seat in New York, there's the liberal Jon S. Corzine, who won a seat in New Jersey. The former CEO of Goldman Sachs broke the record in Senate campaign spending with his \$60 million run. Others with less star power include Delaware Governor Tom Carper, Mark B. Dayton from Minnesota, heir to the Dayton-Hudson department store fortune, and Representative Debbie Stabenow. When the ballots are counted in Washington State, RealNetworks Inc. executive Maria Cantwell may join the strengthened Democratic lineup in January. But the GOP had winners as well. Such conservatives as Nevada veterinarian John Ensign and former Virginia Governor George Allen helped the Republican Party maintain its majority.

POWER SHARING? Should the Senate wind up in a tie and Al Gore in the White House, running mate Joseph I. Lieberman must resign his Senate seat. That would leave the balance of power in the GOP's favor, 51 to 49. If George W. Bush wins, Vice President-Elect Richard B. Cheney becomes the tie-breaker in the Senate. That would assure the GOP committee chairmanships and the legislative agenda. Even so, Democrats al-

ready are conspiring to muscle in on Republican turf. Senate Minority Leader Thomas A. Daschle on Nov. 8 called on Majority Leader Trent Lott (R-Miss.) to share power, giving each party equal billing on committees and would join equally in setting the agenda.

The wafer-thin majorities on both sides of the Capitol already have fomented countless intrigues. "For the Democrats every decision will be framed in terms of 'How does this help us get control?' For the Republicans, it will be 'How does this help us keep control?'" says Meyer. Adds Trinity College political scientist Diana Evans: Congress is likely to be a snake pit—worse than ever."

All that's got the business community feeling plenty nervous. Having a divided Congress "puts a premium on the President's ability to be bipartisan," says Robert N. Burt, chairman and CEO of Chicago-based FMC Corp. and chairman of the Business Roundtable. "All the things need to be addressed," he adds, ticking off a prescription drug benefit for seniors, a patients' bill of rights, and greater authority for the President to negotiate trade treaties.

Some business lobbyists, however, see an opportunity to form business-friendly coalitions of centrist Republicans and

Cover Story

Republicans may now hold an equal fifty seats. That would be the first time such a situation has existed in over 100 years. And in the House, where Republicans lost seats for the third election in a row, Democrats may be just five votes from a majority. "Senate Democrats had a huge night" on Nov. 7, says Daniel P. Meyer, a former top aide to ex-House Speaker Newt Gingrich.

A big crop of new Democratic senators will be arriving in town come January. Yet some of these faces hardly seem fresh at all. In addition to First



DEBBIE STABENOW
Moves from
the House
to the
Senate

w Democrats. They welcome such
business Democrats as Nebraska's
Nelson, ex-Florida Insurance Commission-
er Bill Nelson, and Carper. Al-
dy, National Association of Manufac-
ers President Jerry J. Jasinowski has
t with all three. "We are cautiously
imistic that the tenor of the next
gress will be conducive to develop-
pro-business solutions with biparti-
coalitions," says Gregory S. Casey,
resident of the Business-Industry Pol-
al Action Committee, a pro-business
draiser.

To pass entitlement reforms, middle-
ss tax cuts, or boost spending on
ld health care, the President will
ed to work closely
h a socially moder-
e, fiscally conserva-
e, floating middle of
h parties. "In the
ct two years, every
l done in this town
going to be done
n the center out,"
s business lobbyist
eph P. O'Neill, pres-
nt of Public Strate-
s Washington Inc.
mits Daschle: "They
n't have the votes,
don't have the votes."

A unified business community could
ve enormous influence on Congress
ause of its longstanding ties to mod-
es in both parties. Their problem
l be figuring out who the centrists
e on any given issue. "It's a floating
alition. On trade it's one set of people.
environment it's another. On taxes
another," says Bernadette A. Budde,
ior vice-president of the Business-
ustry Political Action Committee.
The biggest opportunity for improved

cooperation may lie in the House. True, a
shrinking majority will make life tough
for House Speaker J. Dennis Hastert (R-
Ill.). He will need to work with moderate
Democrats to find compromises on a
range of issues from health care to edu-
cation and taxes. But with the Democra-
tic caucus moving more to the middle
with every election, House Minority
Leader Richard A. Gephardt (D-Mo.)
may also find it in his self-interest to co-
operate with the GOP—particularly if
Bush wins the White House. If Gephardt
decides to make another run for the
White House in 2004, he will want to
appear bipartisan.

Gephardt already has signaled he's

ic White House should be able to chalk
up some early wins, especially on a
Medicare prescription drug benefit, an
issue that put many candidates in the
winner's circle. Some Democrats say
they can back a Medicare reform plan
based on vouchers as long as the GOP
agrees to a longer phase-in period.
Legislation drafted earlier this year by
centrist Senators John Breaux (D-La.)
and Bill Frist (R-Tenn.) provides a
strong starting point. "A lot of the
pieces are in place," says Senator Judd
Gregg (R-N.H.).

The makings of a compromise are in
place, too, for education reform. De-
mocrats flatly reject GOP proposals that

would allow education
tax dollars to be spent
on private schools.
But they might accept
a pilot voucher pro-
gram and proposals
that call for teacher
accountability, such as
national testing stan-
dards, if the President
throws more money
into school construc-
tion. Teacher testing
"may be the only
thing Gore and Bush

agree on," says John Kernan, CEO of
San Diego-based software company,
Lightspan.

Clearly the two candidates have more
in common than that. And no matter
which one wins in the end, he may have
to adopt many of his opponent's ideas to
work with a sharply divided Congress.
For an anxious business community, that
may prove a recipe for success.

*By Lorraine Woellert and Howard
Gleckman in Washington with bureau
reports*

THE NEW FACE OF CONGRESS

	HOUSE SEATS			SENATE SEATS		
	OLD	NEW	GAIN/LOSS	OLD	NEW	GAIN/LOSS
REPUBLICANS	223	220	-1*	54	50	-3*
DEMOCRATS	210	211	+1	46	49	+3
INDEPENDENTS	2	2	0	0	0	0

* AS OF NOV. 8, TWO SEATS ARE STILL UNDECIDED IN THE HOUSE AND ONE IN THE SENATE.

DATA: BUSINESS WEEK

willing to make concessions, especially
on issues of importance to the high-tech
sector. Other Democrats see the thin
margin as an opportunity to put their
stamp on legislation. But they warn Bush
not to take them for granted. "If the
Bush Administration thinks it can reach
out and pick off a few of our members
and use them to have credibility, that's
not going to happen," says Representa-
tive Calvin M. Dooley (D-Calif.).

Even absent a clear mandate, a con-
sensus-minded Congress and pragmat-

By Paul Magnusson

THE PUNISHING PRICE OF NADER'S PASSION

ELECTION
2000
THIRD PARTIES

You have to hand this much to Ralph Nader: He can take the heat. Despite pleas and bluster from labor leaders, environmentalists, and feminists to drop out and effectively throw his support to Vice-President Al Gore, the 66-year-old left-wing crusader stayed his lonely course. Even as it became clear that Nader's Green Party candidacy could tip the election to George W. Bush, a politician he rates a "D minus," Nader didn't shy from the role of principled spoiler. And when it appeared that Gore, whom Nader dismisses as just a "D plus," might go down in defeat, Nader called him 'the least of the worst' and said it would serve the Veep right.

That's not the way politics is done in Washington, of course. A more pragmatic Nader would have traded his troops for the right to pick the next Interior Secretary in a grateful Gore Administration. Instead, Nader reveled in his giant-killer status. His allies on the left are apoplectic that he would so cavalierly sink their candidate and risk handing the Republi-



BLOODIED BUT UNBOWED: He earned the Dems' fury, but he engaged the young

conference, for example, he reeled off 17 separate issues—from fighting child poverty to universal health insurance to switching tax dollars from fancy sports stadiums to library and school construction. And that was just in answer to the first question.

But even a personality as forceful as Nader's may not be enough to build a party nearly from scratch, soothe the wounds inflicted on allies like Big Labor, and continually challenge the "corporate-controlled government" he likes to rail against. Nader had hoped to qualify the Greens for \$7 million to \$9 million in federal campaign and party-building funds by capturing 5% of the vote, but he came up short. Now, predicts Georgetown political scientist Stephen J. Wayne: "Nader will continue to be a gadfly and leader of his own groups.

But without money or an election, you can't really hold a minor party together. They'll collapse or implode just like the Reform Party did."

Perhaps. But Nader also leaves the Greens with a mailing list of 240,000 supporters who gave \$7 million to Nader's quixotic quest—nearly all in under \$100 donations. Moreover, the movement may go on without Nader, who often serves as a kind of Johnny Appleseed for progressive causes. He has proved adept at founding and then spinning off left-leaning watchdog groups like Public Citizen and the Center for Automotive Safety.

Of course, Nader is already being branded a saboteur by furious Democrats. But he engaged the young, got people to the polls who might never have gone, and raised issues—undue corporate influence in Washington, the excesses of globalism, the failure of the drug war—that the major parties never mentioned. At his Nov. 8 news conference, he praised environmentalist icon David Brower, former executive director of the Sierra Club, who died recently. "He never wavered. He never waffled. He never turned into a tactical person," said Nader. What Brower did was push the movement in the direction he favored. That may be Nader's legacy to the left—even if he's never forgiven.

Cover Story

cans the right to radically alter the makeup of the Supreme Court, for example. Says one AFL-CIO official: "His people are not coalition-builders. We'll never work with him again."

NO ILLUSIONS. But Nader, who got just under 3% of the vote nationwide, is betting otherwise. If unions and moderate environmental groups "can put away the recriminations, they will find that we are allies of their interests and they are allied with ours," Nader insists. Says pollster John Zogby: "A Ralph Nader comes along very rarely. Under the right circumstances, Nader's Green Party could find itself the leading force on the left."

Unlike other third-party candidates, Nader never deluded himself that he was going to win. Instead, he realized that running for President can mean a guaranteed perch on the national soapbox. During his televised post-Election Day press



WHERE NADER WAS A FACTOR

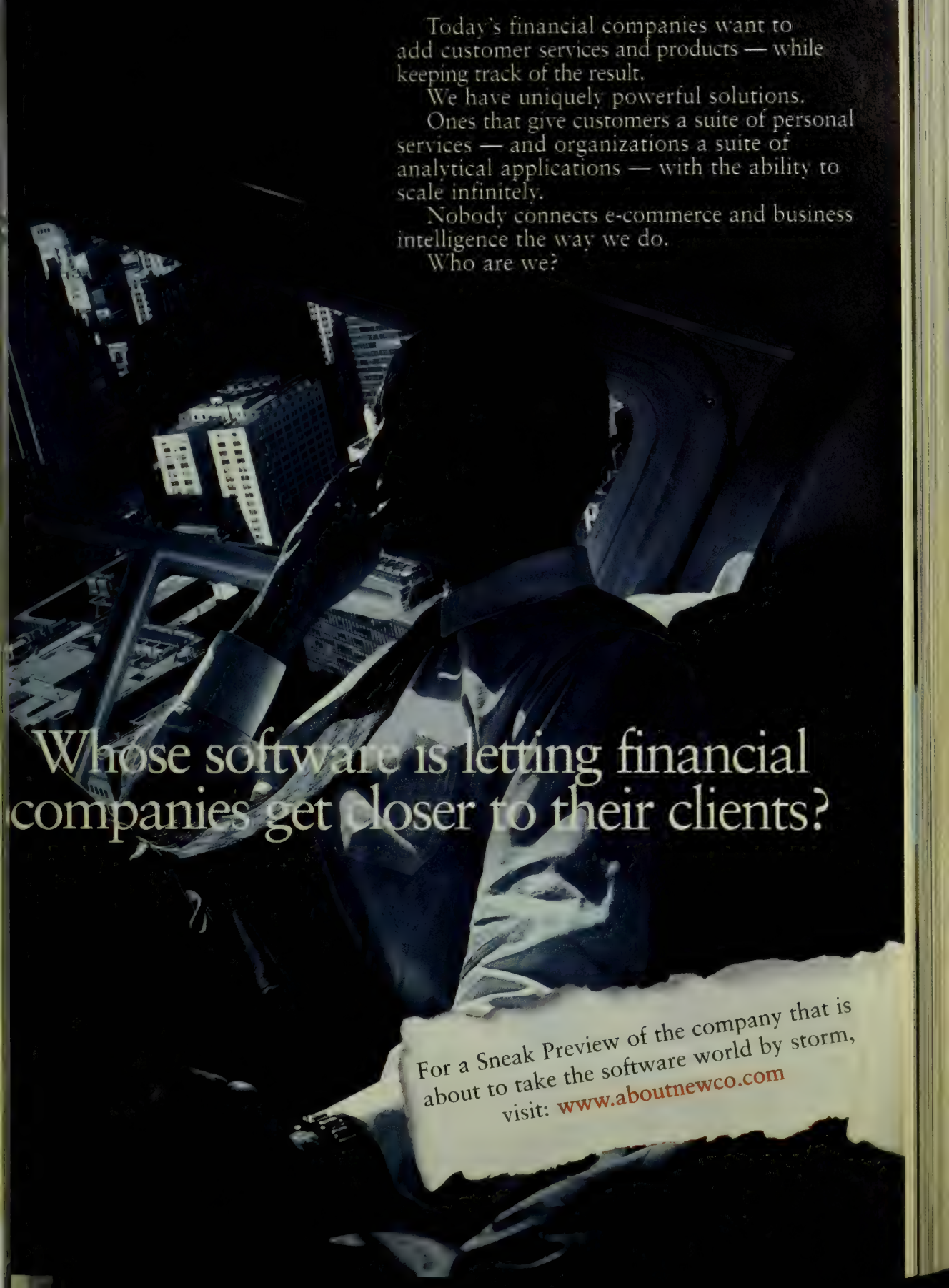
States in which he made a numerical difference

	BUSH	GORE	NADER
FLORIDA*	49%	49%	2%
NEW HAMPSHIRE	48	47	4
OREGON	48	46	5
WISCONSIN**	48	48	4

* Before the recount in Florida, Nader had more than 96,000 votes

** Gore won by more than 6,000 votes
DATA: ABC NEWS

Magnusson has been covering Nader since 1979.



Today's financial companies want to add customer services and products — while keeping track of the result.

We have uniquely powerful solutions.

Ones that give customers a suite of personal services — and organizations a suite of analytical applications — with the ability to scale infinitely.

Nobody connects e-commerce and business intelligence the way we do.

Who are we?

Whose software is letting financial companies get closer to their clients?

For a Sneak Preview of the company that is about to take the software world by storm, visit: www.aboutnewco.com

STATUS QUO PLUS

Voters went for small changes

ELECTION 2000 THE BALLOT

If ballot initiatives are the true voice of the people, then this year the voice came through loud and clear: Don't rock the boat. Rather than

clamoring for change, voters approved measures that tweaked the status quo.

They had their chance to stir things up with education, but across the nation, voters demurred. True, four states approved increases in school funding, including teacher pay raises. But folks in Michigan and California gave a big thumbs-down to vouchers that could be used to help fund private education.

In Michigan, the proposition was limited to vouchers for kids in the worst-performing districts. Voucher proponents around the country had high

Cover Story

hopes for the measure. But despite the backing of the DeVos family—founders of Amway Corp.—and encouragement from Senator John McCain (R-Ariz.), the measure was trounced by a more than two-to-one margin. Also defeated was California's Proposition 38, which would have granted every pupil a \$4,000 credit for use in private schools. "I went to public school, and I didn't turn out so bad," explained Todd Piro, a student at the University of California at Los Angeles, after casting his anti-voucher, pro-funding votes. The political upshot: For the near term, at least, these vetoes put the voucher movement on life-support.



Warm and fuzzy feelings for public schools, though, were no indication of a broader liberal victory. True, this year's crop of initiatives was top-heavy with anti-business and pro-environmental measures. But most fell shy of the mark. The big kahuna was a health care effort in Massachusetts. It would have mandated universal health coverage by 2002 while imposing stringent new requirements on managed-care companies. Advocates hoped the state would set a mold for health-care reform nationwide, but health-maintenance organizations teamed up with other Massachusetts businesses to paint the measure as extremist. "This would seriously drive up the cost of health insurance," says Karen M. Ignagni, president of the American Association of Health Plans. Backed by an estimated \$5 million ad blitz, the industry pulled off a narrow victory after trailing by double-digits in pre-election polls.

ANTI-SPRAWL. Topping enviros' wish list was a plan to limit clear-cutting in Maine's forests. Even though a tougher measure failed four years ago, backers returned this year with slightly looser provisions. They lost by a wide margin. In Colorado and Arizona, anti-sprawl activists tried to limit growth in the suburbs of Denver and Phoenix by strengthening land-use planning. But voters resoundingly chose gridlock over further restrictions on development.

The one big victory for the green

crowd was approval in Florida of a multibillion-dollar high-speed passenger rail system that would link the state's five biggest metropolitan areas. Eclipsed by the state's notoriety in other races, it sailed to easy, if unheralded, victory. "It really wasn't a hard sell," considering the state's growing congestion, shrugs Jo G. Sowinski, a consultant to the group that backed the measure.

Perhaps most notable was what was not on the ballot this year. There were none on such incendiary issues as affirmative action or illegal immigration. Tax-rollback efforts, ballot perennials were few and far between. Only Massachusetts passed a sizable cut—from 5.9% to 5% in the state's income tax.

So what next for these ballot measures? Expect many of the issues to keep cropping up. Organizers in Washington and California are trying to get universal health care on the ballot in those states. And education groups are likely to come back with more funding requests. The worst that can happen is that the people will say no.

By Dan Carney in Washington, wa; Arlene Weintraub in Los Angeles; William C. Symonds in Boston, a bureau reports

HEALTH CARE

After an ad blitz by the industry, Massachusetts narrowly voted down universal coverage

TINKERING AT THE EDGES

The ups and downs of this year's ballot initiatives.



HEALTH INSURANCE

In Massachusetts, a radical measure to provide universal health insurance by July 1, 2002 lost by a narrow margin.



EDUCATION

California voters nixed a move to provide any student with \$4,000 in vouchers for private schooling. Michigan vetoed a narrower measure.



GROWTH

Colorado and Arizona rejected anti-suburban sprawl measures. San Franciscans voted to limit where high-tech companies can locate.



TRANSPORT

Florida OK'd a statewide passenger rail system. But New Yorkers wouldn't cough up \$4 billion for improvements.



CAMPAIGN FINANCE

Missouri voters rejected a plan to tax corporations in order to provide public financing for all statewide candidates.

MORE AADVANTAGE



Go To **AA.com** PURCHASE UPGRADES.* RECEIVE E-MAIL SUMMARY STATEMENT. REGISTER FOR SPECIAL MILEAGE PROMOTIONS. ALL FROM YOUR ONLINE AADVANTAGE® ACCOUNT. DETAILS AT www.aa.com/aadvantage OR AOL KEYWORD: AA AADVANTAGE

AA.COM. THE ULTIMATE SITE FOR EVERYTHING **American Airlines**
American Eagle

*AAdvantage upgrade miles currently available only for Executive Platinum, Platinum and Gold members and valid only for travel on American Airlines and American Eagle flights. American Airlines, American Eagle, AAdvantage, AA.com and The Ultimate Site For Everything are marks of American Airlines, Inc. American Eagle is American's regional airline affiliate. American Airlines reserves the right to change the AAdvantage program at any time without notice. American Airlines is not responsible for products or services offered by other participating companies. For complete details about the AAdvantage program, visit www.aa.com.

THE INTERNET

A REVOLUTION IN PRICING? NOT QUITE

With the Internet, alternative systems are doable—just not desirable most of the time

Priceline.com flipped pricing on its head when it launched in 1998. Usually, businesses post prices, then lower them if no one's willing to buy. At Priceline.com Inc., it was buyers who posted the prices they would pay—then raised them if no one was willing to sell.

Economists were gleeful. It was like detecting a new subatomic particle—a pricing model that had been theorized to exist but was never before observed. The early successes of Priceline, as well as online auctioneers such as eBay Inc. and other dot-coms with alternative pricing systems, convinced many experts that conventional seller-posted prices were relics of the Industrial Age. "We've suddenly made the interaction cost so cheap, there's no pragmatic reason not to have competitive bidding on everything," Stuart I. Feldman, director of IBM Corp.'s Institute for Advanced Commerce in Hawthorne, N. Y., said in a 1998 BUSINESS WEEK story.

NICHE APPEAL. Not so fast, folks. Although technology and venture capital have produced dozens of alternatives to seller-posted prices, most have flopped and none has moved beyond a narrow niche. For most products, and most consumers, a system of prices posted by sellers is still perceived as more convenient and fair. Says Robert L. Phillips, chief technology officer of Atlanta-based Talus Solutions Inc., which makes pricing software: "It's going to be very difficult to build a business plan

around a pricing model alone."

Why did so many entrepreneurs and investors overestimate the popularity of alternative pricing schemes? Partly because they confused what's technologically possible with what buyers and sellers actually want. Auctions, for example, are suited for one-of-a-kind items whose

value is uncertain, such as a painting that's worth nothing to most people but a lot to some idiosyncratic collector. The brilliance of eBay is that it opened auctions to a much broader public and lowered transaction costs so it became feasible to auction even low-priced items. But economists say that auctions have

Auctions are
best suited for
one-of-a-kind
items

no advantage for mass merchandising because there's nothing idiosyncratic about the demand for it—it's just easier to slap on a price tag.

What's more, companies don't want to sell all the stuff to bargain hunters. That's why customers who buy via Priceline can choose their airline and what time of day they'll fly. The airlines fill seats by appealing to price-sensitive customers who otherwise would not fly at all without having to lower prices for their regular customers. To get airlines to offer other companies to participate, Priceline

must keep its system deliberately inconvenient—which naturally limits its potential market. "I see Priceline as a variation of coupons," says Hal R. Varian, an economist at the University of California at Berkeley.

There's still innovation in pricing. But it's focused on how to set posted prices. Companies are getting better at using instant feedback from the marketplace



DRAWBACK OF PRICE-SETTING INNOVATIONS

The Internet makes it easier to abandon seller-posted pricing, but negotiating has its disadvantages:

INCONVENIENCE

Many customers don't want to take the time to bid or haggle, especially when the stakes are low

UNFAIRNESS

Customers may resent paying more than someone else for an identical item

DISLOYALTY

Auctions and other mechanisms make customers focus on price comparisons, reducing brand loyalty

borah Vollmer Dahlke, CEO of Zil-at Inc. of Austin, Tex., a Net pricing management company, says the number price changes in desktop computers going up 20% a year. Plus, companies figuring out how to segment their customers by willingness to pay, as the lines have long done. One trick: Publish a high list price, but send out

coupons to price-sensitive customers who otherwise wouldn't buy. IBM's Feldman says maneuvers like that fit his loose definition of auctioning.

If this stuff doesn't sound revolutionary, that's the point. The revolution—alternative pricing—didn't live up to its press. Last spring, Priceline founder Jay S. Walker said: "There have only been

five pricing systems in the history of the world. This is the sixth pricing system. This one will become the preferred pricing system." Of course, Priceline's stock is down 98% from its peak. Maybe our ancestors weren't clueless about business after all.

By Peter Coy in New York, with Pamela L. Moore in Greenwich, Conn.

COMMENTARY

By Timothy J. Mullaney

PRICELINE SHOULD BUY PRICELINE

At Priceline.com Inc., Plan A clearly is toast. The drop of the company's market value to \$542 million from \$25 billion in April, 1999, buries once and for all its plan to be the Wal-Mart of the name-your-own-price approach, selling everything from long-distance phone service to mortgages. On the other hand, the company has quickly become a force in its core travel market with sales flirting with \$1.3 billion this year. And, unlike most dot-coms, Priceline has positive cash flow. People who think Priceline is worthless now are as wrong as those who thought it was worth infinity last year.

What to do? First, Priceline should try Plan B: Get out of the car business, the mortgage business, the long-distance business, and the rest. Concentrate on travel. That, plus cuts in Priceline's advertising, could easily bring the startup's operating cash flow to \$70 million annually.

If the public market won't reward Priceline for its discipline (and it probably won't), its managers should turn to Plan C: Take the company private, where they can work out its kinks without the punishing glare of Wall Street. Why? Several reasons. First, Priceline lacks the growth prospects to make itself worth anywhere near \$25 billion, so it shouldn't manage itself for hypergrowth. Second, Priceline's travel business is better than the market thinks, but the company needs time to focus and build it. And the stock's getting cheap enough to make a buyout attractive.

BEST INFO. Travel works well on the name-your-own-price model because accurate, timely information about travel prices is hard to come by. Airlines' complex yield-management systems, designed to fill the most seats at the highest prices, change those

prices by the minute. So only industry insiders grasp how flights and hotel rooms are priced. Priceline helps the market get at least the best information available.

Priceline lacks that edge in other markets. A local realtor can reach just as many mortgage banks, any credit union can get you a cheap car, and phone companies advertise so heavily that consumers know where to find low rates. (See page EB 22.) Plus, cars and mortgages are always available tomorrow, while airline seats must be

improving loyalty numbers could help Priceline fend off new competitors like Hotwire.com.

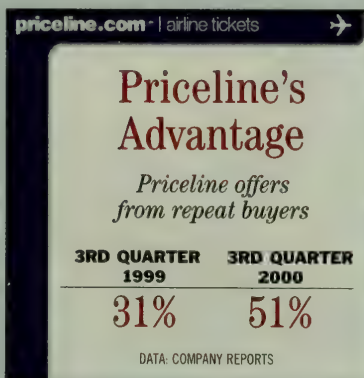
But a buyout can work only if the numbers add up. Take cash flow. Priceline has had \$17.8 million in operating cash flow since April. That's \$35 million a year. Then slash ad spending, which has eaten \$48 million since Jan. 1. Cutting to 1999's level could save \$25 million yearly. (Did anyone feel deprived of Priceline ads in 1999?) The company has cut staff 16%, adding up to \$9 million to the pot. That's about \$70 million in cash flow to add to \$131 million of cash on hand—no small change.

Even if Priceline makes these cuts, Wall Street could respond with a yawn. Management should then reach out to tech buyout funds formed to pounce when markets toss out babies like Priceline with bathwater like Pets.com Inc., which failed this week. "If they've reached a sustainable balance on cash flow, it's a very interesting proposition," says Roger McNamee, head of buyout fund Silverlake Partners in Menlo Park, Calif. It gets a lot more interesting with the stock at a more affordable \$2.50 or \$3.

In truth, whether that cash flow is stable is a live question, and nobody will lend money to Priceline until they know how much new competition like Hotwire hurts. Priceline couldn't do an '80s-style leveraged buyout borrowing 90% of the price. An equity partner such as an airline or hotel chain is a must.

Priceline won't comment, but it's a deal worth doing at the right time. Priceline's not worthless. What better way for management to prove it than to buy it themselves?

Mullaney is E-Business department editor. Pamela L. Moore in Greenwich, Conn., contributed.



sold before the flight. Priceline admits its other businesses are growing slowly. And that won't change.

Meanwhile, Priceline's travel business has crushed 1999 forecasts. In two years, Priceline has grabbed 4% of the U.S. air-ticket market. Although its airline ticket sales have plateaued at about 1.3 million tickets per quarter, sales of hotel rooms and rental cars have surged. And Priceline's air-ticket stall isn't so alarming given that the airline industry has grown only 3.3% this year.

Even better, results from the otherwise terrible third quarter suggest that shoppers aren't bailing out. More than half of offers to buy through Priceline came from prior users, vs. 31% the year before. These

AUTOS

AN INCENTIVE TO HALT INCENTIVES

Carmakers sabotage profits as they grab for market share

After years of steadily losing ground to competitors, General Motors Corp. made a dramatic turnaround in October, adding two points of market share, pushing it from 28% to 30%. But that's no reason for rejoicing at GM headquarters. The sales surge, fueled by generous offers like five years of interest-free financing—worth about \$3,000 per vehicle—will take a bite out of fourth-quarter profits. And GM isn't alone. DaimlerChrysler blames the cost of incentives for Chrysler Group's \$534 million third-quarter loss. Says Ronald

ings estimates for the Big Three.

How did incentives get so ubiquitous? Consumer rebates were supposed to be a one-time gimmick. Remember former Chrysler Corp. pitchman Joe Garagiola trying to lure buyers in the mid-1970s? ("Buy a car. Get a check.") Consumers liked the come-on so much that auto makers began offering other discounts, like cut-rate loans and special lease deals.

It worked for a while. The barrage of incentives helped Detroit get through a recession in the early '90s, and more

Breaking the habit will be no easy task. Chrysler tried to scale back earlier this year, hoping that its competitors would follow. The gesture, however, went largely ignored by the other automakers, and Chrysler ended up losing market share.

Now, as the new model year begins, Chrysler is back in the game, even offering low-cost financing on its redesigned 2001 minivans. That's a bad sign, says Susan Jacobs, president of Jacobs & Associates, an auto marketing consultant: "The fact that we have incentives at the beginning of the model year that are so large is an indication that the industry, and especially the Big Three auto makers, have seriously misjudged the pricing environment."

IDLE FACTORIES. With no end in sight to the incentives game, auto makers are wringing expenses to get profits back on target. And they're idling factories where necessary to bring supplies

Let's Make a Deal!

Some auto makers are spending big bucks in 2000 to make a sale

	AVERAGE INCENTIVE PER CAR	INCREASE OVER 1999
DAIMLERCHRYSLER		
CARS	\$2,129	25.2%
LIGHT TRUCKS	2,057	27.6
GENERAL MOTORS		
CARS	\$2,242	11.3%
LIGHT TRUCKS	1,842	7.0
FORD MOTOR		
CARS	\$1,731	-12.2%
LIGHT TRUCKS	1,571	10.7

DATA: AUTODATA CORP.

L. Zarrella, GM North America's president: "It's great for consumers, but it's forcing thinner margins on everybody."

Indeed, despite record sales, auto makers are worried about falling profits. The industry is slowing, yet competition has intensified, especially among pickups and sport-utility vehicles. Although the truck market is nearly saturated, auto makers are still racing to add truck capacity in North America. In all, analysts say that 1.5 million units of truck capacity will be added in North America in the next three years. That means incentives are likely to go even higher, a move Detroit can ill afford, since giveaways are already spinning out of control. With dealer incentives, some offers have cost the carmaker up to \$4,000. The result: a steady drop in Wall Street's earn-

ings estimates for the Big Three. How did incentives get so ubiquitous? Consumer rebates were supposed to be a one-time gimmick. Remember former Chrysler Corp. pitchman Joe Garagiola trying to lure buyers in the mid-1970s? ("Buy a car. Get a check.") Consumers liked the come-on so much that auto makers began offering other discounts, like cut-rate loans and special lease deals. It worked for a while. The barrage of incentives helped Detroit get through a recession in the early '90s, and more recently, helped prop up the normally cyclical U.S. car and truck market for an unprecedented five years. Now comes the painful result: an industry that's addicted to incentives. The problem is that after such an extraordinary industry boom, consumers are sated. "Today's buyers are purely discretionary," says Maryann Keller, ex-president of Priceline.com's automotive services unit. "They're not buying out of need. They're buying because they want."

NASTY HANGOVER? Even worse, when the downturn comes, the artificially high level of sales could mean an exaggerated downside, says David Cole, director of the Center for Automotive Research in Ann Arbor, Mich. "It's a sign of a mature and tough market," says Cole.

CODDLED: An interest rate anyone could love

some models back in line with demand. Comerica Bank says U.S. production fell 4% in the third quarter, and a large drop could be seen in the fourth quarter. Chrysler stopped production at seven of its plants for a week, General Motors had several weeks of shut downs. And Ford Motor Co., which has done the best job of managing inventories, had temporary production halts to free up parts for product recalls.

The production cutbacks are bitter medicine in such an intensely competitive market. But for an industry hooked on incentives, it may be the only way to restore the balance between supply and demand.

By Joann Muller, Jeff Green, and David Welch in Detroit



By Andy Reinhardt

TRANSMETA: THIS IPO DARLING MAY BE A HEARTBREAKER

For an initial public offering market in deep freeze, the Nov. 7 debut of chipmaker Transmeta Corp. came like a balmy autumn day. It was the most highly anticipated IPO of the season—and it didn't disappoint. After nearly doubling its offering price to \$21 in the days preceding liftoff, Transmeta soared another 115% on its first day of public trading, giving the startup a heady market capitalization of nearly \$5.8 billion.

Transmeta flew because Chief Executive David Ditzel and crew did a masterful job of building buzz. The company's technology aims to replace many of the hardwired functions of traditional Intel Corp. microprocessors with easily reprogrammed software. And as a bonus, Transmeta's chips—introduced with great fanfare last January after five years of deep secrecy—gobble less power than alternatives, permitting longer battery life for notebook computers and other gizmos. Even IBM's surprise decision on Oct. 31 not to use Transmeta's chip in an upcoming laptop didn't derail the IPO.

SKY-HIGH VALUATION. But while Transmeta deserves credit for innovation, its prospects as an investment aren't so promising. At its current market cap, Transmeta sells for an astronomical 1,515 times its revenues over the last 12 months, or 418 times annualized revenues from its most recent quarter. That's a higher price-to-sales ratio than even Amazon.com Inc. commanded in its halcyon days, when its market cap peaked at 23.3 times sales last December. Don't even mention a price-to-earnings ratio: Transmeta isn't expected to turn a profit any time soon.

Such a high-flying valuation might be justified if Transmeta were staring at unbridled opportunity. Problem is, it has to confront Intel. The world's largest chipmaker is incomparably aggressive and has a long history of wiping out upstarts that try to horn in on its business. Cyrix Corp., for in-



BUILDING BUZZ: CEO Ditzel bucked the IPO slowdown

stance, made a decent run at Intel with innovative, lower-cost processors, but never gained more than 10% market share. Others, such as Rise Technology Co. and Integrated Device Technology Inc., have fared even worse.

Now, stimulated by the threat of Transmeta, Intel is roaring into low-powered chips. It wrested back IBM's business and promises even more abstemious chips next year. And unlike Transmeta, it can offer packaged deals of mobile and desktop processors, plus chips that support the main processors and marketing incentives such as the Intel Inside program. Such advantages make competing against Intel a tough slog—and victory can be joy-

WHY TRANSMETA IS A RISKY BET

Intel is fighting back hard in low-power microprocessors

Transmeta's processors solve only part of the battery-life problem in notebooks

Corporate buyers are wary of using non-Intel processors—even from established players

less. After more than 30 years of pitched battle, rival Advanced Micro Devices Inc.'s chips have nabbed 18% of the PC processor market. But in all that time, AMD has logged just \$1.7 billion in retained earnings—less than Intel's profits in the third quarter alone.

Even without Intel to worry about, Transmeta's opportunities may be circumscribed. It has chosen to focus on the rapidly growing markets for mobile PCs and info appliances, but so far it hasn't broken into the top tier of laptop makers. And while Gateway Inc. was expected to unveil an info appliance containing a Transmeta chip on Nov. 10, such devices aren't taking off as

quickly as hoped, and many won't use Intel-compatible chips like Transmeta's. Analysts figure the company will sell about 1.2 million processors next year, for revenues of about \$170 million. That means even if the stock remained flat, Transmeta still would be valued at more than 34 times revenues. By comparison, Intel—with its \$34 billion in sales and 32% operating margins—now has a market cap only 10 times its revenues.

Most perplexing, however, is the spectacle of investors flocking to Transmeta on its promise to save notebook battery life. IBM insiders say that Big Blue balked at Transmeta chips when they delivered only 20 to 45 minutes of additional battery life in notebook computer tests. And even if Transmeta can improve that down the road, microprocessors consume only 10% of the battery power in a notebook PC. Screens and storage draw far more power—and that's something Transmeta's chips don't address.

Transmeta has pioneered fine technology, and millions of people could someday benefit from its products. But as an investment, Transmeta's stock may be too hot to handle.

Reinhardt covers the chip industry in Silicon Valley.

EDITED BY MONICA ROMAN

NO CHEERS FOR CISCO

CISCO SYSTEMS CEO JOHN Chambers once again stepped on the accelerator but failed to convince nervous investors that the ride will continue. On Nov. 6, Cisco said fiscal first-quarter sales surged 66%, to \$6.52 billion, while profit before special items climbed 67%, to \$1.36 billion. Encouraged by 50% sales growth in all five of its markets, the company boosted its 2001 earnings forecast. Chambers predicted that Cisco would leapfrog rivals like Lucent Technologies and Nortel Networks to become the world's largest supplier of communications gear. Yet Wall Street remains worried about slower spending by

U.S. phone companies and Cisco's high inventory. Cisco's shares closed Nov. 8 at 52½, down 4%.

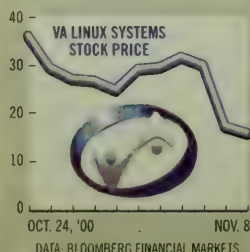
AT&T: LET'S START CLEANING HOUSE

THE RESTRUCTURING AT AT&T continues. Now the company is saying it may sell noncore assets to raise cash and reduce its crushing debt load. That could include its holdings in Time Warner Entertainment and Cablevision Systems. Another possibility: selling its 75 million Vodafone Group shares. Bond analysts are increasingly nervous about the magnitude of the company's debt, which ballooned to \$62 billion with its acquisition of cable-TV operators MediaOne and TeleCommunications. Credit rating service Standard & Poor's lowered its rating on AT&T debt Nov. 7 to A from AA-.

CLOSING BELL

WRONG PROGRAM

Dot-coms are getting blamed for everything these days. Shares of VA Linux Systems sank 42% on Nov. 6, to \$17.38, after the maker of software for PC servers said revenues for the quarter ended Oct. 27 will be about \$55.8 million less than expected, or 10%. Losses could run 16¢ a share—twice expectations. The reason for the fall: VA Linux' overwhelmingly dot-com clientele. If VA Linux is going to turn it around, it had better find some Old Economy customers fast.



A CURE WORSE THAN THE DISEASE?

A CHILLING REMINDER THAT over-the-counter remedies aren't without risk: On Nov. 6, the Food & Drug Administration asked drugmakers to discontinue marketing products containing phenylpropanolamine after scientists found that the compound could increase the risk of stroke in women. PPA is found in such cold remedies as the effervescent form of Alka-Seltzer Plus Cold Medicine and in weight-loss products such as Acutrim II Maximum Strength Appetite Control.

NORTHWEST DOES SOME FANCY FLYING

NORTHWEST AIRLINES SURE knows how to make a deal. Northwest tentatively agreed to sell its controlling interest in Continental Airlines to the airline. The deal would end

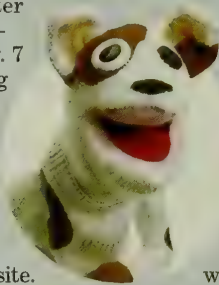
HEADLINER: PETS.COM

PUTTING A SOCK ON IT

It's off to the dog pound for the Sock Puppet. The canine mascot for Pets.com is up for sale, along with the pet-supply Web site's other assets, after the company announced on Nov. 7 that it's shutting down.

Pets.com raised \$110 million from Amazon.com and others last year to become the leading pet site. In countless TV ads, including a \$2 million Super Bowl spot, the playful puppet urged people to buy online "because pets can't drive." But it wasn't enough to overcome cutthroat competition, high shipping

costs, and consumer reluctance, which contributed to a \$22 million loss in the third quarter. Pets.com's IPO last February was a big dot-com dog, failing to rise above its \$11 asking price. Shares have traded below \$1 since September, despite expected 2000 sales of \$35 million.



CEO Julie Wainwright said the San Francisco company

sought financing in early summer and a buyer more recently. But more than 50 prospects didn't bite—apparently because pets can't spend money, either.

By Rob Ho

a Justice Dept. antitrust suit to force Northwest to divest its holdings in the nation's No. 5 carrier. But fourth-ranked Northwest would get a 29% premium for its stake, based on Continental's Nov. 3 closing price. Plus, it would retain the airlines' joint marketing pact and veto power over a sale of Continental till 2025, as well as a 7% interest. The settlement now goes to a federal judge on Nov. 14.

BIG TOBACCO IS BUSY IN COURT

TIMES ARE GOOD IF YOU'RE AN attorney representing the embattled tobacco industry. On Nov. 6, the European Commission sued the two largest tobacco companies, Philip Morris and R.J. Reynolds, accusing them of abetting black marketeers who evade taxes. In Florida on the same day, the five

largest tobacco companies appealed a \$145 billion punitive judgment awarded last July in state court.

Meanwhile, in U.S. District Court in Brooklyn, Lorillard Tobacco and Liggett Group are expected to settle dozens of punitive claims in an billion out-of-court agreement. The deal is an attempt to shield Lorillard and Liggett from the Florida judgment. It's a long shot, given that the other major tobacco companies are refusing to join the Brooklyn settlement—least for now.

ET CETERA...

- Broadcom agreed to pay as much as \$2 billion in stock for chip design house SiBy
- Microsoft, Compaq, and others will invest \$1.02 billion in WinStar Communications.
- The SEC will consider a rule Nov. 15 that seeks to ensure the independence of auditors

TPG /ti:pi:dʒi/adj (TNT Post Group)

1 *AmE* good or quick in thinking; clever.

2 quick and sharp. **3** *esp. BrE* neat and stylish in appearance. *Efficiency and a high degree of automation define the TPG approach of doing things differently.*

| Evolving from a national postal service into the most TPG company in the business is quite extraordinary. | It's also TPG to invest much time and effort establishing a sophisticated infrastructure and networks around the world. - see also Mail, Express & Logistics.

Some call it smart. We call it TPG.



www.tntpost.com





e-marketplaces

WHAT A GREAT LOCATION



Introducing the e-marketplace alliance: IBM, i2 and Ariba. Three

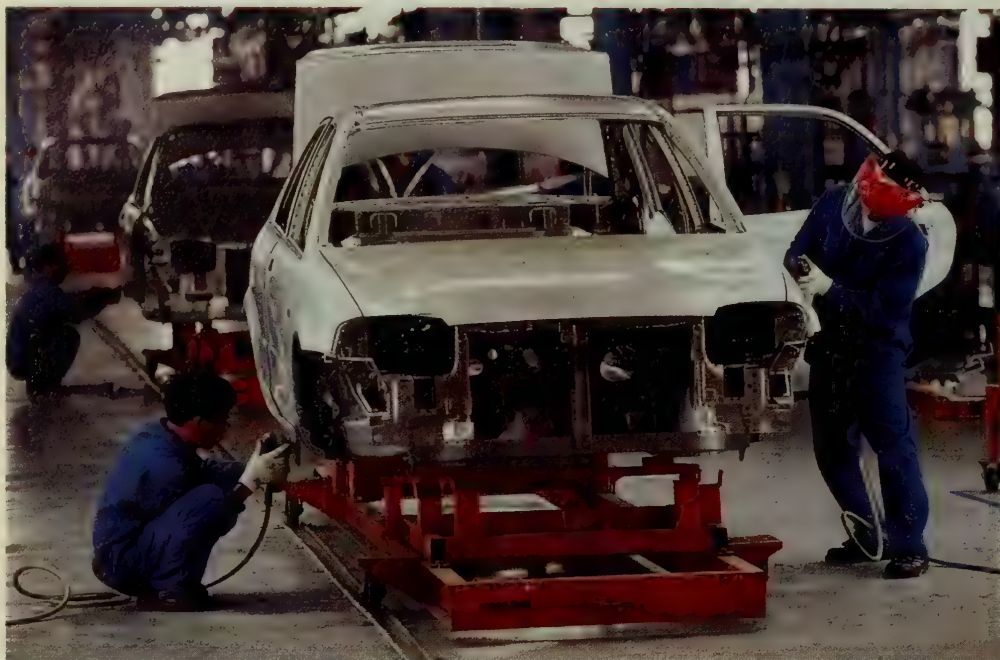
OR AN E-MARKETPLACE.



Best names in e-business working together to help make your business
efficiently — whether you buy or sell ships, sleds or seafood. It's b2b×3.

ibm
i2
ariba

www.ibm-i2-ariba.com or call 877 426 2676; priority code: emarket1



FORD PLANT: The company had to wait 16 months for permit to sell cars

SOUTHEAST ASIA

BACK ON THE RADAR SCREEN

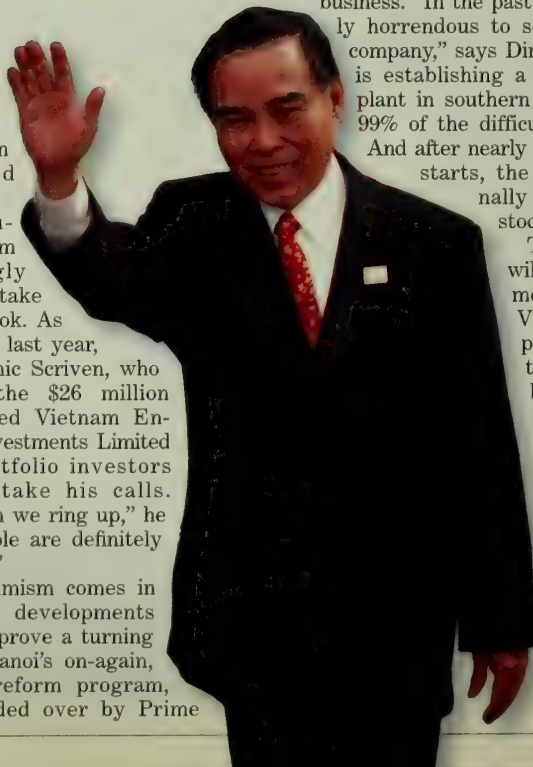
Vietnam is hunting foreign investors

When President Bill Clinton lifted the economic embargo against Vietnam six years ago, predictions that the nation would become Asia's next economic tiger seemed credible enough. Thanks to economic reforms launched in 1986, nearly \$8 billion in foreign investment had been pledged to Vietnam by 1994, and U.S. companies were expected to pour in billions more. But the nation's communist rulers, it turned out, weren't ready to abandon a command economy. Reformers would open the door to the West one minute, only to see hard-liners slam it shut the next. Tired of battling red tape, corruption, and protectionism, many foreign investors took their money elsewhere.

Now, it seems, Vietnam is poised to reappear on the radar screen. Clinton is to visit the country this month, making him the first U.S. President to do so since what the Vietnamese call the

American War. And investors, while cautious, seem increasingly willing to take a second look. As recently as last year, says Dominic Scriven, who manages the \$26 million Dublin-listed Vietnam Enterprise Investments Limited Fund, portfolio investors wouldn't take his calls. "Now when we ring up," he says, "people are definitely interested."

The optimism comes in a year of developments that could prove a turning point in Hanoi's on-again, off-again reform program, now presided over by Prime



more fairly with foreign investors. "The trade agreement has signaled that Vietnam wants to be a serious player in the international scene," says a senior U.S. official in Hanoi.

NO TROUBLE. Vietnam also has enacted internal reforms. In January, it passed an enterprise law that put into place a simple, two-week process to set up business. "In the past it was absolutely horrendous to set up a private company," says Dinh Thi Hoa, who is establishing a food-processing plant in southern Vietnam. "Ninety-nine percent of the difficulties are gone. And after nearly a decade of false starts, the government finally has opened a stock market."

The trade deal will provide an immediate fillip for Vietnamese exports. Average tariffs on U.S. bound goods will drop to 3% from 40%, with shoes, textiles, and light manufactured goods

PHAN: The Prime Minister's reforms may be at a turning point

ected to benefit the most. Analysts reckon exports to the U.S. will grow \$1 billion next year, up from \$650 million in 1999. "This is Vietnam's greatest opportunity since the beginning of economic reforms," says government economist Le Danh Doanh.

Theoretically, the trade deal will mean that all companies, domestic and foreign, are treated equally—paying the same minimum wages, taxes, and telephone charges—and are subject to the same laws. Optimists also hope state firms will be less likely to use political connections to their advantage. One example: Ford Motor Co. spent \$102 million in the mid-1990s to build a factory near Hanoi. But thanks to pressure from local rival Vietnam Motor Corp., it took 16 months for Ford to get approval to sell its Laser sedan. Ford is just beginning to recover from the setback; it sold only 957 cars in the first 10 months of this year, a far cry from the 14,000 it had expected to sell annually. But under the trade accord, government approvals are supposed to be weighed objectively rather than politically.

In another sign that Hanoi aims to be more investor-friendly, foreign companies are being allowed to wholly own local subsidiaries, or buy out troublesome joint-venture partners. Full foreign own-

ership was technically possible as far back as 1987 but was effectively blocked. The government has finally begun to realize that foreign companies will not set up in Vietnam unless they can do business without fear of being blindsided by their local partners. No one has forgotten the experience of American Rice International, which was pulled out in 1998 after a bitter dispute with state-owned Vinafood.

Clearly the trade deal with the U.S. is no guaranteed elixir for investors' headaches. Penetrating Vietnam will require a "serious campaign," says Chris Tragakis, general director of American International Insurance Co., which in April finally received the necessary approvals for an investment license—after trying for seven years. Observers caution that the signing of the trade agreement almost certainly owed more to Vietnam's recent economic travails than Hanoi's wholehearted embrace of capitalism.

Indeed, hard-liners still wield considerable influence, and the Communist

Party remains deeply divided over the pace of liberalization. A draft of the next five-year economic and social blueprint is replete with conflicting messages. In one breath it says the development of the private sector is good; in the next it says the state will remain the dominant force in the economy. And while increasing foreign competition

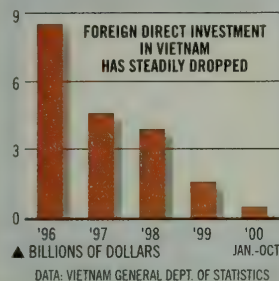
could force Vietnam's 5,500 coddled state-owned enterprises to restructure, they can be expected to drag their feet every step of the way.

Relatively robust growth of 6.5% also could embolden the hard-liners to slam on the brakes. But the clock is ticking, and the longer Hanoi waits, the greater the

cost of reform—and the more the country will fall behind the rest of the world. "Vietnam," says government economist Doanh, "must restructure its economy and accept competition at international standards." Clinton no doubt will tell his Hanoi hosts much the same.

*By Frederik Balfour
in Ho Chi Minh City*

INVESTMENT PARIAH



NEVER MIND THE SNAIL'S PACE. THIS IS CAPITALISM

The Ho Chi Minh City Securities Trading Center is almost eerily quiet. With less than an hour to the closing bell, several traders are reading newspapers; others wander outside for a smoke. Suddenly, a fax machine comes to life and spits out an order. A staffer keys it into a terminal. A minute later, the trade flashes across the big screen.

Welcome to Vietnam's fledgling stock exchange. Just three months old, it boasts a market capitalization of some \$48 million and average daily turnover of \$70,000. Only four companies have listed so far, all of them formerly state-owned enterprises—a maker of air conditioners, a telecom cable manufacturer, a freight-forwarding company, and a tissue-paper exporter. The market is open two hours a day, three days a week.

Hold the chuckles. Despite its modest beginnings, the exchange represents a step forward for Viet-



nam, where most people still keep their savings under the mattress.

The government hopes the market will hasten the privatization of the nation's cash-starved state-owned companies—essential if Vietnam is to move to a true market economy.

Overseas fund managers have been sounding out the six local brokerages, though none have invested so far. Jonathon Waugh, chief repre-

A FOOT IN THE DOOR:
Vietnam's fledgling bourse on opening day

sentative of Jardine Fleming Vietnam, says they'll take the plunge once the bourse reaches critical mass; at least 10 new companies will list over the next year. For now, says Waugh, foreign investors, who account for 12% of the market, are mostly venture capitalists.

To list, a company must show two years of profits and boast minimum capital of \$700,000. Fund manager Dominic Scriven says that he has uncovered some 40 companies that meet the requirements. "The market is good," he says. "The settlement system works, and prices don't go all over the place."

For her part, Thai Uyen Phuong, a broker from state-owned BIDV Securities Co., would like to see more action on the trading floor. "It gets kind of quiet," she says. "We hope more companies list." Vietnam's future may well depend on it.

*By Frederik Balfour
in Ho Chi Minh City*

COMMENTARY

By Michael Shari

WHY SINGAPORE IS UNLOADING AN ICON

Just a couple of years ago, NatSteel Electronics Ltd. was an exemplary Asian success story. Under the guidance of Chester Lin, an imaginative CEO who is anything but risk-averse, the Singapore contract manufacturer did brilliantly at assembling name-brand computers for high-class clients that no longer wanted to run their own factories. NatSteel Electronics was paid in hard currency and boasted such rapid profit growth that it managed to weather the Asian crisis.

But NatSteel Electronics has become a parable of how difficult it is for Asian players to compete against outsize global corporations in the fast-growing contract manufacturing business. Quick though it was to latch on to industry trends and identify best-selling products, NatSteel Electronics fell behind its U.S.-based competitors, which have deeper pockets, are geographically closer to their clients, and are better at cutting costs.

PRETTY PENNY. As a result, the Singapore government, which owns NatSteel Electronics' parent, NatSteel Ltd., agreed on Oct. 31 to sell out to industry leader Soletron Corp. in Milpitas, Calif., for \$2.4 billion. The sale is part of Singapore's long-stalled initiative to force sprawling, unwieldy government-linked companies (GLCs) to offload non-core assets. In fact, NatSteel Electronics is superior to many other GLCs, but its sale will make it easier for Singapore Inc. to make other painful decisions.

To their credit, Singapore's policymakers are unashamed of letting a big fish swallow one of their fastest-swimming minnows. Having decided to sell, the government's goal was to get a premium for NatSteel Electronics' shares, which dropped by 80% between Mar. 9 and Oct. 18. After two months of shopping the company around, NatSteel Ltd. sold its 33% stake to Soletron for twice the market price.

It's not hard to see why Soletron paid a premium. Much of NatSteel Electronics' value can be attributed to CEO Lin. Before leading a management buyout of the company in 1994, he ran the Singapore operations of SCI Systems Inc. of Huntsville, Ala.—the company that practically invented contract manufacturing. After taking over NatSteel Electronics, Lin demonstrated a knack for spotting trends and sniffing out the right product lines. In 1997, he acquired a

and 80% in 1998. But last year, they were up only 20%—and suddenly the company was vulnerable.

Over the past three years, Soletron, Flextronics International Ltd., and other players have bought plants from such clients as IBM and Ericsson. By building up economies of scale, they manufactured products more efficiently than their clients could have done themselves. And they spread their risk among various customers. By contrast, NatSteel

Electronics became addicted to one client—Apple, which made up 53% of its annual revenues of \$2.5 billion until October, when Apple announced a projected 15% drop in sales. Clearly that would badly dent NatSteel Electronics' bottom line.

IN THE LOOP. And so a Singaporean icon of national development became takeover bait, an increasingly common occurrence. Over the past two years, companies from Flextronics to Jabil Circuit Inc. in Detroit to Dii Group Inc. in Niwot, Colo., have acquired Asian contract manufacturers or plants. The only companies to buck this trend so far are the mainly Taiwanese "original design" manufacturers that add value by actually developing new products for their clients.

Until recently, Asia seemed to own contract manufacturing. But cheap labor and engineering costs are no longer a big advantage. Nowadays, the key

is a strong presence in Silicon Valley and Western Europe, where most decisions are made. Because NatSteel Electronics was a Singaporean company, Lin was out of the deal-making loop. In the end, the winners in the contract manufacturing game will be companies like Soletron and Flextronics that can tap Wall Street for capital and boast tight client relationships with the world's biggest electronics and telecom companies. Unfortunately, NatSteel Electronics and its ilk simply cannot compete.

Shari is Singapore bureau chief.



IF YOU CAN'T BEAT 'EM...

A richer rival is buying Lin's NatSteel Electronics

ing iMac, for which NatSteel made motherboards.

Sudden success prompted Lin to embark on a global expansion binge. NatSteel Electronics began buying up and opening factories from Mexico to Hungary. At first, the strategy seemed to be working. NatSteel Electronics' profits rose 100% in 1997

By David Fairlamb

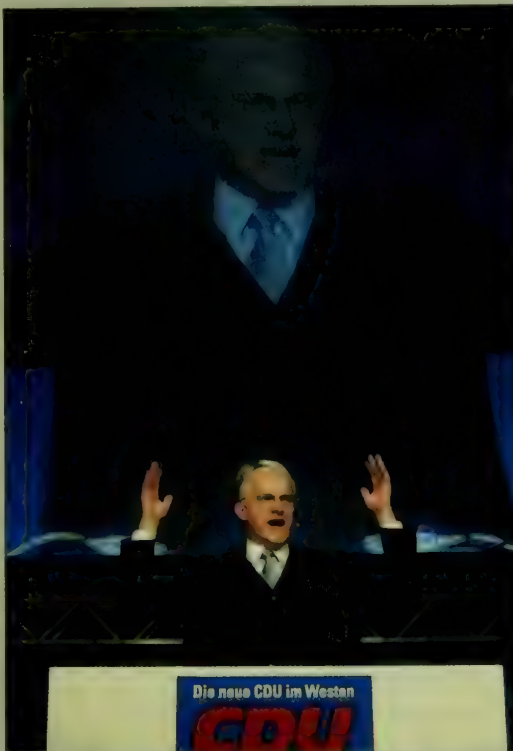
A BANK BREAKUP THAT'S JUST WHAT GERMANY NEEDS

Germany's private-sector bankers are a pretty buttoned-down lot. But if you want to see them unleash some Teutonic rage, just ask what they think of Westdeutsche Landesbank. WestLB, as it's popularly known, has its hand deep in the state's cookie jar. It enjoys government backing from the big state of North Rhine-Westphalia and gets government guarantees on the debt it raises from the markets. These advantages have given rival bank executives fits.

So the news that broke on Nov. 3 is just what these bankers have been waiting for. That's when Jürgen Rüttgers, head of the Christian Democratic Union in North Rhine-Westphalia, said WestLB should be broken up and partly privatized. Since the CDU controls WestLB's supervisory board, the bank may finally be transformed.

If so, the breakup will dramatically change the German financial landscape. Together with state-controlled savings banks, the 12 *Landesbanken* account for more than half of all bank assets in Germany. Breaking up WestLB—the country's fourth-largest bank with assets of \$390 billion—would spur a much-needed restructuring of German finance and create a more level playing field between public- and private-sector banks. “It would mean the disappearance of grave distortions in German banking,” says Manfred Weber, managing director of the Federation of German Banks.

HOUSE BANK. Private-sector financiers complain that the Düsseldorf-headquartered leviathan has an unfair advantage because it is 43.2%-owned by the state of North Rhine-Westphalia. Like other *Landesbanken*, WestLB provides wholesale and investment banking services for local savings banks (which also own a big slice of it) and acts as house bank to the local government. In return, the government guarantees its borrowing.



As a result, WestLB has an AA1 credit rating but a financial-strength rating of D from Moody's because of the bad debt on its balance sheet. WestLB can raise money up to 50 basis points more cheaply than many private banks and use that capital to underwrite corporate lending at low rates. And the politicians on WestLB's supervisory board are far less demanding of high profits than their private-sector counterparts.

The same is true of the other *Landesbanken*. But none has exploited its privileges as vigorously as WestLB. It is the largest lender to industry in North Rhine-Westphalia and a potent force in the Frankfurt capital markets. Its close links to the state government mean it automatically underwrites most public-sector bond issues. Under long-serving Chief Executive Friedel Neuber—probably the most powerful man in North Rhine-West-

phalia—WestLB has built up sizable stock and bond operations in London and New York, and has even moved into Indian trade finance. “No wonder the private-sector banks want to see its wings clipped,” says Ralf Dibbern, banking analyst at M.M. Warburg & Co., a private bank in Hamburg.

Successive German governments have refused to reform the *Landesbanken* because state governments count on them to finance pet projects, and the banks' supervisory boards provide lucrative jobs for retired politicians. So Commerzbank, Deutsche Bank, and other private banks complained directly to European Competition Commissioner Mario Monti, who has demanded that the *Landesbanken* lose their special privileges.

MORE SHAKEUPS? Rüttgers' CDU party is in opposition in North Rhine-Westphalia, but it got control of the WestLB supervisory board when a series of municipal election victories gave it control of local savings banks with seats on WestLB's board. Rüttgers wants to defuse tensions between the EU and Berlin over government involvement in the financial sector, so he's proposing to spin off WestLB's

corporate and wholesale banking businesses. The rump of the bank would handle development projects and government business and keep its state guarantee. The plan will be discussed by the board later this month.

Other public-sector banks may get similar shakeups. The city of Frankfurt, which controls a savings bank called Frankfurter Sparkasse, could sell off all or part of it. That's revolutionary talk by German standards. Says Dibbern: “We could be on the threshold of a period of seismic change.” And not a moment too soon.

Fairlamb covers finance from Frankfurt.



COLOMBIA

THE WAR ON COCA: HOW FAR WILL THE U.S. GO?

The final cost may be much higher than Washington thinks

Life in the southern Colombian province of Putumayo has never been easy. But for the 350,000 residents of this coca-growing outpost on the border with Ecuador, it's hard to see how it could get any worse. For seven weeks now, left-wing rebels and right-wing paramilitaries have been waging a pitched battle for control of the province, which is home to half of Colombia's 300,000 acres of coca fields. A guerrilla-organized blockade has reduced supplies of fuel and food to a trickle. Hundreds of people have already crossed over into Ecuador. Those who remain are bracing for more hardship.

That's because the crisis in Putumayo is expected to intensify in December once a new 950-man antidrug brigade is deployed in the area. The brigade is part of Colombia's campaign to halve the country's coca output by 2006, and the U.S. is contributing \$1.3 billion over two years toward the effort. Besides footing the bill for—and overseeing—the training of three antidrug brigades, Washington is throwing in some 60 helicopters. "As we see it, it's only going to escalate the conflict in Colombia," says a U.N. official.

The final tab for Washington may be a lot bigger than U.S. lawmakers anticipated. Colombian President Andrés Pastrana had originally wanted \$450 million more from the U.S. to support Plan Colombia, an ambitious \$7.5 billion program that encompasses everything from democratic reform to measures designed to fortify an anemic economy. So Bogotá is likely to lobby for even more U.S. money. Ecuador, meanwhile, wants Washington to help boost development in border areas that could see a flood of Colombian refugees. According to the U.S. General Accounting Office, the State Dept. has already acknowledged that "substantial funding" will be needed to support U.S. goals in Colombia.

There is a real danger that the latest offensive in Colombia could aggravate tensions in the politically unstable Andes. The coca trade is the main source of financing for guerrilla groups that have fought a four-decade-long battle

REFUGEES

Ecuador has asked Washington for \$300 million to help cope with a flow of fleeing Colombians

against the government. The fighting has claimed 30,000 lives in the past decade.

Colombia's neighbors fear that the campaign will cause the conflict to spill over into their own countries. That's why Panama, Brazil, Peru, and Ecuador are all now beefing up border security. Ecuador is particularly vulnerable since it shares a frontier with Putumayo, and the country has already received \$2 million from the U.N. to cope with an expected inflow of 5,000 Colombian refugees. In October, Ecuador's foreign minister, Heinz Moeller, traveled to Washington to ask for \$300 million in fresh funds. A State Dept. official says Moeller's request will be carefully considered. If Ecuador succeeds in its request, other countries may be inspired to follow suit.

ADAMANT. Despite the potential escalation in cost, there is no sign that Pastrana and his allies in Washington are prepared to rethink their antidrug strategy. The Colombian government believes that attacking the coca trade is its best chance of extracting concessions from the guerrillas at the negotiating table. Talks between the government and Colombia's largest rebel group, the Revolutionary Armed Forces of Colombia (FARC), have been under way since January, 1999, with little result. "Coca is the biggest enemy of peace," says Jaime Ruiz, a top aide to Pastrana.

U.S. officials, meanwhile, are adamant that the policy will bring stability not just for Colombia but for the entire region. "Everyone reaps the benefits when the drug trade is reduced," says Robert

Weiner, spokesman for U.S. drug czar General Barry McCaffrey.

The guerrillas won't give up the cash crop without stiff fight, though. Indeed, with coffee fields in Putumayo under threat, FARC

Colombia's neighbors
fear the conflict
will spill across
their borders

is seeking other strongholds. In mid-October, the rebels laid siege to two northern towns, killing more than 100 soldiers in one and taking 30 civilians hostage in the other. The price of peace in Colombia will be high. And Washington may have to pick up the tab.

By Suzanne Timmons in Bogotá

prudential.com

It's about money. It's about time.

Insurance quotes, prices, and other useful stuff.

Prudential.com is loaded with interactive calculators and smart financial tools that can help you take control of your financial life.

- Get a quick online term life insurance quote.*
- Calculate the value of your estate.
- Find a Prudential professional in your area.

Manage your money online.

- Access your account information online.
- Pay bills and make other financial transactions.
- Apply for a home equity loan.
- Access your Prudential-administered 401(k).
- Download mutual fund prospectuses, and more.

Connect to the pulse of Wall Street.

- Get the latest stock quotes and market news.
- Access daily market commentary from well-known analysts like Ralph Acampora and Larry Wachtel.
- Catch other industry experts during one of our live webcasts.
- Order a free copy of our Select List and find out which stocks our analysts are watching now.

Find a new home without leaving home.

- Browse through listings for homes all across North America.
- Find a neighborhood that meets your needs.
- Get smart tips on moving and more.

Now you can access Prudential offerings from your Palm VII™

It's a busy life we live. With precious little time for things like managing our finances. Now, prudential.com gives you one place you can go to find everything you need to manage your financial life wisely.

Log on to **prudential.com** and see what it can do for you, or call **1-800-THE-ROCK ext. 8406.**



Prudential

Securities products and services offered through Pruco Securities Corporation, 751 Broad Street, Newark, NJ 07102, Prudential Investment Management Services LLC, 100 Mulberry Street, Newark, NJ 07102, and Prudential Securities Incorporated, 199 Water Street, New York, NY 10292, all members SIPC. *Not available in all states. Home equity loans are made available through The Prudential Savings Bank, F.S.B. ("Prudential Bank"), Equal Housing Lender, and are available in most states. Real estate brokerage services are offered through the Network of independently owned and operated franchisees of The Prudential Real Estate Affiliates, Inc., a subsidiary of Prudential. Equal Housing Opportunity. All of the above are Prudential companies.

IFS-2000-A056103

BRAZIL

SAVING THE FOREST FOR THE TREES

A Brazilian company joins a drive to make timber "green"

There's a fresh coat of bright yellow paint on the ends of the tree trunks piled up on the banks of the Madeira River deep in Brazil's Amazon forest. "Cheerful color, isn't it?" says Raimundo Barbosa, paintbrush in hand. "That's the certified wood."

Barbosa works for Gethal Amazonas, a Brazilian company that on Oct. 19 became the first tropical plywood maker in the world to be fully certified by a nonprofit organization called the Forest Stewardship Council (FSC). Founded in 1993 and run on a shoestring from Oaxaca in southern Mexico, the FSC's goal is nothing less than converting the world's timber companies to a new creed of sustainability. The organization's members include environmental groups, as well as the logging companies, timber merchants, and wood retailers that until recently were their sworn enemies. "Our mandate is to change the way the world's forests are managed," says FSC Operations Director James Sullivan.

If the FSC has its way, certified companies like Gethal will eventually squeeze their noncertified competitors out of the global marketplace. "It's a matter of survival," says Gethal CEO Bruno Stern. But don't think the wanton destruction of the rain forest is going to end next week. The FSC has certified less than 4% of the world's 500 million hectares of productive woodland so far. At this rate, it's not certain which will become extinct first: unscrupulous timber companies or some of the precious forests they plunder.

Yet the activists and their new allies in industry press on. At Manicoré, Marcelo

Alves, one of Gethal's forest engineers, shows what FSC certification means in practice. Of the 40,000 hectares of ancient forest Gethal owns, 13,000 are being mapped in 50-square-meter blocks to show the location of every tree to be cut. Trees marked for the chain saw must be over a certain circumference. And Gethal limits itself to just 13 species of Amazon hardwood, including amapa, cajui, and sumaruba. One team then does the cutting, first removing any creepers that could pull down nearby trees. Another team marks a trail for the tree to be dragged a maximum of 300 meters to the nearest storage patio. "The idea is to minimize the impact so the forest can recover more quickly," Alves says. The logs then travel two days downriver to Gethal's mill near Manaus. There, they are turned into plywood that is shipped to the U.S. and Europe for use in the construction, marine, and transport industries.

FORMER DEVIL. Gethal's practices weren't always this eco-friendly. In the 1950s and 1960s, the company was among those responsible for the near-destruction of the Atlantic Forest in southern Brazil. When the trees there ran out, it decamped to the Amazon, where it bought wood from local loggers, not caring much where it came from. "A few years ago, they were the devil incarnate," says Tasso Azevedo of Imaflo, a Brazilian agency affiliated with FSC.

But that was before the plight of Brazil's Amazon forest began to garner global attention in the late 1980s. Since then, pressure on rapacious logging com-



THE FOREST STEWARDSHIP COUNCIL

DESCRIPTION A nonprofit organization established in 1993

BASED Oaxaca, southern Mexico

FOUNDING MEMBERS Retailers such as Home Depot (U.S.), B&Q (Britain), Ikea (Sweden); Environmental groups, including Friends of the Earth and Greenpeace; lumber companies in the Americas, Europe, and Asia.

MANDATE To provide an independent labeling scheme on timber and timber products that guarantees that they come from a well-managed forest

ACHIEVEMENTS 241 forests certified, covering a total of 18,327,000 hectares

panies has been building from all directions. Environmental groups have been the most outspoken critics. In June, Greenpeace activists invaded warehouses in the British port of Tilbury and stenciled the words "criminal plywood" on 1,400 packs of plywood. The shipment belonged to Amaplac, a Malaysian-owned company long accused of buying timber from Brazilian loggers operating without legal permits.

Retailers have also become a force for change. Home Depot Inc. of Atlanta is the world's largest home-improvement chain with sales of \$34.8 billion last



TREE TREASURE: The idea is for certified companies like Gethal to squeeze out competitors that aren't

movement has even greater momentum: 20% of all wood and paper products sold in Britain, for example, are FSC-approved.

Some investors are joining the cause. A growing number of so-called green funds limit their investments to companies with environmentally sound practices. For Gethal, this trend has been vitally important: In February, a fund operated by Grantham, Mayo, Van Otterloo & Co. (GMO), a Boston asset-management firm that has about 1% of its \$23 billion portfolio tied up in green ventures, paid \$7 million for 85% of the company. GMO is also spending \$10 million to modernize Gethal's mill and buy new forests at Manicoré. "We were looking for a project in tropical forests and Gethal was by far the best

one we found," says Bob Brokaw, a GMO partner. Gethal posted a \$1 million profit on sales of \$12 million last year. Its new owners expect annual revenues to rise to \$14 million and margins to improve as a result of cost-cutting. GMO has promised to hang on to Gethal for at least a decade, after which it will decide whether to sell it.

Without GMO's cash, Gethal would have been hard pressed to meet the FSC's exacting standards for certification, a process that took two years from start to finish. Gethal's CEO believes the effort will pay off in the long term. But

Stern admits he's "a little disappointed the market isn't paying the premiums we were hoping for." The 43-year-old native of Uruguay, who gave up a cushy job as vice-president of Citibank's international corporate debt department in New York in 1989 to run Gethal, expected his certified wood to fetch a premium of 30% over noncertified. But so far, he's had to content himself with premiums of just 7.5% on average.

More buyers may materialize soon. A bill now going through the New York City Council will require the city administration to buy FSC-certified wood for all public contracts, when available. "This is the first bill of its kind in the U.S., but we would expect other local governments to follow suit," says A. Gifford Miller, the council member who drafted the bill. Many local authorities in Europe are already paying more to get certified wood.

MUCH TO DO. Gethal is just one example of how the certified wood movement is gaining ground in Brazil. Of the 241 companies that have secured the FSC's seal of approval so far, 10 are in Brazil. And a million hectares of the Amazon forest are now being readied for certification.

But there's still much more to be done before the planet's tropical forests will be safe. About 15% of the Amazon forest has been destroyed over the past three decades. In Asia, just 30% of the tropical forest is left. Much of the blame goes to local buyers, who typically are far less picky than Home Depot. So the FSC and its allies face an uphill struggle. Then again, nobody ever said creating an eco-friendly business would be easy.

By Jonathan Wheatley in Manicoré

ar, is an FSC founding member and e of the movement's drivers. Last ar, the company promised to stop selling wood products from endangered reons by the end of 2002 and to give eference to suppliers offering FSC-certified wood. "This is something we did in vance of our customers asking for it, ough more and more are doing so," ys Home Depot's manager of environment programs, Kimberly Woodbury. Home Depot's main rival, Lowe's Companies, along with window-maker Anrson Corp., have also joined the usade. In Europe, the certification

EDITED BY ROSE BRADY

CHINA: TOMORROW'S LEADERS ARE JOCKEYING FOR POSITION

It's primary time in Beijing. Or, at least, the closest thing China has to primaries is gearing up: Even though it's more than two years until President Jiang Zemin, 74, and Premier Zhu Rongji, 72, step down, potential contenders to succeed them are already jockeying for power. A frontrunner has fallen out of the running, and others have gained an advantage in the race to rule China. Who wins could have big implications for the pace of reform and the state of relations with the new U.S. President.

Candidates for the top jobs in China need to have their support well in place before members of the Politburo pick the next Prime Minister and President at the 16th Party Congress in the fall of 2002. The new leaders will have to see China through difficult challenges as it opens to global competition as a result of its membership in the World Trade Organization. And they may experiment with political reforms, such as municipal elections, or allowing more parliamentary debate.

The tough agenda ahead promises to make the next Premier's job even more demanding than it has been under the crusading reformer, Zhu. Still, politicking for the post is fast becoming intense. Until recently, one strong contender was 61-year-old Zeng Qinghong, the head of the party's Organization Dept. He was said to be supported by his patron, Jiang. But at a Party Plenum in October, Zeng was passed over for promotion to full membership in the Politburo—partly because of opposition from Zhu, who did not want a protégé of Jiang's winning too much power.

While Zeng was unable to build a solid base of support in the Politburo, two other top aspirants for the premiership enjoy widespread backing. Both are known as technocrats, but their approaches differ. Li Changchun, 56, is a cautious play-

er who toes the political line. He has served as governor and party secretary of the provinces of Liaoning and Henan, respectively, and now runs southern Guangdong province. Li has done a competent job as party secretary, analysts say, but he hasn't introduced innovative economic reforms.

By contrast, the current frontrunner to succeed Zhu has stronger reform credentials. Vice-Premier Wen Jiabao, 53, holds one of China's toughest jobs: managing the rural economy, which is beset by falling incomes. Wen has appeased restive

farmers by calling for limits on rural taxes. But his next task will be implementing the reforms, which could face opposition from local leaders. Another wild card will be how Wen and Zhu deal with China's entry into the WTO. If that leads to mass layoffs, it could weaken Zhu's ability to anoint Wen as his successor.

TIBET NOIR. Whoever wins the race for the premiership will have to work with China's new President—widely expected to be Vice-President Hu Jintao, 57. He graduated from China's top science academy, Tsinghua University, in 1965. While party secretary of Tibet from 1988 to

1992, he presided over a harsh crackdown. But more recently, analysts say, Hu has surrounded himself with relatively liberal advisers who favor far-reaching economic and political reform.

If Hu proves to be a strong reformer, and a leader such as Wen becomes Premier, China could enter uncharted territory in a few years. Wen seems prepared to follow Zhu in aggressively pushing economic reform. And analysts say he is more likely than any other contender to consider pressing—cautiously—an opening of the political system. But that's long way off since the Chinese primaries are only beginning. The ride to new leadership will be long and bruising.

By Dexter Roberts in Beijing, with Sheridan Prasso in Washington



THE OLD GUARD: Jiang and Zhu

GLOBAL WRAPUP

DAEWOO'S LATEST CRISIS

► South Korea's government-controlled creditors have stepped up a battle with the militant labor union of ailing Daewoo Motor Co. in a bid to make it more sellable to a foreign buyer—most likely General Motors Corp., with its partner Fiat. On Nov. 8, the lenders declared Daewoo Motor bankrupt after its union rejected wage and job cuts. The company, whose \$16 billion in debts outweigh its assets by more than \$5 billion, became insolvent last year but has been kept afloat by creditors under a govern-

ment-arranged workout program. The government feared that an outright Daewoo bankruptcy would ruin thousands of its suppliers.

The labor union has been the main obstacle to streamlining Daewoo Motor's operation. Although the company's factories are running at 60% of capacity and are expected to pile up as much as \$2 billion in losses this year, union members have rejected management demands to lay off 3,500 of the 19,000-strong workforce. Now, creditors want the company to be run by court-appointed receivers. That

would involve the appointment of new managers, who won't be required to seek union approval for layoffs.

To put pressure on the union, creditors last week cut off fresh funds and let Daewoo default for a second consecutive day on Nov. 7 on \$77.3 million in debts, thus pushing it into bankruptcy. Daewoo had sought from lenders an additional \$400 million in working capital needed until the end of this year. Daewoo is the third South Korean carmaker to go bankrupt since the financial crisis of 1997.

By Moon Ihlwan in Seoul



350 MILLION PEOPLE MAY
DROP BY TODAY.
TIME TO SAY "HELLO."

The Internet world is knocking. PSINet helps your business answer. We give you all the tools you need to maximize on-line communications. Everything from multicurrency e-commerce and dedicated networking to multimedia services, private IP networking, and more. It's what we've done for thousands of small- and medium-sized companies as well as more than a third of the Fortune 500®. Your opportunity is knocking. Open the door. Call or contact PSINet at 1-800-406-4574 or www.psinet.com.

PSINet
THE INTERNET SUPER CARRIER

Being number one wo Being number one wy

China

Germany

Canada

USA

France

Thailand

Australia

Mexico

Sweden

Deutsche Post  World Net

MAIL EXPRESS LOGISTICS FINANCE

Worldwide is good. You is better.



When Danzas acquired Air Express International – AEI for short – we became No. 1 worldwide in air freight. But we're more concerned with being your first choice.

Integrating AEI into Danzas made us the leading global provider in air freight and a leader in ocean freight. Now, we can open up interesting new prospects for your intercontinental business, for example, through our stronger presence in the USA. What's more, you stand to gain from our increased freight capacity, our extensive connections and our space availability.

Another of our strengths lies in our wide variety of services, offering the full range of air and ocean freight, project forwarding and value-added services. And thanks to state-of-the-art information technology, it all happens fast and upfront, leaving nothing to your imagination. Every measure is designed for your specific needs, every step of the way. So it's not surprising that as AEI Intercontinental stands for total solutions to all your logistics tasks – all from a single source.

Danzas Group-Logistics. Worldwide.

- Worldwide No. 1 in air freight
- Global leader in ocean freight
- Leading in European overland transport
- Customized supply chain management
- eBusiness partner
- Represented in 150 countries

www.danzas.com

DANZAS **AEI**
INTERCONTINENTAL

At Wharton

**We Don't Teach
the New Rules
of Business...**

We Write Them

<http://wh-execed.wharton.upenn.edu/2631.cfm>

Executive Education That Works

Finance and Accounting for the Non-Financial Manager

January 7-12, 2001 August 5-10, 2001
March 18-23, 2001 October 21-26, 2001
June 10-15, 2001

Mergers and Acquisitions

January 28-February 2, 2001
June 3-8, 2001

Global Market Management

February 11-16, 2001
August 19-24, 2001

Wharton Executive Negotiation Workshop

March 4-9, 2001 December 9-14, 2001
July 22-27, 2001

For more courses and information,
please contact a course consultant at:

215.898.1776 or 800.255.3932 ext. 2631 **phone**

215.898.2064 **fax** (attn. 2631)

execed@wharton.upenn.edu **e-mail** (subject 2631)

<http://wh-execed.wharton.upenn.edu/2631.cfm> **we**

Wharton

Aresty Institute of
Executive Education

The Wharton School
University of Pennsylvania



SPUTE RESOLUTION

HAPPY ENDINGS NOT GUARANTEED

Arbitration doesn't always live up to its billing

Kanematsu USA Inc. is on a roll. A \$1 billion-plus subsidiary of a Japanese trading company, it has come on the winning end of four arbitration cases in less than a year. In August, a South American customer that refused to pay Kanematsu for more than \$1 million in telecommunications equipment was ordered by arbitrators to pay the full amount, plus interest. And in June, a U.S. customer who had withheld payment on Japanese yarn was ordered to pay Kanematsu's claim. Richard K. Jeydel, the company's senior vice-president, couldn't have been happier. "They ended up paying considerably more than we would have settled for," he says.

Happy endings like that have led many companies to commit to arbitration as a way of ironing out future disputes. But many are finding that arbitration—often a method of dispute resolution that doesn't involve courts—doesn't always live up to its billing. They're encour-

tering frustrating delays, expense, and irreversible rulings. And critics say one of arbitration's big advantages for companies—its confidentiality—is also one of its flaws, allowing companies to resolve disputes in private that should be made known to the public.

When arbitration works as it is intended, it is faster and cheaper than litigation and immune to endless appeals or punitive damages, and it provides business partners from different countries an unbiased forum. That's why many companies are insisting on prenups—fine print in the contract that requires both parties to resolve disputes through arbitration—before they tie the knot with customers, suppliers, and partners around the globe. Since 1995, cases filed with the American Arbitration Assn., one of several arbitrators available, have increased dramatically (chart, page 73). International disputes have soared more than 250%. And no

STAY AT THE CENTRE OF ATTENTION.

Enjoy the undivided attention to personal service and all the imperial luxuries of The Palace Hotel, lying in the heart of Beijing's ancient and cultural Wangfujing district. Book a Superior Deluxe Room for just US\$210, or a Suite from only US\$390. Of course both come with complimentary American breakfast and round trip limousine airport transfers. To book your room, please contact The Palace Hotel Beijing or The Peninsula Group Reservations Centre.

Offer valid from now until 31 December 2000. Minimum 3 nights stay. Rates are subject to 10% service charge and 5% VAT per person per night in City Development Fund.



王府飯店

THE PALACE HOTEL
Beijing

Managed by THE PENINSULA GROUP

8 Goldfish Lane, Wangfujing, Beijing 100006, P.R.C.
Tel: (86-10) 6559-2888 • Fax: (86-10) 6512-9050
E-mail: rph@peninsula.com • Website: www.peninsula.com
or CONTACT YOUR TRAVEL PROFESSIONAL



one of
"The Leading Hotels of the World"



Only the non-upgradeable die young. 





Right now, Motorola's Smart Networks Platform is helping the world's leading networking companies create programmable, upgradeable products that won't become part of next year's landfill. Thanks to DigitalDNA™ chips, systems, software and ideas.

Our sophisticated communications processors can enable products to live longer in market by adapting to future networking needs and standards.

Imagine unleashing this type of technology on your next smart product.

Find out more at www.digitaldna.com.



THE HEART OF SMART

i believe if opportunity
doesn't knock, build
a door."

— Milton Berle

American Opportunities Fund

★★★★★

Morningstar Overall Rating™ as of 9/30/00 among 3,876 Domestic Equity Funds. *American Opportunities Fund* outperformed the S&P 500 and the DJIA for the 1-, 3-, 5- and 10-year periods. There may have been intervals during those periods in which the Fund did not outperform the indexes. As a result of market volatility, current performance may vary from the figures shown.

Class B As of 9/30/00	1 Year	3 Years	5 Years	10 Years
SEC Standardized Avg. Annual Total Returns*	+33.36%	+24.72%	+24.25%	+23.00%
S&P 500	+13.27%	+16.44%	+21.68%	+19.42%
DJIA	+4.64%	+12.12%	+19.53%	+18.64%

American Opportunities Fund has beaten the S&P 500 and the Dow across the board.

I love a winner. Of course my *American Opportunities Fund* is only one of many strong performing funds from Morgan Stanley Dean Witter. Naturally, I realize past performance cannot guarantee future results, and I may have a gain or loss when I sell my shares. That said, this is one opportunity I wasn't about to let pass me by.

MORGAN STANLEY
DEAN WITTER

i
Funds

MORGAN STANLEY DEAN WITTER
Success. One investor at a time.

For more information on our
American Opportunities Fund call 1-877-937-MSDW
msdwdvice.com/fund

Issues resolved in private can include a public-interest component that may never be aired

ask for our free brochure and a prospectus, which contains more complete information on risks, charges and expenses. Read the prospectus carefully before you invest or send money.

There is no assurance that the Fund will achieve its investment objective. The Fund's share price will fluctuate with changes in the market value of its portfolio securities. When you sell Fund shares, they may be worth more or less than what you paid for them. Accordingly, you can lose money investing in this Fund.

The fund may invest in foreign securities in markets that pose different and possibly greater risks than those customarily associated with domestic securities, including currency fluctuations and political instability. Investments in small- and mid-sized companies involve greater risks than is typically associated with larger companies.

SEC standardized returns reflect the Fund's contingent deferred sales charge (Class B shares), that starts at 5.00% and declines to zero after six years.

Morningstar proprietary ratings reflect historical risk-adjusted performance for the periods ended September 30, 2000. Ratings are calculated from the Fund's 3-, 5- and 10-year average annual total returns (when applicable) in excess of 90-day Treasury-bill returns (with appropriate adjustments) and a risk factor that reflects fund performance below 90-day Treasury-bill returns. These ratings are subject to change each month. The top 10% of the funds in an investment category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars and the bottom 10% receive 1 star. American Opportunities Fund Class B received 5 stars for 10 years (of 796 domestic equity funds), and 4 stars for 5 years (of 2,419 funds) and 3 years (of 3,876 funds). Ratings are for Class B shares only; other share class ratings may vary. Past performance is no guarantee of future results.

The Standard & Poor's 500 Composite Stock Price Index and the Dow Jones Industrial Average are generally accepted measures of stock-market performance. The Standard & Poor's 500 Composite Stock Price Index is an unmanaged index of 500 widely held common stocks. The Dow Jones Industrial Average is an unmanaged index of 30 actively traded blue-chip stocks.

Morgan Stanley Dean Witter is a service mark of Morgan Stanley Dean Witter & Co. Services are offered through Dean Witter Reynolds Inc. and Morgan Stanley Dean Witter Online Inc. Members SIPC. is a service mark of Morgan Stanley Dean Witter & Co.

©2000 Morgan Stanley Dean Witter Distributors Inc. Member SIPC.

wonder. Prenups allow companies to decide ahead of time where the case will be heard and in what language. But whatever the language, "arbitration is essentially the same everywhere," says Richard W. Naimark, executive director of the Global Center for Dispute Resolution Research. "For businesses, this is immensely comforting."

Still, it's far from perfect. Sometimes winners are subject to counterclaims by losers, or they have to go to court to get paid. Losers have little recourse to appeal. And even when both sides walk away "winners," the public may lose by failing to hear about cases that involve product safety, anticompetitive behavior, or intellectual-property theft. But privacy is part of arbitration's appeal to companies. "Companies don't have to worry about disputes showing up in the paper," said William K. Slate II, AAA's president and CEO.

Partnerships and alliances that have made companies profitable have also left them exposed to potentially crippling disputes over payment, rights, and other matters. Arbitration doesn't necessarily reduce that exposure. Just ask John Gibson, the president of Halotron Inc., a division of American Pacific Corp. American Pacific, a \$73 billion Las Vegas-based chemical company, says it purchased the rights to Halotron, a chemical used in airbags and fire extinguishers, from its Swedish inventor in 1992, only to discover that the inventor was marketing it on his own. American Pacific won an arbitration against the inventor, but it took three years, two trips to Sweden, and considerable expense. And the dispute is not over. The company has gone to court to enforce the arbitration decree, and the inventor is seeking to have it overturned. "It's not a perfect system," says Gibson.

LESS THAN IDEAL. Losers in arbitrations might agree, since they're left with few options if they think the process was unfair. Arbitration rules allow appeals only in cases involving fraud or conflicts of interest on the part of arbitrators—and few cases can meet the test. Consider Arthur Andersen. When

in August the accounting giant split from its consulting unit, Andersen Consulting, it emerged from the ordeal with the Andersen name and \$1 billion—nowhere near the \$14 billion it wanted. The bitter, three-year dispute was neither fast nor private, and the outcome—at least for Arthur Andersen—was less than ideal. But it had no grounds for appeal. Says Daniel D. Beckel, the firm's general counsel: "The advantages [of arbitration] were not realized here."

For the public, there's a bigger problem. Disputes between two companies that are arbitrated in private can include a public-interest component that may never be aired in public. Issues

deemed "material" to the companies' bottom line must be disclosed in securities filings. But materiality is a subjective standard. For example, investors in Johnson Controls Inc., a \$17.2 billion maker of automotive interiors based in Milwaukee, would not have learned from the company's Securities & Exchange Commission filings that

the company had been part of a multi-million-dollar dispute that involved the accounting treatment used to determine the price of a company it had divested several years ago. But there was such a dispute, confirms general counsel John P. Kennedy. It started as an arbitration claim but was resolved informally, leaving behind no public record. Kennedy says SEC rules do not require disclosure of such disputes.

Critics say decisions not to disclose arbitrations do a disservice to investors and the public. "You're basically privatizing the system of justice in this country," said David B. Lipsky, director of Cornell University's Institute on Conflict Resolution. "There's this massive deregulation of justice."

Of course, most companies aren't going to be dissuaded from arbitration by public-policy advocates. That's clear from the rush to sign prenup agreements. But as companies come to grips with the possibility of expensive delays and unfavorable verdicts etched in stone, they may find a trip to court doesn't look so bad after all.

By Louis Lavelle in New York

ARBITRATION ON THE RISE



Special Report



AS LEADERS, WOMEN RULE

New studies find that female managers outshine their male counterparts in almost every measure

Twenty-five years after women first started pouring into the labor force—and trying to be more like men in every way, from wearing power suits to picking up golf clubs—new research is showing that men ought to be the ones doing more of the imitating. In fact, after years of analyzing what makes leaders most effective and figuring out who's got the Right Stuff, management gurus now know how to boost the odds of getting a great executive: Hire a female.

That's the essential finding of a growing number of comprehensive management studies conducted by consultants across the country for companies ranging from high-tech to manufacturing to consumer services. By and large, the studies show that women executives, when rated by their peers, underlings, and bosses, score higher than their male counterparts on a wide variety of measures—from producing high-quality work to goal-setting to mentoring employees. Using elaborate performance evaluations, executives, researchers found that women got higher ratings than men in almost every skill measured. Ironically, the researchers weren't looking to ferret out gender differences. They accidentally stumbled on the findings when they were compiling hundreds of routine performance evaluations and then analyzing the results.

The gender differences were often small, and men sometimes earned higher marks in some critical areas, such as strategic ability and technical analysis. But overall, female executives were judged more effective than their male counterparts. "Women are scoring higher on almost everything we look at," says Shirley Ross, an industrial psychologist who helped oversee a study performed by Hagberg Consulting Group in Foster City, Calif. Hagberg conducts in-depth performance evaluations of senior managers for its diverse clients, including technology, health care, financial-service, and consumer-goods companies. Of the 425 high-level executives evaluated, each by about 25 people, women execs won higher ratings on 42 of the 52 skills measured.

The growing body of new research comes at a time when talent-hungry recruiters are scrambling to find execs who can retain workers and who can excel in the smaller bureaucracies of New Economy companies. Women think through decisions better than men, are more collaborative, and seek less personal glory, says the head of IBM's Global Services Div., Douglas Elix, who hired two managers within this year—both women. Instead of being motivated by self-interest, women are more driven by "what they can do for the company," Elix says. Adds Harvard Business School Professor Rosabeth Moss Kanter, author of the 20-

WHERE FEMALE EXECS DO BETTER: A SCORECARD

None of the studies set out to find gender differences. They stumbled on them while compiling and analyzing performance evaluations.

SKILL (EACH CHECK MARK DENOTES WHICH GROUP SCORED HIGHER ON THE RESPECTIVE STUDIES)

	MEN	WOMEN
MOTIVATING OTHERS		✓✓✓✓✓✓
FOSTERING COMMUNICATION		✓✓✓✓✓*
PRODUCING HIGH-QUALITY WORK		✓✓✓✓✓✓
STRATEGIC PLANNING	✓✓	✓✓*
LISTENING TO OTHERS		✓✓✓✓✓✓
ANALYZING ISSUES	✓✓	✓✓*

*In one study, women's and men's scores in these categories were statistically even
DATA: HAGBERG CONSULTING GROUP, MANAGEMENT RESEARCH GROUP, LAWRENCE A. PFAFF,
PERSONNEL DECISIONS INTERNATIONAL INC., ADVANCED TEAMWARE INC.



Only 2 of the 500 top companies have female CEO

year-old management classic, *Men and Women of the Corporation*: "Women get high ratings on exactly those skills needed to succeed in the global Information Age, where teamwork and partnering are so important."

It's no surprise, then, that some executives say they're beginning to develop a new hiring bias. If forced to choose between equally qualified male and female candidates for a top-level job, they say they often pick the woman—not because of affirmative action or any particular desire to give the female a chance but because they believe she will do a better job. "I would rather hire a woman," says Anu Shukla, who

sold her Internet marketing-software company Rubric Inc. earlier this year for \$390 million. "I know I'm going to get a certain quality of work, I know I'm going to get a certain dedication," she says, quickly adding that she's fully aware that not all women execs excel. Similarly, Brent Clark, CEO of Grand Rapids-based Pell Inc., the nation's largest foot-care chain, says he would choose a woman over a man, too. Women are more stable, he says, less turf-conscious, and better at "all sorts of intangibles that can help an organization."

But if women are so great, why aren't more of them running the big companies? Thousands of talented women now graduate from business schools and hold substantive mid-

de-management jobs at major corporations—45% of all managerial posts are held by females, according to the Labor Dept. Yet only two of the nation's 500 biggest companies have female CEOs: Hewlett-Packard Co.'s Carly Fiorina and Avon Products' Andrea Jung. And of the 1,000 largest corporations, only six are run by women.

UNREWARDED. For one thing, there's still a pipeline problem: Most women get stuck in jobs that involve human resources or public relations—posts that rarely lead to the top. At the same time, female managers' strengths have long been undervalued, and their contributions in the workplace have gone largely unnoticed and unrewarded. Companies are now saying they want the skills women typically bring to the job, but such rhetoric doesn't always translate into reality. Some businesses view women only as workhorses well-suited for demanding careers in middle management but not for prime jobs. These undercurrents of bias in Corporate America infuriate many women who then bail out rather than navigate unsupportive terrain. "They're doing the

BIAS OF EXPERIENCE

"I know I'm going to get a certain quality of work," says Shukla, who recently sold her Web software company for \$390 million



Special Report

"ARAMARK gives our employees a 24/7 perk."



David Tricaso,
Excite@Home

John Niklewicz,
ARAMARK

Lourdes Martinez-Jones,
Excite@Home

Unlimited Partnership with:

Excite@Home -
The leader in broadband services

Since:

1999

Managed Services:

- Coffee and other beverages
- Vending

Value Created:

	1999	2000
Sites	1	7
Employees	400	2,500
Deliveries	3/week	Daily

David Tricaso,
Director, Real Estate & Facilities,
Excite@Home:

"We work in cybertime. Coffee is fuel. We need a partner who is here before we know we need them. Who can not only keep pace with our growth but help fuel it. ARAMARK is a true cyber partner."

John Niklewicz, ARAMARK
General Manager:

"David made it clear from the get-go: 'This is about our people; know what they want, where they want it, and when they want it. Then deliver it. And keep delivering it.' We do. Our reporting system tracks every coffee service transaction. The service centers are within steps of employees. We've even bottled Excite@Home water for them with strange, mystical powers."

To learn more about ARAMARK Unlimited Partnerships visit our website at www.aramark.com or call 1-800-ARAMARK.

ARAMARK® Managed Services for Business, Government, Healthcare, Sports and Entertainment, and Educational Institutions include: Food and Support Services, Uniform and Career Apparel, Child Care and Early Education.

 **ARAMARK**
Managed Services, Managed Better.

Some executives now have a pro-woman hiring bias



work, but they don't make it to the top," says Lyn Andrews, president of WebMD Health, a consumer unit of WebMD Corp. in New York. Many start their own companies, while others seek a different work/family balance than many corporations offer. There are now more than 9 million women-owned businesses in the U.S., double the number 12 years ago.

The new studies offer some clues about why the cultural mismatch between women and large companies persists and why it's so critical to keep women on board. What makes the new research more compelling than other such data is that it is based on results culled from executives' actual performance evaluations rather than on opinion surveys or experiments that simulate business situations.

Because the participants had no idea that

statistically significant, says Susan Gebelein, executive vice-president of Personnel Decisions, those differences don't mean much in the real world. Why? Because the consulting firm has tested so many thousands of people, which can make minor differences appear more important than they really are. Women have always outscored men in such evaluations, says Gebelein, whose company began looking at gender differences in 1984. And they score highest at the most male-dominated companies because, she surmises, of the type of woman who succeeds in such environments—someone who must be superior in every way.

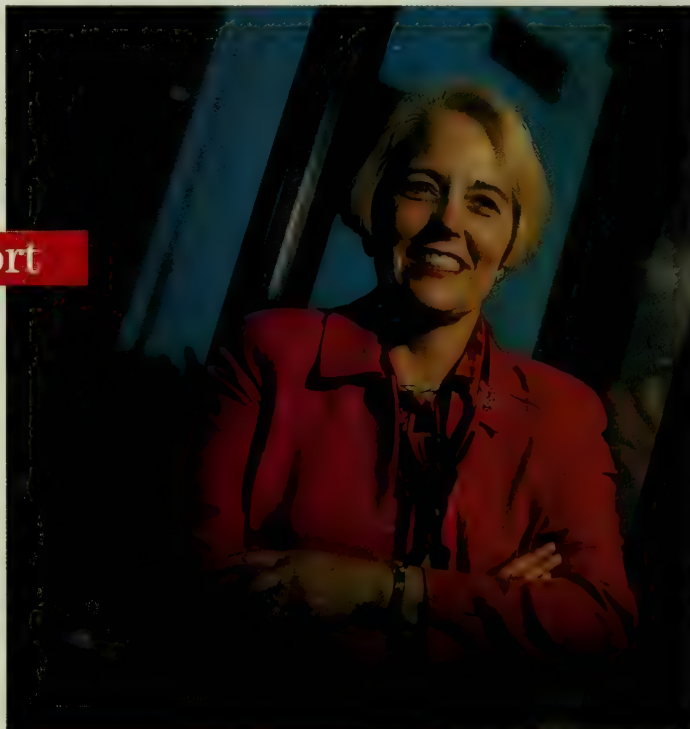
Robert Kabacoff, a vice-president at Management Research Group in Portland, Me., also wondered if women were getting higher test scores in these studies for reasons other than gender. They might have rated higher because they weren't being compared with men holding similar jobs, he suggests. Managers of human-resources departments often get rated higher on people skills than other supervisors, for instance. If the majority of female managers in a study work in human resources, vs. only a minority of males, the results may have more to do with job than gender.

MISUNDERSTOOD. To eliminate such potential distortions, Kabacoff conducted a differently designed study in 1998. He compared male and female managers who worked at the same com-

panies, held similar jobs, were at the same management level, and had the same amount of supervisory experience. When he examined 1,800 supervisors in 22 management skills, he found that women outranked men on about half of the measures. Female managers were graded more effective by peers and subordinates, but bosses still judged men and women equally competent as leaders. "Men and women seem to be doing roughly equally effective jobs, but they approach their jobs differently," says Kabacoff.

Certainly, many women managers are keenly aware that they inhabit a different reality at the office than men. Nancy Hawthorne, former chief financial officer at Continental Cablevision Inc., who is now a consultant, says she often felt her bosses "wondered what the heck I was doing." At meetings, she often allowed subordinates to explain the details of ongoing projects. She felt her role was to delegate tasks to people around her to help them be more effective. "I was being traffic cop and coach and facilitator," she said. "I was always into building a department that hummed."

And sometimes, women say, they were badgered about using the very skills the research found so valuable. Sandra Kiely, managing director and chief administrative officer at Na-



Special Report

their evaluations would end up as part of a study on gender, the data are untainted, says Janet Irwin, a California management consultant who conducted one of the studies. "We were startled by the results," she says.

Irwin and her colleagues discovered that women ranked higher than men on 28 of 31 measures. Irwin was stunned by women's consistently high ratings and how the scores defied conventional wisdom. Contrary to stereotypes, women outperformed men in all kinds of intellectual areas, such as producing high-quality work, recognizing trends, and generating new ideas and acting on them. "Women's strengths are stronger than men's," says Irwin, "and their weaknesses are not as pronounced."

Several other studies showed similar patterns. Personnel Decisions International, a consulting firm in Minneapolis, looked at a huge sample—58,000 managers—and found that women outranked men in 20 of 23 areas. Larry Pfaff, a Michigan management consultant, examined evaluations from 2,482 executives from a variety of companies and found that women outperformed men on 17 of 20 measures.

Some of the researchers draw different conclusions, though, arguing that the research shows that women executives are equally effective as their male counterparts but not necessarily superior. While women score better, and the scores are

OLD-SCHOOL ADVICE

One of managing director Kiely's ex-bosses told her: "You should be looking out for yourself, not your people"

Around the world, the future of Visual Technology™ looks bright with ViewSonic®



Welcome to the Visual Revolution™

We have entered the new information economy. Where demand for niched content, e-commerce, business information and entertainment will be supplied through a variety of visual and communication products and services from ViewSonic.

ViewSonic is leading the visual technology revolution with OptiSync™ digital displays and networked internet appliances designed for B2B and B2C commerce. Look for our latest display technology and Internet appliances designed to deliver the ultimate visual communications experience across the world wide web.

ViewSonic, the #1 best selling monitor and display company in the USA* is working hard to lead the visual technology revolution in the information economy. Welcome to the Visual Revolution™

For more information visit:
www.ViewSonic.com

The Visual Technology™ Company





Women still suffer from a lack of mentoring

tional City Investment Management Co. in Cleveland, recalls that one of her bosses at National City Bank warned that her management style would hurt her career. "You should be looking out for yourself, not your people," he advised her.

Everyone knows that women have long excelled at teamwork, but getting results was one of the categories in which women earned their

highest marks in these studies. Jackie Streeter, Apple Computer Inc.'s vice-president for engineering, says she has repeatedly volunteered to shift dozens of employees out of her division because she felt they would better fit into a different department—a move that she says "startled" her male colleagues. "It's not the size of your organization that counts but the size of the results you get," says Streeter, who has 350 people working for her.

Women are also more likely to disregard as a useless power trip another long-held management bugaboo: keeping information tightly controlled. "It's better to overcommunicate," says Shukla, whose Web startup, Rubric, made 65 of her 85 employees millionaires. Rather than dispensing information on a need-to-know basis, she made sure information was shared with all of her employees. She also created the CEO lunch, inviting six to eight employees at a time to discuss the business with her.

CARING WORKS. Companies can also undercut women's strengths in another, often inadvertent way: by assuming that people skills are not business skills. In fact, they are inextricable, argues Joyce Fletcher, a professor at Simmons Graduate School of Management in Boston and author of *Disappearing Acts: Gender, Power, and Relational Practice at Work*. Employees who feel cared about by their bosses or are inspired by them often produce higher-quality work, consultants say. And supervisors who know how to deal with conflict get better results.

Women have been doing this kind of work for years, but their behavior is often devalued because their intentions are misunderstood, says Fletcher. A woman who takes the time to talk to an employee about a meeting he has missed, for instance, might simply be considered a nice person—not someone trying to make sure that the staff has enough information to make an important decision. Her business actions become invisible, since the staff attributes her behavior to just being kind.

Similarly, duties such as coaching and keeping people informed are often taken as a given. But these tasks can actually be the invisible glue that holds a company together, which, until the 360-degree feedback evaluation came along, rarely got examined. "It's like somebody doing your laundry," says Hawthorne, the former Continental Cablevision exec. "You rely on them to have clean clothes," but the work is "invisible when it's done well." Because "the guys are into

glamour," says National City's Kiely, women often end up in charge of difficult and unglamorous tasks such as performance reviews.

Kiely bristles at some research that concluded that women aren't perceived as strategic or vision-oriented. Her strategy, she says, is to make people think something is their idea so she can get them to buy into a plan.

Another potential trap: Women's biggest strengths can also become their biggest weaknesses, says Vivian Eyre, a New York management consultant. By working so hard to get great results, they often take away time from building critical business alliances. "Given the opportunity to stay in their offices and make sure their report is perfect or going out of their office and talking to Joe about his business, women are more likely to do their own work," says Eyre.

What's more, she adds, women still suffer from a lack of



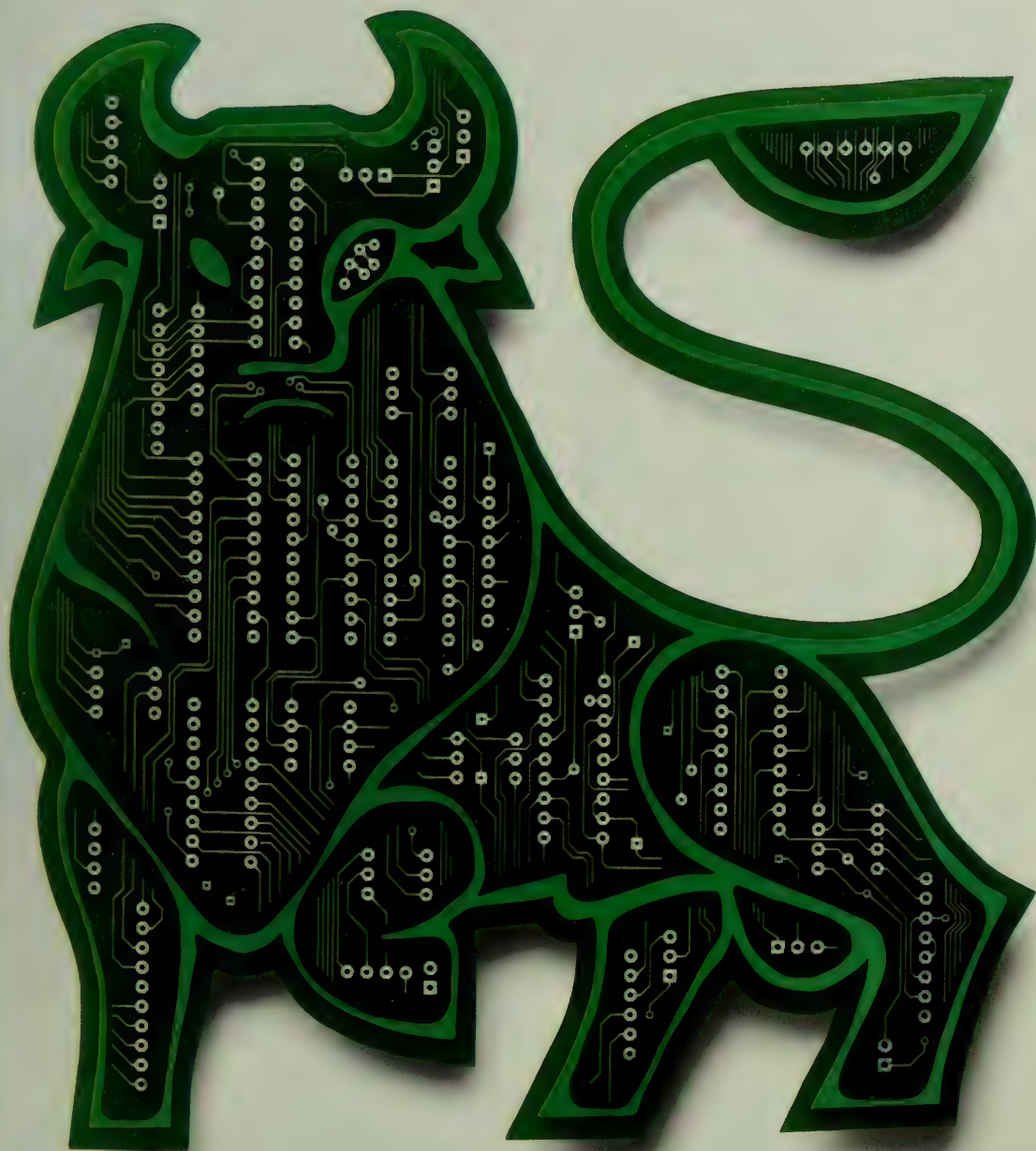
NEW BUSINESS MODEL

Companies assume people skills aren't business skills, says management professor Fletcher, when in fact, they're inextricable

mentoring and being kept outside informal networks of communication. Many women admit that because they spend so much time focusing on getting results, they don't think enough about strategy and vision—qualities that Harvard's Kanter says are still the most important in a top executive. "If women are seen as only glorified office facilitators but not as tough-minded risk-takers," says Kanter, "they will be held back from the CEO jobs."

In the end, it takes a lot more than competence to make it to the top. Getting the best performance evaluations in the company's history may not be nearly enough. "When you actually sit down in a selection committee to choose the CEO, lots of subtle assumptions come into play," said Deborah Merrill Sands, co-director of Simmons' Center on Gender & Organization. Companies may say they want collaborative leaders, but they still hold deep-seated beliefs that top managers need to be heroic figures. Interpersonal skills may be recognized as important, she said, but they aren't explicitly seen as corner-office skills. "We are in the process of changing our concepts of leadership," she

Be wired.



Plug in—via mouse, phone or human being—to a globally plugged-in research network, Merrill Lynch. Have fresh thinking from 800 analysts on 6 continents delivered to your virtual doorstep every morning. So you can open the door to opportunity before others even realize it's knocking.

Be bullish.

**YOU'VE SOLVED
THE PROBLEM OF BEING
IN 50 PLACES
AT ONCE QUITE SIMPLY.
BY BEING IN 50
PLACES AT ONCE.**

It's way beyond traditional collaboration. It's Lotus Sametime™— instant messaging that's fit for business. It's how you contact employees or suppliers instantly to give them what they need. It's how to improve response time by providing live customer service to Web users. It's how companies move the expertise, not the expert. And it's only available from Lotus. Just another way super.human.software helps e-business people work together. To learn more, visit www.lotus.com/superhumansoftware

SUPER.HUMAN.SOFTWARE



e-business

Lotus.

An IBM Company

Women don't get proper credit for their people skill



says. "But organizations haven't evolved that much yet."

In fact, Kabacoff has just finished a new study showing how CEOs and corporate boards view upper management, and he found a clear double standard. Male CEOs and senior vice-presidents got high marks from their bosses when they were forceful and assertive and lower scores if they were cooperative and empathic. The opposite was true for women: Female CEOs got downgraded for

being assertive and got better scores when they were cooperative. Kabacoff's conclusion? "At the highest levels bosses are still evaluating people in the most stereotypical ways." That means that even though women have proven their readiness to lead companies into the future, they're no likely to get a shot until their bosses are ready to stop living in the past.

By Rochelle Sharp
in Boston

TEACHING MEN THE RIGHT STUFF

Boys, it seems, can't afford to be boys anymore. At least not if they want to succeed as managers in the New Economy, where the old-school style of command-and-control is about as effective as getting blitzed in front of your boss at the company cocktail party.

were to ask which of these qualities men had an upper hand at, the answer would be none," he says.

Indeed, in this vise-tight labor market, execs who are prone to scoff at such "soft skills" have found they need to listen to Traeger and his cohorts. Managers everywhere are being forced to think more about creative leadership—the kind that can steer companies across the New Economy's bumpy terrain as well as hold on to valued workers who are constantly bombarded with new job offers. "The nature of modern business requires what's more typical to the female mold of building consensus as opposed to the top-down male military model," says Millington F.

McCoy, managing director at New York-based executive search firm Gould, McCoy & Chadick Inc.

After Traeger helps participants identify the gender issues, they work on communication skills, feelings, and emotional expression. "The program is about breaking down the stereotype of an aggressive, controlling, and competitive man who always wants to be right, take charge, solve problems, and also has to have the last word," says David Bancroft-Turner, founder of 3D Training & Development, a U.K.-based consulting firm, who participated in the program. "It's about learning to listen and work in harmony."

Although the U.S. hasn't yet seen this kind of men-only program, various coaching firms are similar to Traeger's. Hay Group, in Philadelphia, coaches execs to be "emotionally aware." Adapting theories from Daniel P. Goleman's book *Emotional Intelligence*, Hay Group instructs managers "to recognize the emotional hot buttons" that are "not taught in business schools," says Annie McKee, Hay's director for management-development services.

One tip that all of the seminars advocate: If you're a man, follow the lead of your female co-worker. She probably has a lot to teach you.

By Pallavi Gogoi
in Chicago

Special Report

With more and more studies showing that qualities typically associated with women are what New Economy businesses need to thrive, a new cottage industry is emerging that is taking the opposite view of Professor Henry Higgins in *My Fair Lady*:

Why can't a man be more like a woman? "Men just don't have what it takes to be successful in the modern workplace," says London-based management guru James R. Traeger. "They are deskilled."

Sure, the baby-faced Traeger has an ax to grind—he runs a for-men-only training program that helps guys understand the value of emotion in work relationships. Through a three-month seminar that involves intense personal scrutiny, coaching, networking, and public speaking, Traeger tries to get men to recognize and improve their abilities to communicate, build teams, and develop flexibility. "If you



TRAEBER: His seminars instruct men in emotional expression

WHAT CAN A GUY DO?

Tips for male managers from the female playbook

CONTROLLING BOSSES ARE BAD BOSSES So are micro-managers. Give your people the power to do their jobs.

FLEXIBILITY, NOT RIGIDITY Learn to allow your employees to sculpt their jobs. Don't finger-wag. Be open to others' opinions and build consensus.

ADMIT YOU DON'T KNOW EVERYTHING You can't solve all of your problems, but your staff probably can. Avoid hogging air time—learn to listen.

WINDOWS OF OPPORTUNITY.

CUSTOMIZED FOR ANY BUSINESS.



You can have a plan. You can have all the right information. But unless you hold these things up to your goals, assess them against your needs, and understand their effects on the future, you can't make a truly informed decision. That's where your CPA comes in. Because windows of opportunity aren't always found. They're created.

Consulting Services

Financial Planning

Performance Management

Technology Services

International Services

Information Integrity

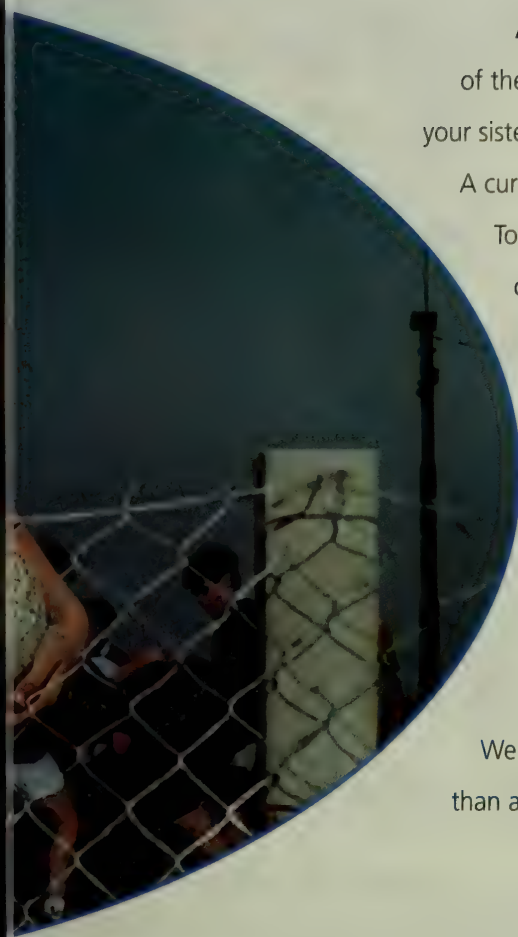
Assurance Services



The CPA. Never underestimate the value.SM

Because our best friends have diabetes, too.





At Pfizer, we're determined to find the cures of the future. A cure for your father's Alzheimer's, your sister's heart disease, your best friend's diabetes. A cure for the ailments that touch all our families.

To help create this better world, we decided to create an even better company. At the newly expanded Pfizer we have the largest pharmaceutical research team in the world, with a scientific staff of 12,000 dedicated people looking for solutions to age-old problems.

This year we're spending approximately \$4.5 billion searching for new cures and in the coming years we'll invest even more.

We're now poised to do more for human health than any other pharmaceutical company in history.

At Pfizer, our company has changed, but our mission hasn't.



Life is our life's work.

www.pfizer.com

TOMORROW'S CURES

Reproduce with more intelligence.



With ST's new printhead driver technology, an inkjet can make almost photo-quality prints. Which is nothing to wriggle your nose at.



ST's new dual-matrix-head driver chip has taken inkjet output to a whole new level. From monitors to modems, sound cards to storage devices, ST is a world leader in technology for computer peripherals. At ST, we're always searching for advanced solutions.

Because to us, that's the carrot.



We put more intelligence into everything.

STMicroelectronics (formerly SGS-THOMSON) • www.st.com • A world leader in semiconductors for consumer products, automotive, telecommunications, computer peripherals, industrial automation and control systems • For opportunities: <http://jobs.st.com>

STMicroelectronics

BusinessWeek

NOVEMBER 20, 2000

e.biz

A REPORT ON ELECTRONIC

IS THIS RIGHT?

Web Auctions Sell
Killers' Hair, Votes,
Autopsy Photos

SPECIAL REPORT

The New Science
Of Net Logistics

High Noon At WorldCom

Can Bernie Ebbers turn
the phone giant into
an Internet force?

BusinessWeek



**What does a
professional services firm
know about e-business?**



cover story

30 Laying It On the Line

Bernie Ebbers, telecom's swaggering cowboy, delivered a profit warning and an apology to WorldCom investors on Nov. 1. They responded by lopping another \$17 billion off his company's market cap. Now, with its long-distance business unraveling, Ebbers sees salvation in the Internet. But visionary Vice-Chairman John Sidgmore is growing increasingly detached and could soon be on his way out. Has too much time passed for WorldCom to become a player in high-value Internet services?

special report

► Logistics is Suddenly Sexy

Both dot-coms and Old Economy companies are turning their attention and dollars to the mundane business of delivering the goods on time

► Nabisco: One Smart Cookie

It's using the Web to coordinate orders, and share warehouses and trucks with other manufacturers

► Warehouse Trouble

The dot-com shakeout comes just as e-fulfillment outfits are gearing up to deliver Christmas goods



features

► Letters to the Editor

► Home Page

Software to catch e-adulterers, an *Idiot's Guide* to not much, prospects for an online delivery service, a gibberish generator

► Personalities

42 Going for Gold at BlueLight

Parent Kmart considers him a bit pushy, but CEO Mark Goldstein aims to make its online retailer leader of the pack

48 Making Her Own Luck

If Ellen Hancock can mastermind new services for Web hoster Exodus, her old job setbacks will be a laughing matter

Contents November 20, 2000

features cont'd

► **Web Smart Companies****58 Wired at Webcor**

The San Mateo builder's embrace of technology makes it stand out in the risk-averse construction industry

**64 3M: Glued to the Web**

An online strategy has enabled it to finesse problems with deliveries, inconsistent data, and inventory levels

► **Upstarts****73 Getting Out of Gridlock**

TrafficStation will need partners to deliver customized traffic information to drivers anytime, anywhere

78 Keep the Excess Moving

In a huge market for surplus goods, online exchange TradeOut is growing, but it faces a wealth of rival sites

► **Net Culture****84 Making a Killing Online**

There's little to discourage the sale of "murderabilia" and a whole range of equally unthinkable items

► **Management****93 A Fruitful Relationship**

Old Economy giant P&G and New Economy startup Plumtree are profiting from a joint software project

► **Net Worth****98 Rage Against Online Brokers**

Most spend more on building brand and acquiring customers than on service, and complaints are soaring

104 Stock Info for the Masses

Multex has stayed ahead of investor demands—and so far, even has a profit to show for it

commentary

► **Neuborne on E-tailing****18 Seamless Shopping**

Brick-and-mortar stores have finally integrated their online operations in time for high season

► **Data Mine****20 Grandma Gets the Net**

Older women are flocking to the Net in droves, but sites aren't tailored to their sensibilities

► **Clicks & Misses****22 Priceline: Going...Going...Gone?**

We found shopping for travel was good; long-distance phone service and cars—nah

► **The Digital Lifestyle****28 Weird Names and Ham**

Where descriptive words go in herds, and goofy names hide empty domains

► **Due Diligence****108 It Ain't Over 'til It's Over**

The shorts are betting against Global Sports, but it may very well survive

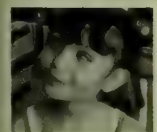
► **Cutting Edge****132 Look, Ma, No Humans**

A few years from now, most e-commerce will be carried out by machines





When was the last time
you made friends
by **bothering**
somebody?



It didn't work then, and it doesn't work today. Which is why Netcentives offers complete direct marketing solutions that help you treat customers with the respect and care they deserve.

We combine a deep understanding of customer relationships with leading-edge technology and marketing services, to deliver relevant communications programs that drive your business both online and off.

That's why industry leaders in virtually every category—from apparel to groceries to financial services and beyond—trust us with their most valuable asset: their customers.

Visit www.netcentives.com today to find out how we can help you win your customers' hearts and minds—without being a nuisance.



Netcentives™

Rewarding Relationships

THIS WEEK

NOVEMBER 13-17

**George Soros**
Bluefly.com

Online retailer Bluefly.com is still in business, but it's hanging by the skin of its teeth. So why

is George Soros, who made his fortune outguessing the currency markets, pumping in \$15 million to keep Bluefly going? **Tuesday**

MONDAY**So What's Plan B?**

Spinning out a dot-com subsidiary was all the rage. No more. What's next?

Perspective by Heather Green

TUESDAY**Calling Dr. Soros**

Most people had given Bluefly.com up for dead. Not investor George Soros. Can he help revive the off-price online retailer?

Company Closeup by Faith Keenan

WEDNESDAY**Shorts vs. Sports**

Short sellers are betting big time that Global Sports is doomed. CEO Michael Rubin is out to prove them wrong.

Movers & Shakers by Heather Green

THURSDAY**The Net2Phone Puzzle**

Using phones to tap the Internet is going mainstream, thanks to AOL and Yahoo!

So why is pioneer Net2Phone sinking?

Street Wise by Amey Stone

FRIDAY**Move Over, Priceline**

The airlines have started their own cheap tix site, Hotwire.com. We offer an assessment of the interloper.

Clicks & Misses by Timothy J. Mullaney

COMING ATTRACTIONS

Disappearing Inc. lets you get rid of unwanted e-mail—for good.

A profile of social critic **Jeremy Rifkin**, whose latest target is e-business and "hypercapitalism."

We try out shopping bot **MySimon.com**

EXTRAS

• Q&As

Get a firsthand perspective on the issues. Andy Ball, president of Webcor, talks about how the Internet is changing construction. Shane Coppola of Westwood One assesses the prospects for making money from traffic and other information via the mobile Web. Kevin Lynch, CEO of Nistevo, explains Net-powered logistics. And Andy Kahn, a victims' rights advocate in the Houston mayor's office, discusses the dark side of online auctions.

• Update

We warned you that Verizon Wireless' IPO looked dicey (Oct. 23). What's in store for the company now that it has shelved the deal?

Did You Miss?

What's Behind the Net-Stock Meltdown

Don't be surprised that the transition to the vaunted Internet Age isn't a pretty sight. Failure is a natural part of the process. Let's just hope that from now on companies are better prepared before going public.

Perspective, Oct. 30

Need Just a Tad Less Angst?

The Nasdaq-100 tracking stock, known as the Qs, may be just the ticket for queasy investors. You get only the Nasdaq blue chips and less volatility. Here's our primer.

Company Closeup, Sept. 26

**Seeking Profits from Nonprofits**

Harry Gruber has sold off his streaming video company. Next? His Kintera will help nonprofit groups raise money over the Web.

Movers & Shakers, Nov. 1

Web-Site Makeover**ideas.com**

Design maven Jakob Nielsen watches people browse around on a Web site to gain valuable insights into usability (page EB128). In the case of ideas.com, the invention and inspiration exchange put off its launch to fix the problems. We'll show you what didn't work—and what does.

Business Week**e.biz**

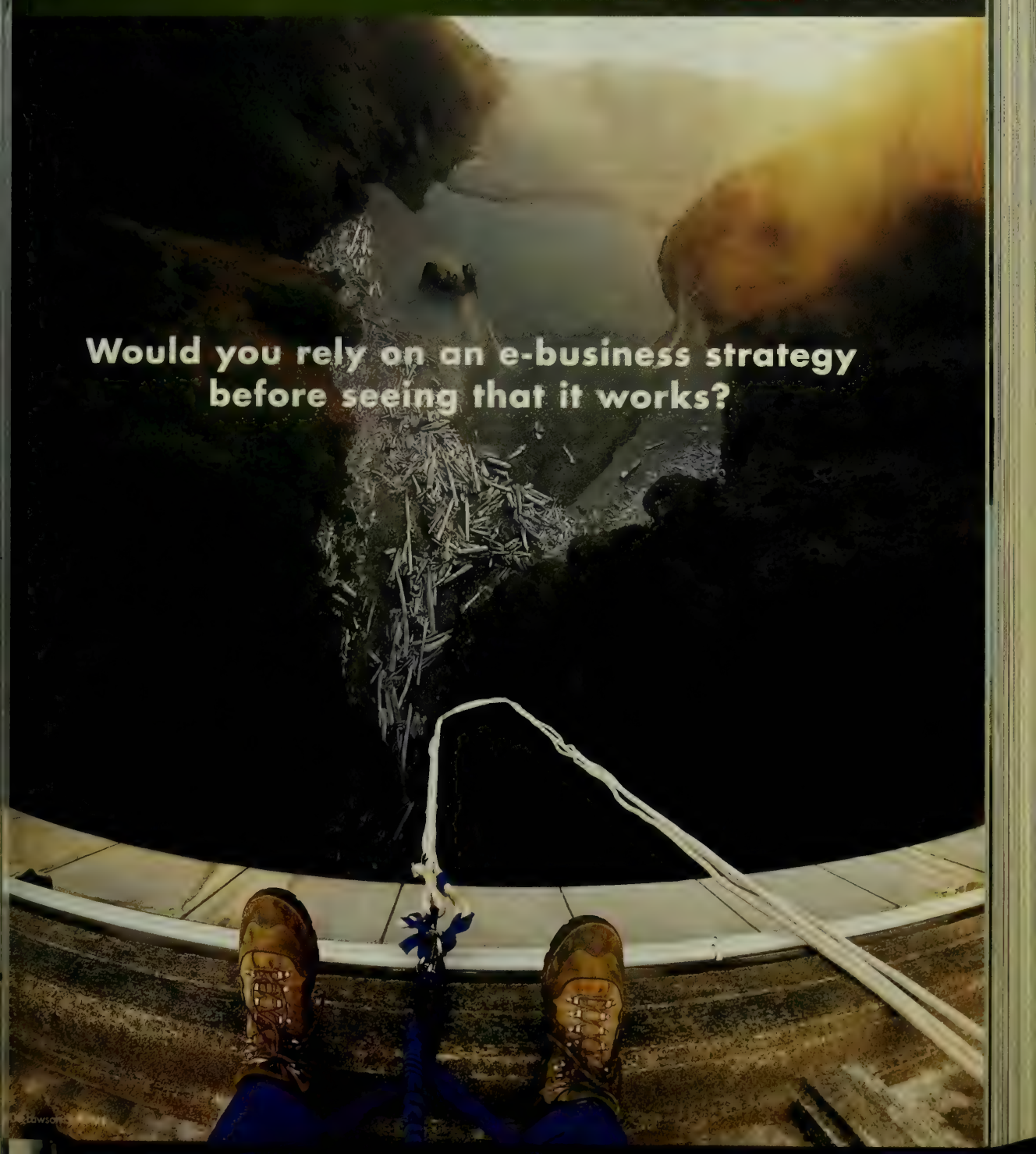
EDITOR: Kathy Rebello • MANAGING EDITOR: Ira Sager • ASSOCIATE EDITOR: Steve Hamm • PRODUCTION DIRECTOR: Karen
PHOTO EDITOR: Anne Murray • DESIGN & ART DIRECTION: Mitch Shostak, Viviana Bromberg, Anne Yeckley

There's no going back once you start running your business on the Internet. Fortunately, you can rely on Lawson to simplify your business processes. We've helped thousands of organizations like yours develop and implement effective Internet solutions. We'd like to earn your confidence, too. So before you take the leap, take a look at our fact-filled e-Business Success Kit. Just visit www.lawson.com/success500b or call 1-800-477-1357, code 500b.

LAWSON

Software

PROVEN.

A first-person perspective from a high-altitude rope bridge. The viewer's feet, wearing brown leather hiking boots, are visible at the bottom of the frame, standing on a wooden plank. A thick rope is attached to the bridge's edge. Below the bridge, a deep, dark canyon stretches out, with a river visible in the distance. The sky is hazy and yellowish, suggesting a sunrise or sunset. The overall mood is one of risk and uncertainty.

**Would you rely on an e-business strategy
before seeing that it works?**

our readers write



Cool Gestures vs. Communication

Good piece on the bifurcation of tech in the Bay area ("The Valley? Oh, Yuck," *The Digital Lifestyle*, Oct. 23). As a venture capitalist, given the chance to invest in urban cool, with all that implies, or a "nose-to-the-grindstone" type of company, I'd pick the latter.

It's interesting to me that some young companies actually think that antique lunchboxes have an effect on their employees. Creating the feeling that employees are part of something big and that their contributions are valued comes from communicating effectively and ultimately executing.

As office spaces go, when you think of Disney you think of great movies, characters, and television shows, but you don't think about what their buildings look like.

Jeff Nolan
SAP Ventures
Palo Alto, Calif.

Does Threshold Deserve a Forum?

I was extremely disappointed with *BUSINESS WEEK* ("Babes in Broadband," Special Report: *Hollyweb*, Oct. 23). We are living in a time when the quality of our culture is under attack, and Hollywood has played a major part in the decline of moral values in this country. The Federal Trade Commission has recently issued a report condemning the entertainment industry's practices of marketing inappropriate material to teenagers. Yet, here is the most prestigious business magazine in the country giving a national forum to Larry Kasanoff and his company, Threshold Entertainment, as he highlights plans to do exactly what the FTC and Congress are condemning. According to your article, Threshold's goal is to create content "...aimed at titillating sex-crazed, action-loving teenage boys" via such shows as *Bikini Masterpiece Theater*, where women in skimpy bikinis read Shakespeare.

You could have produced an article highlighting a company that is attempting to produce more constructive content. You could have challenged Mr. Kasanoff on the appropriateness of his plans in light of the FTC report.

Instead of being part of the solution, you became part of the problem. Shame on you.

William A. Kirsten
Gaylord, Mich.



PitBull: 'Strong Link in a Weak Chain'

PitBull from Argus Systems Group ("Keep Out: We Mean It," *Upstarts*, Oct. 23) is certainly an effective product. As the article states, PitBull is based on the concept of a trusted operating system.

While numerous other trusted operating systems are available (including a free version, namely SecureBSD), the reality is that Corporate America is simply not ready or willing to roll out trusted operating systems.

Many organizations do not

have fundamental information security measures. Given the fact that many systems are secured with ineffective and easily broken passwords ensures that PitBull will only be a strong link in an overall weak chain.

Ben Rotstein
Iselin, N.J.

Navigating Nonsense

A disturbing trend that yet to be fully checked is the proliferation of Web sites that require Java, cookies, or software plug-in to function at all ("The Trick to Selling Air Tickets Online? Minimalism," *Web Smart* 50, Sept. 18).

One step down, but still disturbing, is the trend toward graphics-only sites, with no alternate text or plain text navigation aids.

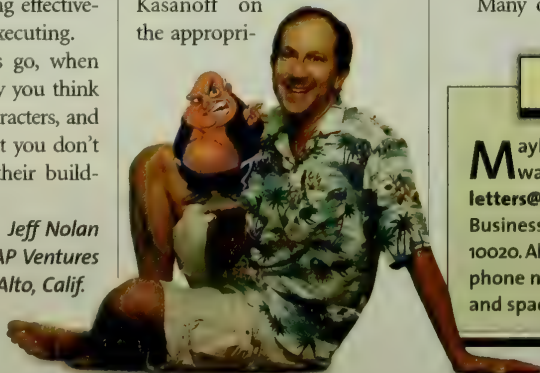
I view Web pages on a dial-up connection, with images, Java, and plug-ins turned off. It amazes me how many sites cannot easily navigate.

These companies do not seem to notice or care how many potential customers they turn away by allowing such basic mistakes.

Ryan Edwards
Carmel, Ind.

Talking it out with e.biz

Maybe you love our stories. Maybe you hate them. Either way, we want to know. Please send your thoughts to letters@ebiz.businessweek.com. Or via U.S. mail: e.biz Letters, Business Week, 1221 Ave. of Americas, 43rd Floor, New York, NY 10020. All letters must include an address and daytime and evening phone numbers. We reserve the right to edit letters for clarity and space and to use them in all electronic and print editions.



iProcure.com

Connecting industrial buyers and suppliers.



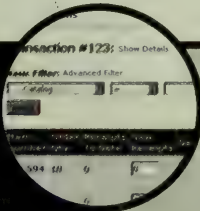
The premier Internet marketplace built for industrial supply.



"Procurement in industrial operations is more complex."



"iProcure is the smartest way to satisfy industrial buyers."



**INDUSTRIAL
STRENGTH
PROCUREMENT**

Providing instant access to millions of industrial parts and supplies, iProcure reduces the administrative costs of purchasing and leverages your buying power – saving time and money on costly industrial purchases. Visit www.iprocure.com.

iProcure
Powered by Datastream
(NASDAQ: DSTM)

home page

A Nightmare for E-adulterers

A wife learns her hubby is e-mailing nude photos to a paramour. A man is shocked: His wife is plotting to kill him. Is this a tawdry Aaron Spelling TV show?

Just real life, as recorded by SpectorSoft Corp. of Vero Beach, Fla., whose software lets users spy on the Web escapades of their significant others. The \$49 program was created to let parents control kids' surfing, but cuckolded spouses had their own ideas. Instead of blocking taboo words and Web sites, as most filtering programs do, Spector

records everything one does online—e-mail, pictures, and instant messages, too. And it's all but impossible for an untrained PC user to tell if SpectorSoft has been installed.

Result: Adultery-busting spurs half of SpectorSoft sales, which hit 150,000 copies within a year. Apparently one way to spawn a mini-dynasty is to tattle when Charlie's no angel.

—Jim Kerstetter



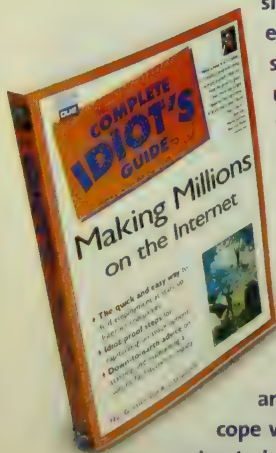
Get me rewrite

What does Nat Gertler know that Bill Gates and Jeff Bezos don't? Turns out, not much. Gertler is the lead author of *The Complete Idiot's Guide to Making Millions on the Internet* (Que, \$18.95), a title that's, uh, a little tough to live up to just now. "Gaze...at your hands," the book suggests. "Those are the hands of a potential Internet billionaire, millionaire, or even simply a (future) happily employed Internet professional." Readers snapped up 10,000 copies within two months of the book's April debut.

Oops. With lots of hands holding dot-com pink slips, Gertler is overhauling the second edition, due out next April. He's adding profiles of failed ventures and giving tips on how to cope with losing a job. "We're going to be a little more cautious,"

he says. Maybe a new title is in order: *The Complete Idiot's Guide to Making Thousands on the Internet*.

—Dennis K. Berman



Use Mouse, Get Bull

You don't have to be Irish to know that sometimes e-businesses rely on blarney. Ask Dack Ragus, developer of the Web Economy Bullshit Generator. Go to www.dack.com, press the button, and let Ragus' software go to work. Resemblance to how dot-com CEOs actually talk is purely intentional.

Which capabilities promised below are from the generator and which are skills claimed on the Web sites of top consultants?

ONE:

- A. "create...a go-to-market strategic relationship"
- B. "provide a buyer-driven service model"
- C. "enhancing brand equity"
- D. "synthesize strategic platforms"

Answers: A. Zefer B. Organic C. Scient D. The B.S. Generator

TWO:

- A. "develop a seamless convergence"
- B. "transform value-added portals"
- C. "Internet-enabling existing applications"
- D. "delivering business and transformation strategy"

Answers: A. Razorfish B. The B.S. Generator C. Proximcom D. Sapient

THREE:

- A. "create leading-edge solutions"
- B. "leverage offline assets"
- C. "engage viral bandwidth"
- D. "implement an end-to-end business-to-business exchange"

A. Marchfirst B. Jupiter Research C. The B.S. Generator D. Fort Point Partners

dot commonsense

www.amdahl.com

AMDAHL

a Fujitsu company

© 2000 Amdahl Corporation. All rights reserved.

home page

Shoot the Messenger

It's a less-than-fetching picture. Online delivery service Kozmo.com, still plying the New York City streets following the collapse of talks to merge with rival UrbanFetch, hopes to pull off a delayed \$150 million IPO (UrbanFetch has since closed its consumer delivery service). What if Kozmo, which delivers mostly videos and food in 10 cities, didn't have the dot-com patina? Bad news: The valuations of two old-world peers in the messenger biz, Dynamex Inc. and CitySprint, are hardly encouraging. A comparison:

► Kozmo.com

Messengers: 2,000
Revenues: \$3.5 million
Losses: \$29 million
Market Cap: NA

► Dynamex

Messengers: 5,000
Revenues: \$251.5 million
Losses: \$3.4 million
Market Cap: \$17.2 million

► CitySprint

Messengers: 5,000
Revenues: \$219.9 million
Losses: \$14.2 million
Market Cap: \$2 million

DATA: COMPANY REPORTS

Switch Hit For a Domain Name

Geeky, sharp-eyed baseball fans spotted a change World Series telecasts: Ads for Major League Baseball's Web site showed that MajorLeagueBaseball.com had slimmed down to MLB.com. H

MLB.com been in the hands of cybersquatters all along? Nope. The masters of baseball's preferred domain name were MLB's own lawyers.

The law firm Morgan Lewis & Bockius, which handles labor talks with team owners, registered MLB.com in 1994. But last winter,

baseball decided to market itself as "MLB," following the example of the NBA and other three-letter sports leagues. At the same time, a new marketing director at Morgan Lewis was convincing partners no one called the firm "MLB" anyway. The deal was done by September, and the switch was made. No cash changed hands, and after months of negotiations, no one

threw a single ball.

—Timothy J. Mullar

Derek Jeter is easier to download now

Are They Cute or What?

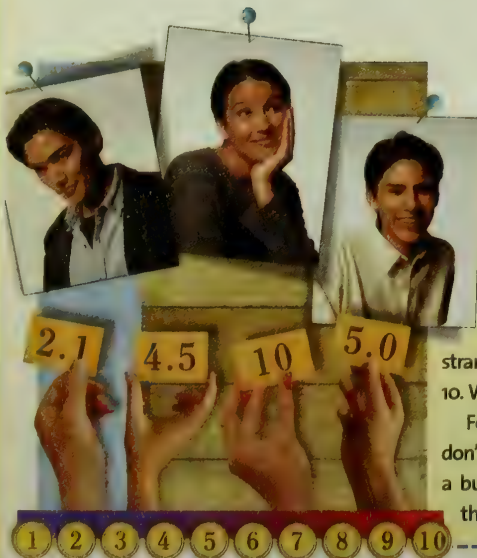
Sorry, *The New Yorker*, but on today's Internet everybody can know if you're a dog. Blame two twentysomethings who had a few beers last month, then created www.AmIHot-orNot.com, where 20,000 brave souls have posted their photos to let strangers rate their looks on a scale from 1 to 10. Who said life got easier after high school?

Founders James Hong and Jim Young don't know if their little phenomenon can be a business. "It would be the funnest job in the world," says Hong, a "between-jobs"

engineer. They built AmIHot after late-night arguments that only carefully-calibrated doses of Heineken and Silicon Valley culture could fuel: Can't agree what kind of woman is a perfect 10? Let the Web decide! Yeah!

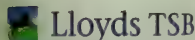
Raters are rough—scores average 2.7 for men and 4 for women. But they prefer chubby guys eating ice cream to bodybuilders. Whether AmIHot itself is hot enough to bet on won't be known until the first report from Media Metrix on the size of its audience. If ratings aren't hot, advertisers will surely be cool.

—Jim Kerstetter





These call center leaders have links with Scotland.

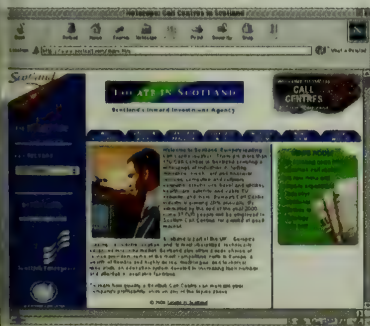


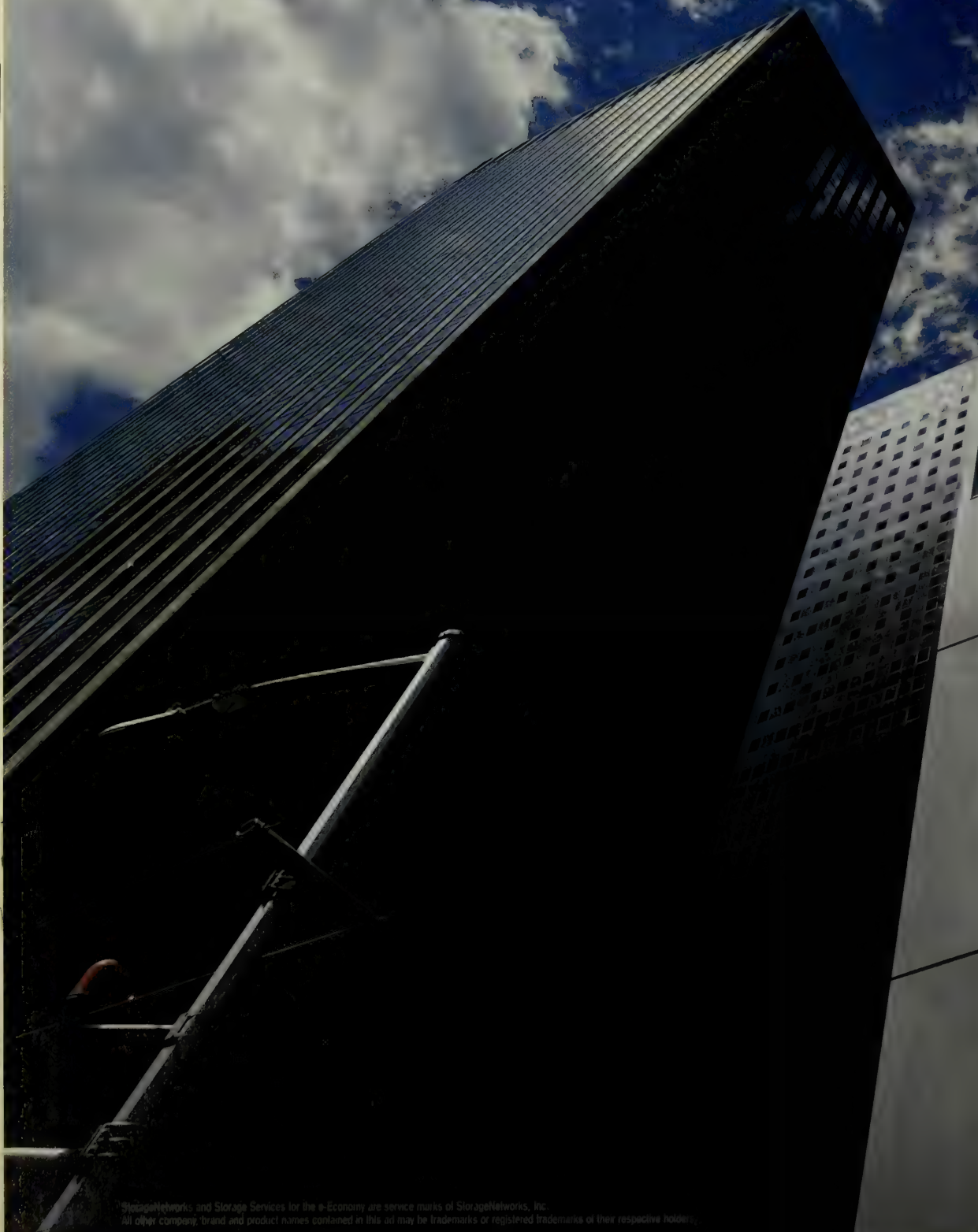
This link tells you why:

www.scotcall.com

Log on now and see why no other call center location is on par with Scotland. Learn about Scotland's leadership in web-enabled, toll-free and Pan-European customer service centers. Discover how Scotland is sustaining the growth of its labor force, too. You'll also find video case histories, as well as information on Scotland's linguistics capabilities, advanced telecoms networks, skills availability, government incentives and more. Visit www.scotcall.com now or call **1-800-THE-SCOT** and let us link you to it all.

LOCATE IN SCOTLAND





StorageNetworks and Storage Services for the e-Economy are service marks of StorageNetworks, Inc.
All other company, brand and product names contained in this ad may be trademarks or registered trademarks of their respective holders.



Neither your competition nor new market opportunities will wait for you to add data storage capacity, hire the right people to productively employ that data, or to complete data backup and restore. That's why StorageNetworksSM provides an on-demand data storage infrastructure, network and software solutions that ensure secure, scalable and accessible data storage, and, of course, the expertise to make it all come together. This way, we save you from the distracting and costly task of storing, protecting and managing your data. In fact, we do this better and more cost-effectively than you ever could yourself. Allowing you to focus on leveraging your information and honing your competitive edge. To learn more about our secure, scalable, "easy-to-access" approach to data storage, visit us at www.STORAGENETWORKS.com.

MILLER, MESSNER & MISSING
OPPORTUNITIES

BY ELLEN NEUBORNE

ellen_neuborne@ebiz.businessweek.com



Seamless Shopping

Stores at last are melding online sites with their bricks-and-mortar presence

There's a lot of neat stuff online this holiday season, but nothing makes me happier than the Talbots catalog. By techie standards, there's not much to celebrate: Just plain old paper catalog now searchable on their Web site. Big deal? Well, actually it is. That catalog represents much more than the site's technical prowess. It's a symbol of the melding of the online and offline retail world—one tiny example

convergence, retailer style. And it's great news for consumers.

Last year, there was still a palpable sense of unease among traditional retailers even as they trumpeted their online sites. Other than slapping RetailerName.com all over their shopping bags, they didn't handle much of the crucial holiday season in concert. It was as if these were separate stores. Often they looked different, stocked different merchandise, had different ad campaigns. Barnes & Noble took the prize for image disconnect by making it difficult to handle online returns and gift certificates in its earthly stores. Were these guys on the same team?

This year, retailers of all stripes have overcome their fear and are blending their e-commerce programs far more effectively with their retail stores and mail-order catalogs. Sites that once functioned as experimental satellites are now more integral parts of the retail whole. Take Nordstrom.com. Among other things, Nordstrom has unified the look of its on- and offline stores. Brand boutiques on the Web site have the same look and feel that a mall browser would find at the bricks-and-mortar stores. Calvin Klein's Web boutique features runway models in striking poses. Polo Ralph Lauren's site is back-dropped in a preppy-elegant forest green. The décor matches the store. The consumer sees a common image, no matter where the consumer is. "Customers are not all that interested in our channel operations. They are interested in a relationship with a retailer," says J. Daniel Nordstrom, CEO of Nordstrom.com Inc.

Crate & Barrel has had a similar epiphany. Last year, only a

minimal selection of its merchandise was available via the Web site. This year, the entire mail-order catalog is for sale online. Gordon Segal says the decision to unify his merchandising strategy was not a tough one—customers demanded it. And it makes perfect sense, he says. Customers don't want to be bothered remembering where they saw a certain item: Was it in the catalog,

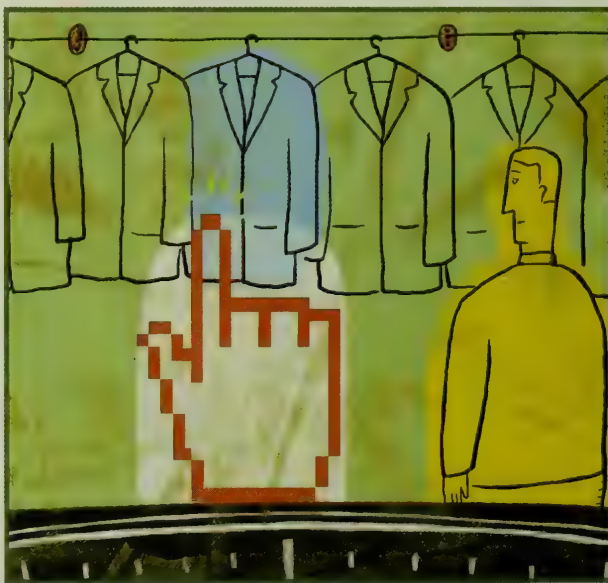
store, or online? "They want to buy it however it's convenient at that moment. You need to be there and not disappoint," he says.

Even Barnes & Noble took the hint. Not only is the company installing Internet service terminals in its superstores. The goal, says Vice Chairman Steve Riggio, is to make the shopping process more seamless.

Why does this retail convergence matter? It shows retailers are starting to get what consumers go online in the first place. Scoring discounts is nice. Midnight shopping for my bunny slippers is fun, too. But what we really want is

the same relationship with stores online that we have offline. Most shoppers say their experiences with their favorite real-world stores are good ones. We want more of that experience online.

All that will vary greatly depending on the store. We'll want great deals of Loehmann's, the wide selection of Home Depot, the service of Saks Fifth Avenue—but blended into the new virtual store. Making that seamless shopping experience may or may not involve the latest in cutting-edge technology. But it always will require a retailer to embrace all channels as part of the whole.



We have the

TECHNOLOGY

A leading **Java-based** personalization and e-commerce platform.

We have the

PARTNERSHIPS

A network of more than 150 of the **world's best** technology and solution partners.

We have the

E-BUSINESSES

Over 400 **worldwide customers** including Benetton, BlueLight.com, Eastman Kodak, and J.Crew.

We have the best

PLATFORM.

Do you?

The Internet is fundamentally changing the way businesses interact with their customers. ATG is a part of that, and has created a blueprint for maximizing the value of your e-business initiatives. Attend one of our *Blueprint for Customer Management* executive seminars to find out how your organization can take advantage of the ATG Dynamo e-Business Platform for building and managing online relationships with customers, suppliers, and partners. For more information, including seminar locations and online registration, visit www.atg.com/blueprint





BY ROGER O. CROCKETT

roger_crockett@ebiz.businessweek.com

Grandma Gets the Net

Older women, along with their granddaughters, are leading the rush online

I have plenty of female friends who use the Internet. Still, while giving a talk about the Web to high school students in Chicago in October, I was surprised by the sea of shoulder-length hair and lip gloss before me. Of the nearly 40 students who filed into the computer lab, more than 30 were girls.

Hold on to your suspenders, gents. Women rule the Web. The 61 million women

now online make up 51% of U.S. Internet users, according to Jupiter Media Metrix Inc. What's more, the number of female surfers is growing 35% yearly, three times the rate of men. "There's suddenly an opportunity to program sites for women and really tap into their needs," says Jupiter analyst Anya Sacharow.

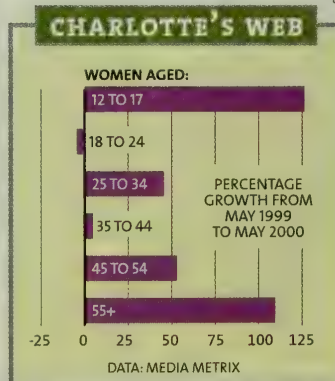
Most astonishing, though, are the two age groups leading the charge. One is the giggling crowd crammed into that computer lab, and the other—surprise—is their grandmothers. The number of 12- to 17-year-old girls on the Net increased 126%, to 4.4 million in the 12 months that ended in May, Jupiter Media Metrix says.

So wake up, Web merchants. Women are redefining household purchases, says Networks Inc. Even so, many of their sensibilities. Lots of gadgets, for example, reflect a male sensibility. Lots of gadgets, for example, reflect a male sensibility. Lots of gadgets, for example, reflect a male sensibility.

As the Web gets easier to use, older women are rushing online. But these newbies need a "bridge" between the physical and virtual worlds, says Cheryl E. Mayberry, founder of NiaOnline, a portal for African-American women. NiaOnline's bridge is a catalogue that's mailed out to site visitors. You can buy online without the catalogue, but it helps ease the transition for

anyone uncertain about e-commerce. "It gives women something they're familiar with," Mayberry says.

Helping women navigate the unfamiliar will keep them on site, according to the Burnette survey. "If women are



frustrated, they leave," says Denise Fedewa of LeoShe, a Burnett University researcher who studies women's tastes. That means customer service is key. Garden.com, for example, attracts twice as many women as men. One reason: a handy "help desk" that features live chat with service reps.

Interaction like that

what Dorothy R. Cunningham, 66, likes most about the Internet. The Army retiree, who first went online in January, saved \$100 buying a plane ticket online. A bigger thrill: e-mailing friends about the bargain. Of the Net's attractions, "No. 1 is e-mail," she says.

Alight.com understands that. A clothing Web shop for plus-size women, Alight puts an e-mail-a-friend link on every product page. Buyers "can instantly tell a friend, 'Hey, I found something,'" says Norman G. Weiss, Alight's chief strategic officer.

Messaging works for teenage girls, too. Teens view the Web as a new-millennium meeting place, where they can communicate instantly and freely. Monica L. Boyd signed up for a Hotmail.com account in September when a friend told her about the free e-mail service.

"I don't like to spend money," says the 17-year-old Chicago student. Webmasters, take note: Monica might not spend much today, but she and her grandmother should be as important to you as her brother is. ●



Transforming the shape of e-business



e-business is the foundation of successful business. It's a proven fact. But what's become seemingly more complex is the underlying core to ensure that success - your Web site. Fortunately, content management solutions are available to help you manage this demand. But, which solution is the best solution?

**Business
Technologies**

www.ebt.com

eBusiness Technologies' engenda - a turnkey, XML-enabled content management and workflow automation solution developed by the only company with over a decade of experience in developing standards-based content management systems and over five years of XML expertise. The company who recently reinforced their commitment to the Web content management space and the e-businesses of tomorrow by repositioning itself into an Internet pure play company - eBusiness Technologies. Visit us on the Web at www.ebt.com or call us at 1.800.981.8705. Let us mold your business into a true e-business.



BY TIMOTHY J. MULLANEY

tim_mullaney@ebiz.businessweek.com

Priceline: Going...Gone?

To assess the auction site's future, we used its services—with mixed results

Priceline, we hardly knew ye. Only yesterday—O.K., in April, 1999—its stock was selling for \$162 a share, cheered on by analysts who are now implausibly posing as aggrieved investors. At \$4.53 a share, people are writing it off. But has anything really changed

There are two ways to find out: You can believe conventional wisdom, or you can use Priceline.com Inc.'s Web service and see if it's any good. Before I did the latter, I had two questions: Can it be a big travel agency? And can Priceline's famed name-your-own-price business model attract buyers of cars, long-distance calls, and other stuff too? If one answer is yes, Priceline.com is worth more than \$4.53 a share. If both are true, it's worth a lot more. If neither is true, look out below.

Priceline's travel agency works—for some people some of the time. But the service isn't good for much else. When I shopped for long-distance minutes and cars, I didn't like my results. And when I looked at using the company that powers part of Priceline's mortgage lending when I bought my house in February, I decided not to use them. The mortgage market is so efficient that Priceline-like systems have trouble beating locally available rates. Priceline works best in markets like travel where market price information is extremely hard to get and to understand. These are my stories:

Travel: I used Priceline to arrange a last-minute business trip to San Francisco and a quick jaunt to see my in-laws in Florida. Out west, I shopped for a hotel. For Jacksonville, Fla., I just checked flights. In both cases, Priceline delivered great prices. In one case—Jacksonville—it also delivered the headaches it's famous for.

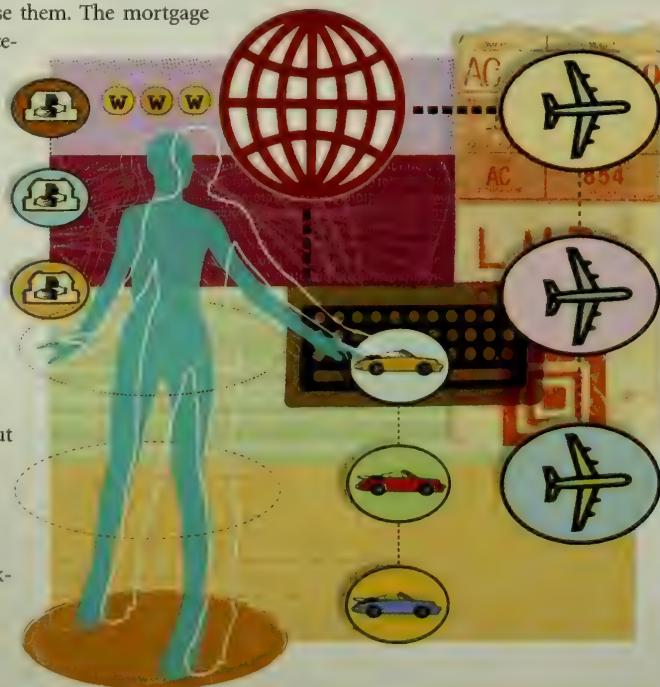
Priceline came up with

\$90 a night for a Wyndham hotel in San Francisco—a dirt-cheap price for the area, especially on short notice. When I last went to Silicon Valley, I ended up in Half Moon Bay, on the other side of the mountains, paying \$149 for a motel. If this were my money, well, a difference of \$60 a night is a lot of money. Should be noted, however, that Expedia's Hotel Price-Match service did arguably as well—delivering a \$99 room closer to where I wanted to be.

My airline ticket deal was equally cheap, but at a greater cost of convenience. First, I went for a flight out of Newark, N.J., near home. I bid \$110, then \$135, and no airline bit. Before I could bid higher, I had to change something about my offer. Priceline's smart to let you nibble them until you get just the deal you want.

I had to agree to fly out of either Newark or LaGuardia Airport, which is on the other side of New York from my home. Boom! At \$160, I could get there from LaGuardia. But, as in all Priceline deals, I was locked in: Priceline demands that you give your credit card in advance and agree to take whatever flight they can find at your price. In contrast, Travelocity.com served up fares from Newark that started around \$240—with no lock-in.

This is ammunition for both Priceline lovers and Priceline haters. Yes, \$160 for short notice at this time of year is seriously cheap, but getting to LaGuardia from my house in Jersey is serious



Have an out-of-office experience?



It's Time to Unchain Corporate America

To say NO to inflexibility. To give the people all the vital information they need - in one, easy-to-use e-business framework - whether they happen to be using a PC, Palm or WAP enabled phone. That's why Corechange developed Coreport™ with B2M™ (business-to-mobile) technology. It enables employees, partners and customers to gain access to true e-business solutions over the Internet - Anytime, anywhere.

888.892.2673 www.corechange.com

corechange®
Mobilizing Corporate America

painful. Plus, my return flight was at 6:30 a.m., blowing a day at the beach. My experience underscores the idea that Priceline is a service for some of the people some of the time. It's best for those who have time on their hands and are willing to be extremely flexible, especially students. As a college student, I would have taken that fare and laughed all the way through 90 minutes of mass transit to LaGuardia. (College kids have a name for this: Road trip!) Now that my time costs money, I'd probably pay the \$80.

Long-distance Service: Priceline faces an inquiry by Connecticut regulators into complaints that some of its come-ons are deceptive, and the way it markets long-distance service is a pretty good example of why. It gave me my price, but without clearly telling me I would get Internet phone service instead of the traditional kind until after I bought a bunch of prepaid long-distance minutes at 4¢ a pop. The service comes from Net2Phone, an Internet phone carrier. Phone calls via the Internet are typically of lower sound quality than calls on the traditional networks. Worse, I discovered that I could have bought the same minutes on Net2Phone.com's own site for 3.9¢ each, and without the auction rigmarole. I'm also not sure that Priceline gave me a fair comparison with other service providers. Priceline compares its rates to AT&T's base rates, but those rates are goofily high and paid mostly by people who pay no attention to pricing or barely use their phones.

My experience argues that Priceline will never be big in long distance. The price of long distance is falling too fast, and consumers have plenty of info about where to get the best deals. Name-your-own price works in travel because people don't understand complex hotel and airline yield-management schemes that produce a wide variance in the prices paid for the same flights or rooms. Everyone understands long-distance plans.

Cars: On first glance, cars seem like the perfect Priceline product. What's the difference between "name your own price" and a dealer asking: "What will it take to put you in this car?" But in fact, Priceline doesn't offer huge advantages. That's partly because cars aren't a "perishable" product like airline seats. Dealers can always find somebody else to sell a car to.

I tested the system on two cars: a Ford Taurus and a Honda Odyssey. My bids below sticker price for an Odyssey were all rejected. And I stopped there. But this doesn't reflect badly on Priceline, in particular. There's a lot of demand for the Odyssey and dealers are holding firm on pricing. Greenlight.com and CarsDirect.com quoted me \$1,000 over sticker. So did my local dealer.

Worse, the dickering over the Taurus devolved into the same stuff people always do with car dealers—and hate. Instead of

\$160 to Jacksonville at short notice is cheap Flying back at 6 a.m. is a pain

they-take-your-price-or-they-don't deal, I got counteroffers. I could have a car close to the one I wanted for \$300 more than I bid. I could wait four to eight weeks for one with side air bags, and so on. I can get that on Route 22, the infamous Jersey car-dealer mecca. And Priceline, unlike dealers, charges \$100 every time a dealer meets my price but I decide not to buy the car.

Back in this company's heyday, when the market valued Priceline at \$25 billion, investors thought it would be a huge travel agency and mega-car dealer. The closing of Priceline's WebHouse Club affiliate, which let people bid for groceries and gas, made analysts doubt the second part of that story. A slowdown in airline ticket sales growth the last two quarters has done the same for the travel business. Travel problems may be temporary, but some of the other problems are tougher to handle. When it comes to long distance, cars, and like, the product is nothing special. And that may be unfixable.

WHAT PRICE CONVENIENCE?

The deal at Priceline.com is simple: Be flexible about the details and they'll deliver a cheap price. We tested Priceline in shopping for cars, hotels, airline tickets, and long-distance calls. The verdict: It's good for travel, but not much else.

DOES IT
DELIVER?

IS IT
WORTH IT?

Travel

Air travel is cheap, as long as you're willing to accept inconvenient departure times. In fact, Priceline will let you tailor how much inconvenience you'll tolerate. The hotel service delivered a \$90 room in San Francisco on short notice—and at mid-week.



Cars

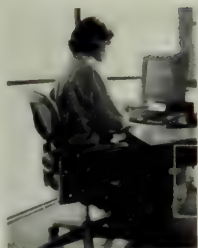
To use Priceline to buy cars, you have to agree to a \$100 fee for every price you name that's accepted—whether you buy the car or not. That's crummy, since most people look at more than one model before making a decision.



Long Distance

Good news: my bid for 4¢-a-minute long-distance service was readily accepted. Bad news: While that's less than what AT&T charges, it's not the same product. Priceline sold me Internet-carried phone service instead of the more reliable circuit-switched version.





Appliance dealer enters
Whirlpool® partner portal



Order is placed through
customized price list



Dealer tracks status
of shipment online.

IBM designed and
built Whirlpool's
partner portal, allowing
appliance dealers to
manage orders and
inventory online.

In the first 3 months,
the portal generated
\$100 million in revenue.





2:09 PM > Customer places online order from personalized shopping list.



2:45 PM > Staples' preapproval process allows customer's order to be processed in minutes.



4:00 PM > Customer receives e-mail that order is fulfilled and on its way for next-day delivery.

Staples® uses IBM software and servers to process online ordering and payment from their large corporate customer site.

Today, their B2B customers enjoy a more efficient purchasing channel.

**b
2
binder**

Business-to-business e-commerce isn't just about putting your catalog and prices online. It's become a worldwide electronic *watering hole* for today's business transactions.

YOU'VE SEEN THE NUMBERS:

B2B e-commerce is 5 times greater than consumer Web purchases, and according to Gartner, the forecasts for B2B activity in 2004 are as high as \$7 trillion (it could go higher). Yet B2B e-commerce isn't just about customer payments, partner payments or online inventory queries. As companies transform themselves into e-businesses, they're beginning to manage procurement, supply chains and partner networks online.

The results are staggering: costs are slashed; geographic boundaries are transcended; efficiencies are dramatically improved; and value is added at every step.

"MY DATABASE WILL CONTACT YOUR DATABASE."

It's clear that there are enormous advantages in using the Internet to deepen and secure relationships with any and all of your customers and suppliers. Advantages like being more accessible, providing better service and locking in key relationships. To do this, you'll need to design a system that is open, so you can easily integrate with any of your partners' applications regardless of their platform. As a result, those businesses that are the most flexible and have the quickest response time will succeed.

JOE BUSINESS. MEET MR. E-MARKETPLACE.

The greatest value opportunity is e-marketplaces. They are the ultimate realization of e-business. Suppliers, buyers and marketmakers are coalescing around these

worldwide trading hubs where hundreds, even thousands, of industry players are gathering to do business. Suppliers are finding customers. Buyers are realizing enormous savings online.

Also consider: 18 months from now, there are expected to be 2 billion wireless devices connected to the Internet. Increasingly, both your customers and employees will require access to the information they need, anytime, anyplace.

MAKING IT HAPPEN.

IBM has learned by doing, and this has helped us deploy open Internet trading platforms that span all 35 of the world's major computing environments. Many are built on powerful IBM WebSphere® software, for massive scalability, speed and reliability.

With application software leaders like i2 and Ariba, IBM has over 6,000 dedicated B2B e-commerce and e-marketplace salespeople. Also, IBM embraces Linux and delivers a comprehensive tool set for development of e-business applications across all servers.

And the 130,000 people of IBM Global Services can provide the strategic insight to help you navigate the complexities of B2B e-commerce as well as provide the infrastructure to host your site.

If you need some help getting started, call a trained e-business specialist at **800.ibm.7080 (ext. b2b)** or visit **ibm.com/b2b**, where you will find tailored e-business solutions and case histories about the companies that have spearheaded the B2B e-commerce revolution.



HERE ARE SOME SAMPLE SOLUTIONS FROM IBM.

THE BUSINESS CHALLENGE	WHAT WE CAN DO FOR YOU
Developing your e-commerce strategy	Web Selling Solution Planning Services > A comprehensive planning session led by IBM B2B e-commerce consultants, designed to identify a strategic action plan for a focused e-commerce initiative based on your needs. e-commerce Executive Assessment > A business case assessment for small and mid-sized companies, conducted by accredited IBM Business Partners. Includes a strategic proposal, competitive Web site analysis and prototype e-commerce site.
Establishing a basic Web presence, so that you can start transacting with customers and partners online	IBM Small Business WebConnections® Platinum Package > Start selling and taking orders over the Web. A subscription service including shared Web and e-mail access for up to 100 employees. Starting at \$249 a month.* IBM Start Now for e-commerce > IBM's Start Now solutions combine the software, hardware and services to help you quickly implement e-business solutions that will improve customer service, e-commerce and collaboration. With financing, from \$1,250 per month.†
Establishing a Web-based network with your partners and suppliers to streamline buying and selling	IBM Web Selling and Procurement Service Offerings > Allow you to navigate the complexities of linking customers, vendors and suppliers to your business in order to manage inventory and payments online.
Trying to extend your reach to customers and suppliers through wireless applications and services	IBM Wireless Solutions > Services and WebSphere Everyplace Suite software that enable you to extend your e-business applications to wireless devices, with the end-to-end security and scalability that are necessary in the rapidly expanding wireless world.
Creating an e-marketplace or a Web-based trading network for all interested buyers and sellers	IBM E-Marketplace Solutions > Start with a consulting engagement to help develop your strategy and then add a software platform that allows you to rapidly create and deploy an e-marketplace. Seamlessly link buyers and suppliers over the Internet.

To find a tailored solution that fits your needs, or for a free B2B e-commerce **white paper** developed for IBM by *Forbes*® Partnership Programs, visit **ibm.com/b2b**, or to talk to a trained e-business specialist, call **800.ibm.7080 (ext. b2b)**.

@B2B SOLUTIONS

IBM



BY JOAN O'C. HAMILTON

joan_hamilton@ebiz.businessweek.com

Weird Names and Ham

Where descriptive words go in herds and goofball names hide empty domains

Those dot-com guys, Those dot-com guys,

I do not get those dot-com guys.
I do not get how most make money.
I do think that their names are funny.

Tell me truly, truly dear,
About these names you do here hear:
Google, Yipes, Zhone, and Yack,
Yotta, Whoosh, Noosh, and Quack,
Arzoon, Backflip, Zoza, Pixo,
Bot, Slashdot, eYada, Yahoo!

Don't they sound like pals from Seuss?
Hortons, Yertles, Turtles, Whos?
Angry Monkey, Zilch, and Ratso,
Snippets, Swirl, Trapezo, Zatso.

Don't they make you laugh out loud?
Are they laughing at Loudcloud?

Snippets, Quokka, them at Zing,
Fatbrain, Wildbrain—Another thing:
Can you figure what they do?
Sporting names like Beenz
and Flooz.

Gamasutra, Libida, Ezula...
Are they sexy or trying to fool ya?

These days you can't just name a business,
You need a URL that has lotsa whiz-ness.

But Abracat, MojoNation, and Purple
Yogi
Sound straight from the comic
strips to this old fogey.

So I went and asked some
experts: Hey

What about these names today?
Is this weirdness a passing thing
Like Razor scooters and mood rings?

Is it a phase? Does it stem from youth?

Is it spreading to technologies like Blue Tooth?

First I called those fine folks at Landor.

Amy Becker's a naming pro with lots of candor.

She said clients spend millions with us here

To obtain great names that ring the ear.

We proudly did Lucent, Kanisa, and Agiler

They'll resonate for decades thanks
to our big talent.

She says dot-com clients have two points
of view:

Some want names dead-on descriptive, the others
say "Foo!"

Give us something that
sings, and snaps, crackles
and pops.

Without a weird name you
could be great big flops.

But from Becker's heart she reveals
a devotion

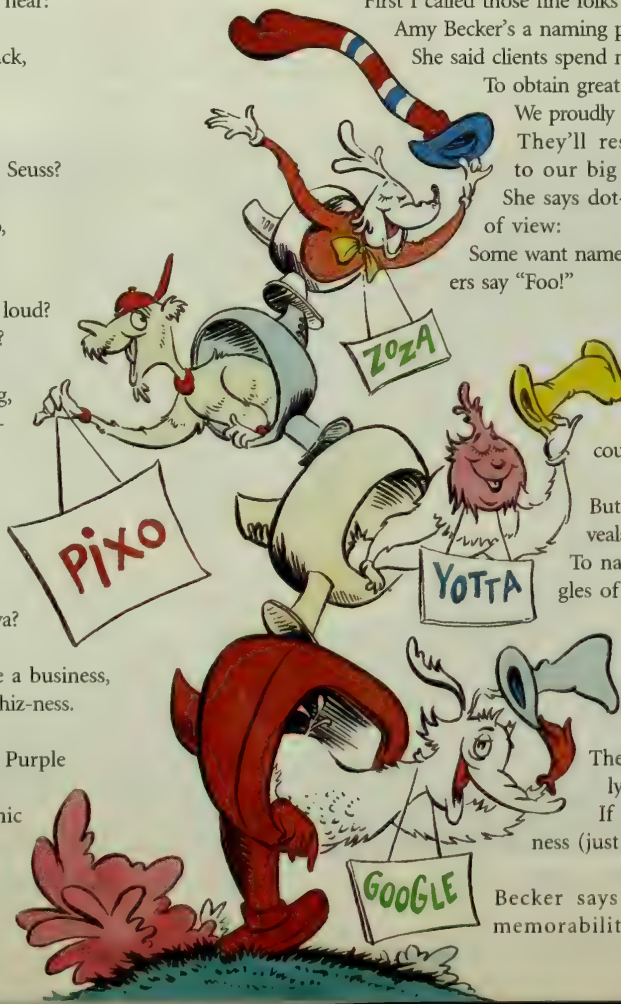
To names that are more than
giggles of emotion.

"Landor believes the best
names have some meaning,"
she explained in a way neither
brash nor demeaning.

These fun, playful names quickly
run out of steam

If you don't have a good business
(just ask Boo what that means).

Becker says over time the need for
memorability



Will give way as search engines improve capability.
Makes sense, but still I sought with some trepidation:
What's really behind these bizarre appellations?

One Freudian I called says hormones may be at work.
Hmm, does that explain Deep Bridge, Oloop, and Encirq?
"Playfulness is a sublimation of erotic pleasure,"
says Dr. Audrey Kavka in tones quite measured.
She says dot-com names scream creativity.
But long working hours limit romantic connectivity.

I cannot argue with the doctor, No Ma'am!
But I still don't get Yodlee, DayNine, or Yazam.

What happens when all the wacky nomenclatures are gone?
Did that lead to the naming of Notboring.com?

It's true cybersquatters snap up everything clever
And remotely relevant to every e-biz endeavor.
For example, I learned the site name
Pow.com
Is for sale. The ad claims: "High-im-
pact" sound.

If you happen to carry 700,000
pounds of sterling
It could buy you these letters if you're
yearning.
I ask: For "Pow," who'll part with that
much dough?
A crime fighter? A gear-seller
for Tae Kwan Do?

Another part of this
wild name-o-rama
Are the stealth names
that lead to lots
of drama.

Those phoney pre-launch code words, often sublime;
Who knew Palo Alto Coffee would become Xtime?

Over at Zendoo mum is the word,

Such a deliciously meaningless lark of a word!
After it debuted, FireDrop became Zaplet.
Well, that sure solves the mystery, doesn't it?

As they run out of options, many startups go in herds
To AltaVista's translator where they type descriptive words.
Terms that actually describe the product or the thrust
Of the business they're in, specificity's a must.

Then they click the button for Hawaiian or Kurd,
Portuguese, Greek, even Spanish, I heard.

An instant name, an instant mythology,
They get a brand-spanking-new exotic tautology.

Like Kanisa—a Lingalan word for "know,"
But be careful getting too clever, so
That you don't end up picking names that backhand
Speakers of languages you don't understand.

Party invitation site Evite was not overjoyed
When it learned that evite in some tongues means "avoid."

And oh the battles, and oh the disputes

Over names that the owners just thought were so cute.

There's an industry of agents and legal gunslingers
Who are getting good money pointing all kinds of fingers.

When somebody small registered "Chunky monkey"
All of Ben & Jerry's got really grumpy.
And those poor dot-com car guys at Model E
Ended up in a lawsuit with Ford Motor Company.

The time is coming, fast I think,
When goofball names won't seem so pink.

Geekapalooza will prompt a
sneer.

Even Razorfish could turn
dull, I fear.

Besides, a move is afoot, one that
many are backing
To take aim at domain name
styles about which I am
yacking.

Instead of cramming big ideas
between dubyas and dot-coms

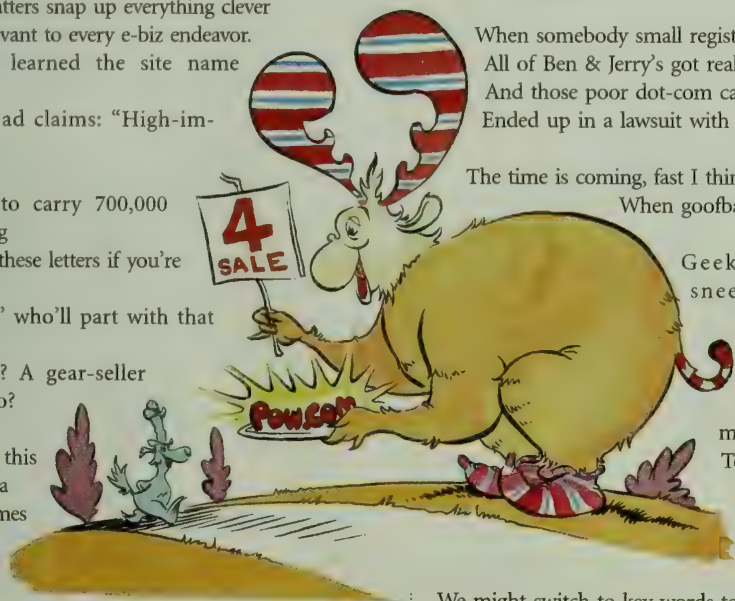
We might switch to key words to speed searches along.

Then what will the dot-coms do?
Tell me
Tell me
Tell me, You!

There was a time in the Pre-Internet Age
When nice, short, clear names were the rage.

There was Sun, of course, and Apple and Dell.
They're really kinda simple, but also kinda swell.

But then I guess when those came out
The IBMs and HPs gave a small shout:
Who are these upstarts? Who are they trying to kid?
Why don't they pick serious names like we did? ●





by CHARLES HADDAD

WorldCom Laying It On

Bernie Ebbers is trying to remake the company into an Internet power, just as he's feuding with top Net strategist John Sidgmore



CEO Ebbers with
Vice-Chairman
John Sidgmore

The Line

It was a humbling moment. In a presentation to analysts at a Manhattan hotel on Nov. 1, WorldCom Inc. CEO Bernard J. Ebbers, the swaggering cowboy of the telecom industry, was back on the heels of his trademark boots. With his core long-distance phone business unraveling faster than expected, he announced plans to split the company into two businesses, one focused on consumers and the other on corporate customers. He also conceded that WorldCom was going to fall far short of Wall

Street's forecasts for the fourth quarter and next year. Instead of rising at double-digit rates, WorldCom's revenues would inch up no more than 7% to 9%. Worse, profits for the fourth quarter would likely be half the \$1.4 billion that analysts had been expecting. Investors dished out swift punishment: They pounded the company's stock down 20% to less than \$19, wiping \$17 billion off WorldCom's market cap in a single day. "I've let you as investors down," Ebbers told the crowd. "I've let myself down."

Ebbers cutting himself a fat slice of humble pie? It's just the latest sign that the once unstoppable juggernaut of the telecom industry isn't the company it used to be. Ebbers' longtime strategy has been to buy growth by gobbling up ever-larger competitors. That approach ended when federal regulators torpedoed his bid for Sprint Corp. last spring. Regulators warned Ebbers that the only deals they'll approve now are niche acquisitions. But even those

may be harder to come by with WorldCom's stock in the doldrums.

So where will Ebbers find growth? In a word, the Internet. The planned restructuring is a forceful affirmation that WorldCom needs to move beyond its traditional phone business to find salvation. Ebbers' plan is to sell businesses new, lucrative e-commerce services. As WorldCom executives see it, they have a built-in advantage: a vast, global network of 300,000 miles of fiber optics that can deliver speedy Internet access—and open the door to other nifty Net services. Why, they argue, shouldn't WorldCom, the company that already carries 50% of the world's Internet traffic, also manage the industrial-strength Web sites of other companies? And why shouldn't WorldCom, with its 40 million phone customers, charge for whiz-bang technology that lets them browse the Web by simply speaking into their phone? "We have the

right assets to move fast into digital businesses," crows Ebbers.

Hold on little dogie. Unfortunately for Ebbers & Co., that may be easier said than done. While WorldCom has been a leader in carrying basic Web traffic, it's late to the party for providing extra Internet services. Consider the fast-growth market for hosting other company's Web operations. Today Silicon Valley upstart Exodus Communications Inc. is No. 1 with a 40% share. And Exodus' hold will likely get stronger. If Exodus closes its deal to buy the Web-hosting operations of Global Crossing Ltd., it will boast 46 data centers and 5,000 customers (Page EB48). "WorldCom is up against enemies now who really understand the technology of the Net and how to exploit it," says analyst Adam Quinton of Merrill Lynch & Co.

Nasty Surprise. Worse yet, WorldCom is entering this new arena more b

CHALLENGES AHEAD FOR WORLDCOM

The telecom giant is facing competition



Voice

WorldCom is the **No. 2 provider** of long-distance service, but it's a status losing its value. There are more than 500 long-distance providers today, driving prices down as low as **3¢ a minute** for big corporate customers. WorldCom's share of the long-distance market is expected to fall to 15% by 2005 from 25% today.



Data

WorldCom is the **largest single carrier** of data in the country, with about 50% of the market. But carrying data is turning into a low-margin business, and nimble rivals are selling higher-priced services, such as **Web hosting**. WorldCom is starting to do the same but lags behind upstarts Exodus and Qwest.

1999 revenue **\$21 billion**

Percentage of total revenue **43%**

Projected annual growth for next three years **3%**

1999 revenue **\$7.5 billion**

Percentage of total revenue **20%**

Projected annual growth for next three years **30%**

default than by careful planning. While Ebbers declined repeated requests to be interviewed, friends, former executives, business partners, and customers describe a company that's still reeling from the loss of Sprint. "Quite frankly, we were caught at-footed," concedes a senior executive who recently left WorldCom. "Ebbers was sure he could pull off the Sprint deal in the 11th hour." Brian Brewer, WorldCom's senior vice-president for business marketing, concedes WorldCom was overconfident about the acquisition and lost valuable time negotiating with federal regulators, but he says WorldCom is poised to make up for lost time.

Playing catch-up, coupled with the plummeting stock, has wreaked havoc on morale at WorldCom's offices in Clinton, N.J., and Washington, D.C. Top executives joke that it doesn't pay to come into work—given that the losses on their stock holdings in the company far exceed their base salaries. Ebbers, a renowned penny-pincher who got rid of company cars at MCI and made well-heeled MCI execs share

rooms at budget hotels on business trips, has taken extraordinary steps to stem defections. He has offered fat cash bonuses equal to several years' worth of salaries to execs who stay through 2002. But the offer has had limited success. In recent months, the list of key departures has included

spirit behind WorldCom's Net strategy. In 1996, when Ebbers wanted to sell off a little-known division he had acquired called UUNET Technologies Inc., which carried Internet traffic, Sidgmore convinced him it would be crucial to keep. Today that division boasts the largest Internet backbone in

The new WorldCom will be smaller but faster

Timothy F. Price, president and CEO of the company's MCI WorldCom Communications unit, and John Donoghue, former senior vice-president of consumer marketing. Brewer says executive departures are normal in telecom since it's such a fast-paced industry.

A more crippling defection may yet come. Many WorldCom insiders are speculating that John W. Sidgmore, the company's vice-chairman, is on the way out. The exit of Sidgmore would be a brutal blow since Sidgmore has been the guiding

the world. Sidgmore also cut a landmark deal to buy America Online Inc.'s Internet plumbing so AOL could focus on marketing and WorldCom could consolidate its leadership in carrying Net traffic. "Sidgmore is vital," says Sajai Krishnan, a partner in the San Francisco office of consultant Booz, Allen & Hamilton. "He's the brains behind the whole Internet effort."

While Sidgmore declined to be interviewed for this story, his actions speak loudly. Insiders say that Ebbers and Sidgmore have never gotten along particularly

Strengths in all of its major markets



Internet

WorldCom is the **No. 1 provider** of Internet access to corporate customers. The business is growing fast, but the **price of access is falling** as new competitors enter the market. WorldCom is working hard to use Internet access as a foot in the door to sell higher-priced services, such as wireless data services.

1999 revenue **\$3.5 billion**

Percentage of total revenue **10%**

Projected annual growth for next three years **More than 40%**



International

WorldCom, which offers communications services in 16 countries, thinks that **overseas markets** will help boost its growth as foreign companies tap into the Net. But building networks and signing up customers overseas is tough, partly because these markets tend to be **less open to competition**.

1999 revenue **\$1.7 billion**

Percentage of total revenue **5%**

Projected annual growth for next three years **More than 30%**

DATA: COMPANY REPORTS

well. Tensions between them have escalated since last year when Sidgmore pushed to buy wireless player Nextel Communications Inc. and Ebbers balked at the high price tag. "Sidgmore was so pissed off about Nextel that he took his ball and went home," recalls a former WorldCom exec. Not long after the dispute, Sidgmore gave up the day-to-day management of UUNET, retaining the ceremonial title of vice-chairman. Since then, he signed on as chairman of Strategy.com, a startup that provides personalized news, stock quotes, and other Net services.

Perhaps most telling, Sidgmore, who has played a key role in acquisitions since joining WorldCom, wasn't involved in the company's September purchase of telecom upstart Intermedia Communications Inc., a \$3 billion deal that gives WorldCom control of the Web-hosting firm Digex Inc. Brewer, the most senior Net exec after Sidgmore, says that Sidgmore remains "our big picture guy," even though he's not involved in daily operations. Brewer denies there are serious tensions between the two execs.

Losing Sidgmore's full focus couldn't

come at a worse time. Without Sidgmore, WorldCom's Internet gambit rests heavily on the vision of Ebbers, who has long admitted his aversion to technology. It took him years to get a cellular phone and a pager. As recently as a year ago, employees say, the best way to get in touch with Ebbers was via fax. Any e-mail had to go through his secretary. Company

"in a box." After college, he became one of the owners of a small chain of motels.

His start as a telecom exec was so thing of a fluke. He chipped in money to start up a company called Long Distance Discount Service in 1983 with several other Jackson entrepreneurs. It was only after the company ran into problems that Ebbers took over as chief executive. He quickly

Its stock price has made the hunter a target

officials say Ebbers has e-mail now.

Ebbers has long been an outsider in the industry dominated by Ma Bell lifers. Born in 1941 in Edmonton, Alberta, he came to the States after flunking out of the University of Alberta. After relocating to Mississippi, he tended bar for a while and then coached high school basketball. Later he went to school at Mississippi College, where he played basketball on a scholarship. He quickly fell in love with the state and likes to say that the only way he'll leave is

found he had a knack for dealmaking and built the company through more than 20 acquisitions. All the while, he's kept a down-home appeal. He lives on a 100-acre soybean farm with horses, and he relaxes putting around on his tractor. At his wedding last year, he wore jeans and cowboy boots with his tuxedo jacket.

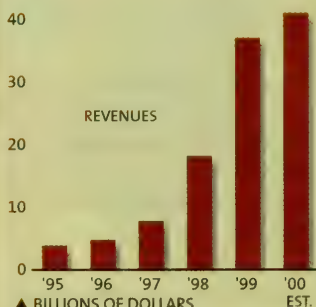
With or without his top Net strategy, Ebbers is pushing hard to rebuild momentum at WorldCom. Creating a track record for the lagging consumer and wholesale long-distance businesses, in a manner similar to the four-way breakup of AT&T Corp., is just the start. He's aiming to close the deal for control of Digex soon, which should help WorldCom accelerate growth in its data and Internet businesses. Already, revenues at those businesses are climbing more than 25% annually, while revenues for the consumer and wholesale businesses are beginning to shrink.

The restructuring will create a leaner WorldCom, one that's smaller but faster growing. The existing company is projected to boost revenues 11.5% to \$45.8 billion in 2001 from \$41 billion this year, according to Credit Suisse First Boston analyst David P. Reingold. But if Ebbers separates the consumer and wholesale businesses, Reingold expects that WorldCom will increase revenues 17.6% to \$34.6 billion next year. That, Ebbers hopes, will once again convince investors to flock to WorldCom's stock. And with a high-flying currency, Ebbers could go back on the hunt for acquisitions and round out his offerings in the Internet sector. "Dot-coms are cheap now, and Ebbers will gobble up a mess of them," says analyst Jay Pultz of market researcher Gartner Group Inc.

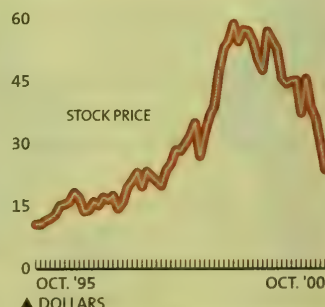
Can Ebbers make WorldCom an Internet powerhouse? Although the odds

WORLDCom BY THE NUMBERS

► REVENUES



► WORLDCom's STOCK PRICE



► ANALYST RECOMMENDATIONS

Today

Buy	Hold	Sell
22	2	0

DATA: BLOOMBERG FINANCIAL MARKETS

► GOING TO THE NET

The percentage of revenues that come from Internet or data services

WorldCom	AT&T	Sprint
30%	12%	16%

DATA: COMPANY REPORTS

Unrivaled



When business teams with technology...
VERITAS® gets you to the top.

The Data Availability Company™


VERITAS™
BUSINESS WITHOUT INTERRUPTION™

In a rocky and fiercely competitive global economy, your data is your most valuable asset.

Unrivaled solutions from VERITAS give you the vital edge necessary to scale new business heights.

VERITAS, The Data Availability Company, provides you with essential, industry-leading software solutions, UNIX to NT, data center to laptop, to continuously access and protect your business critical data.

Visit us at www.veritas.com

© Copyright 2000 VERITAS Software Corporation. All rights reserved. VERITAS is a registered trademark of VERITAS Software Corporation in the U.S. and other countries. The VERITAS logo and Business Without Interruption and VERITAS products are trademarks or registered trademarks of VERITAS Software Corporation in the U.S. and other countries. Other product names mentioned herein may be trademarks or registered trademarks of their respective companies.

against him, he may yet prove the naysayers wrong. He is, after all, the only person in the telecom industry who has been able to create a legitimate rival to the remnants of the Ma Bell monopoly—and he's done it all in less than 20 years. Jettisoning the wholesale and consumer businesses will probably help his stock recover. And if he can use WorldCom's close ties with corporate customers to sell more value-added services like Digex' Web-hosting, revenue growth should accelerate in the years ahead. "I'm banking on more big companies continuing to switch over to digital networks and that will only help WorldCom," says Brian B. Hayward, portfolio manager for the Invesco Telecommunications Fund, which is holding onto its WorldCom stake despite the company's recent troubles.

Ebbers has no time to lose. WorldCom's problems have gotten so severe that the usually gruff, ever swaggering Ebbers concedes he may have to give up his job. "I'm sure with the recent performance of the stock people have a legitimate right to ask if I'm the right person to lead this company," he told analysts at the Nov. 1 meeting.

WorldCom declined comment, but insiders say Ebbers is in no danger of losing his job. WorldCom's problems are a stark contrast to the stellar performance of several telecom upstarts. Qwest Communications International Inc., for example, has been expanding headlong into Net-related services since acquiring the Baby Bell U S West Inc. earlier this year. "We're able to walk and chew

Telekom has cut a deal to buy wire telephone operator VoiceStream Wireless Corp., but "that won't be enough to satisfy its appetite" for U.S. properties, Deutsche Bank telecommunications analyst Gary P. Jacobi.

WorldCom's independence may depend on Ebbers' Net strategy. He's starting with the important strategic

With Digex, it will be a Web-hosting force

gum at the same time, a unique attribute in this industry today," quips Joseph P. Nacchio, Qwest's chairman and CEO.

Even if Ebbers hangs on to his job, he runs the risk of going from hunter to hunted if WorldCom's stock price drops much further. With a market cap of \$52 billion, a weakened WorldCom would look particularly attractive to giant European telecommunications companies, such as Spain's Telefónica and Germany's Deutsche Telekom, which are eager to gain a foothold in the vast U.S. telecom market. Deutsche

advantages of being the largest provider of access to the Internet and the largest carrier of Net traffic. Now Ebbers needs to move beyond just carrying data to selling, enhancing, and manipulating it in ways companies will be willing to pay for. Analysts estimate that the market for these sorts of value-added services could hit \$100 billion in 2004, up from \$30 billion this year. WorldCom plans to spend up to \$100 billion—\$9 billion a year alone—to enable its network to function like a high-speed computer, offering everything from Web hosting to wireless Internet connections.

New Frontier. One promising e-business initiative is Ebbers' move into Web hosting. The market is doubling in this year to \$3.7 billion and is expected to hit \$17 billion in 2004. Better yet, margins in the business can be 50% or higher. WorldCom has been something of a laggard, but it has also run as more nimble upstarts like Digex and Exodus have rushed to help companies take advantage of the Net. "We haven't seen them be very effective," says Ellen M. Hancock, Exodus' chief executive.

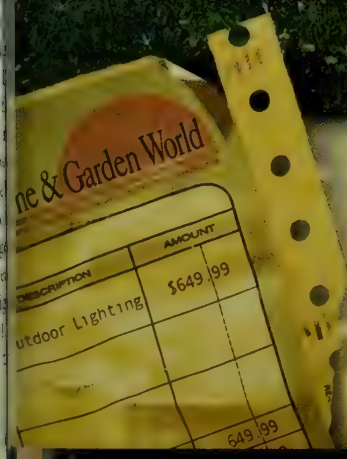
Ebbers should be able to change his strategy with his deal for control of Digex. When he announced WorldCom's acquisition of Intermedia on Sept. 5, he made it clear that the purchase was about grabbing Intermedia's majority voting stake in Web-hosting upstart. While Digex will remain an independent company, it will have close ties to WorldCom. The telecom giant will use its sales force and list of corporate clients to market Digex Web services in the U.S. and overseas. WorldCom also intends to provide Digex with additional resources, such as Web-hosting centers worldwide over



Qwest CEO Nacchio has taken a Net lead

EVERYONE HAS A PASSION.

OURS IS PREDICTING EVERY ASPECT OF YOUR CUSTOMERS' BEHAVIOR.



The Quadstone System is unique, powerful software that lets marketers predict customer activity by identifying hidden behavior. It combines information from all channels of the enterprise — including the Web — to provide complete, highly visual models for taking targeted action in real time. The Quadstone System has been proven at leading global companies. Featuring an open architecture, it can be implemented within a week and deliver results in minutes. To learn more, call us at 1-800-821-8031 or visit www.Quadstone.com.



QUADSTONE

THE PREDICTIVE MARKETING SOFTWARE

next year. "I expect WorldCom will be among the leaders a couple years from now," says Ford Cavallari, executive vice-president of market researcher Adventis. Together the two companies "will be the toughest competitor," concedes Hancock.

WorldCom may be a tough rival in another budding market. Increasingly, corporations are deploying internal networks for sharing their most sensitive data. The market for these so-called virtual private networks, or VPNs, is about \$3 billion today and it's projected to increase 20% annually to about \$8 billion in 2004. Although it faces stiff competition from rivals like AT&T and upstart Level 3 Communications Inc., WorldCom is one of the leaders in the market. Analysts figure it could remain a top competitor because of its expertise in constructing data networks for its own use around the world.

Granted, many of the Net-related opportunities are chump change to a company the size of WorldCom. But Ebbers is attacking a wide range of opportunities, hoping that success in several markets could improve the company's overall financials. One example is voice browsing, a nascent technology that allows people to surf the Web by simply speaking commands into the phone. WorldCom is beginning to sell software that lets companies incorporate voice browsing into their Web sites. WorldCom also is planning to use a wireless technology to offer high-speed access to the Net in 100 cities by the end of 2001. And the company is testing digital subscriber lines, or DSLs, which are high-speed Internet connections over phone lines that let customers get everything from movies to

for WorldCom where Ebbers has always run a no-frills shop.

Consider the case of Tony Canella. He's the director of network administration at HITT Contracting, a commercial builder in northern Virginia. The company had been a longtime MCI customer, but Canella noticed that service began to slip in the wake

sionary who zigged when others were ging. For example, as other companies following America Online into the consumer market in the 1990s, Sidgmore trained his sights on corporate customers. He also inspires intense loyalty among troops. When UUNET went public in 1998, Sidgmore called a meeting and distrib-



Ebbers wants WorldCom's lead in data traffic to translate into high-value Internet services

of the WorldCom acquisition. "After the merger, WorldCom forgot who we were," he says. "We didn't have a sales rep to contact. We lost our dial tone twice for a whole day." Canella eventually switched his business to upstart Nextlink Communications Inc. And he isn't the only one.

stock to the lowliest employees. Some of staff returned the generosity with shout-outs. "John, have my children!"

But he's always had an uneasy relationship with Ebbers. Insiders describe the executives as two "alpha males," who have long clashed over style and strategy. "Bob has never liked Sidgmore," says a former senior WorldCom executive. "He's a monarch and wants courtiers and vassals. Sidgmore is neither."

The alliance between Sidgmore and Ebbers has grown increasingly fractious. For starters, Sidgmore lobbied for a big and expensive—campaign to persuade employees to stay after WorldCom bought the company. Ebbers vetoed the notion and an estimated 80% of MCI's former executive team wound up leaving the company over the next two years. Sidgmore also urged Ebbers to spin off UUNET as a separate company. That way the Internet operation could set its own strategy—unburdened by the declining long-distance business—while creating new stock

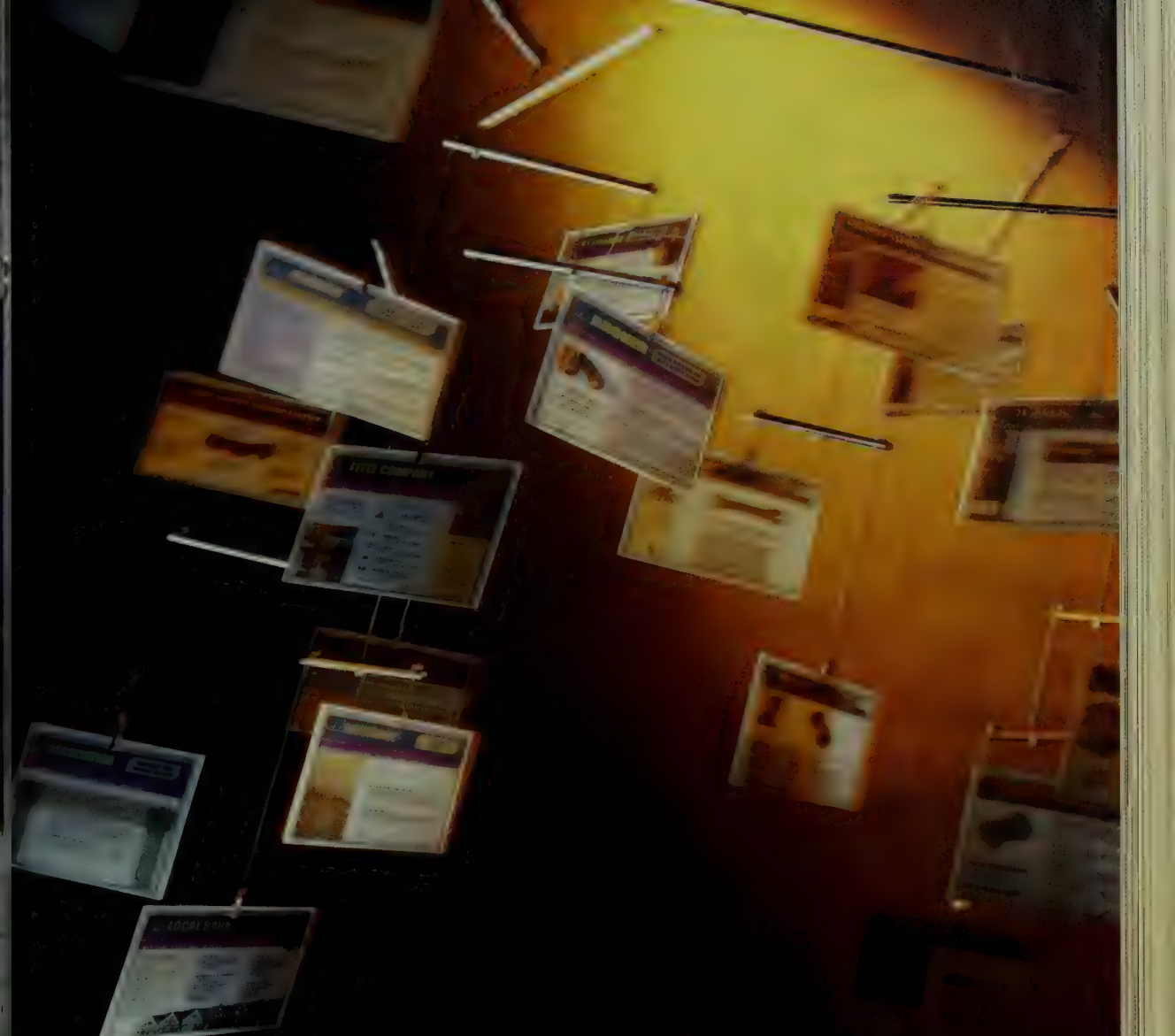
Losing Sidgmore would be a blow to WorldCom

television channels to Internet access over a traditional telephone line. (Page EB40)

Is WorldCom really ready to give what it takes to be an Internet full-service provider? As companies increasingly move their operations to the Net, they need much more expertise and service than they're used to getting from their telephone company. Corporations care about fast service, reliability, and being able to reach a salesperson pronto when things go wrong with a Web site. That's going to be a stretch

Several other WorldCom customers complain about the low quality of service. "WorldCom promised to have us connected to their network in 30 days," says the chief technology officer at one multinational company. "It took 120 days and might have taken longer if we hadn't bugged them for weeks."

Delivering service on Internet time will be even more difficult for WorldCom should Sidgmore leave. The bearded 49-year-old has proven himself a digital vi-



introducing the power to build networked business communities

Business Community networks are the next major development in e-commerce. They deliver all the web services – content, applications and commerce – that enable companies to quickly launch fully integrated and personalized solutions. Epicentric™ is leading this revolution. Our powerful end-to-end business platform and professional services enable organizations to develop an effective Internet strategy.

And it removes the boundaries between Internet, extranet and intranet – so you and your customers, partners and employees are seamlessly connected. This is the platform on which you can build, manage and control the entire complex environment of on-line business communities and value-chains that will drive your e-business.

For details visit www.epicentric.com/portalstrategy.



epicentric

tions to reward his workforce. Some analysts thought it was a smart move, but Ebbers nixed the idea.

More than anything, say insiders, Sidgmore is becoming increasingly frustrated with Ebbers' unwillingness to take risks. "Ebbers looks at the market, sees what's hot, and then copies it," says a former senior executive. "He never wants to be out on a limb, to be called crazy by Wall

Street." The tensions came to a head last year over Nextel, a Virginia-based wireless carrier that uses a different technology than other wireless carriers and has a smaller coverage area. After Ebbers walked away from the deal, Sidgmore became less involved in the company's day-to-day operations. He continues, however, to spar with Ebbers regularly. "More than ever, the two of them are screaming at each other and

pounding the table during staff meetings these days. He already has his v

cut out for him in trying to transfer WorldCom from a telephone company to an Internet powerhouse. And, unless Ebbers can rise to his high-noon challenge, there will be no peaceful pattering around the tractor for this telecom cowboy. ●

Better Late Than Never

For years, WorldCom CEO Bernard J. Ebbers didn't worry too much about how consumers were going to get on the Internet. As AT&T Corp. and other rivals bet billions on high-speed Internet access for individuals, WorldCom kept focusing on its bread-and-butter corporate customers.

Not anymore. Telecom's cowboy is now preparing to mosey into the consumer Internet market. The idea is to boost the profitability of the consumer business by selling customers speedy Net access and other extras along with their long-distance service. WorldCom has been laying the groundwork for the initiative by providing services to nonpaying customers over the past year in six test markets. For example, it provides high-speed Net access over radio waves to homes in Dallas and digital television over souped-up copper phone wires in Atlanta. Now, WorldCom is planning to go commercial with consumer services in a few markets by yearend.

But Ebbers isn't going to follow AT&T's lead in trying to use the cable television networks to hook people up to the Net. His first effort will be to roll out zippy Internet access over copper phone wires, a technology called digital subscriber lines (DSLs). That will begin next month. Next year, WorldCom will start commercial sales of "fixed wireless," a service that beams digital bits over radio waves between rooftop antennas. And in

2002, WorldCom will provide a mobile high-speed Internet-access service for laptop computers. The company's Chief Technology Officer Fred M. Briggs, who is overseeing the consumer Net initiative, says WorldCom will spend a total of \$10 billion on the effort. "We'll bundle video on demand, television, and high-speed Internet access into one

package," says Briggs. "We'll eventually eclipse the cable [providers]."

Brave words for a company getting started. Excite@Home says it should have 3 million customers buying its Net access over cable lines by the end of the year, and SBC Communications Inc. expects to have 1 million DSL customers then. But Briggs insists WorldCom can catch up. The company will offer connections as fast as 7 megabits a second, while rivals rarely offer service faster than 3 megabits. These super-speedy DSL lines will allow WorldCom to offer digital TV as well as Net access

so fast that people can watch video clips off of Web sites.

Still, the track record of companies trying to provide television over phone lines is spotty. Verizon Communications and others toyed with the idea in the mid-1990s, but abandoned it because of high costs. The only substantial deployment is from Qwest Communication International, which is providing TV service to about 50,000 homes in Phoenix.

Clearly, Ebbers and WorldCom have miles of ground to make up in the consumer Internet business. Most analysts think the odds are against the company becoming one of the sector's top players. Still, Ebbers has poked his nose up from under his cowboy hat. And he looks ready for a shootout.

By Charles Haddad in Atlanta

WorldCom Targets The Digital Home

WorldCom is investing \$10 billion so it can offer consumers high-speed Internet access, digital TV, and other interactive services. Here's how WorldCom plans to do it:

► **Digital Subscriber Lines:** DSL is a regular copper phone line souped up with a digital modem that runs at least five times faster than a dialup connection. A faster version, known as VDSL, can transmit digital TV.

► **Fixed Wireless:** By placing a small radio antenna on a customer's roof or window, users can get high-speed Net access or digital TV at a lower cost than cable TV or DSL. It's a practical alternative in rural areas, where it's expensive to lay cable.

► **Mobile Wireless:** WorldCom has invested in Metricom, to provide mobile high-speed Internet connections for computer-laptop users.

The end of

OUTSOURCE ANXIETY

HE KNEW HIS
SERVICES WERE
BULLETPROOF.

NOW THE SUNTONE™
SEAL TOLD THE REST
OF THE WORLD.

TRYING TO PROVE RELIABILITY IN THE SERVICE PROVIDER LANDSCAPE CAN DRIVE YOU CRAZY — UNTIL NOW.

SUNTONE CERTIFICATION IS AN OBJECTIVE WAY TO ASSURE CUSTOMERS THAT YOU'RE COMMITTED TO PROVIDING THE UPTIME THEY NEED.

DEVELOPED BY SUN, TOGETHER WITH MANY OF TODAY'S BEST-OF-INTERNET COMPANIES, THE SUNTONE PROGRAM'S RIGOROUS EVALUATION LEAVES NO

STONE UNTURNED. EVERY CATEGORY CRITICAL TO AN SP'S PERFORMANCE IS EVALUATED — FROM SERVICES TO INFRASTRUCTURE TO

SOFTWARE TO OPERATIONS. THOSE WHO EARN SUNTONE CERTIFICATION HAVE PROVEN THEY CAN PROVIDE SERVICES ENABLING DIALTONE-LIKE RELIABILITY

(IT'S LIKE GETTING AN ELEVEN ON A TEN SCALE). CUSTOMERS WANT YOU TO STOP THE OUTSOURCE INSANITY. THE ONLY SANE THING TO DO IS

VISIT WWW.SUN.COM/SUNTONE-NOW AND FIND OUT HOW TO GET CERTIFIED.



SUNTONE™
CERTIFIED

THE NETWORK IS THE COMPUTER. WWW.SUN.COM/SUNTONE-NOW. © 2000 SUN MICROSYSTEMS, INC. ALL RIGHTS RESERVED. SUN, SUN MICROSYSTEMS, THE SUN LOGO, THE DIALTONE LOGO, DIALTONE, THE SUNTONE LOGO, SUNTONE, THE NETWORK IS THE COMPUTER, AND WE'RE THE DOT IN .COM ARE TRADEMARKS OR REGISTERED TRADEMARKS OF SUN MICROSYSTEMS, INC. IN THE U.S. AND OTHER COUNTRIES.



We're the dot in .com™

Going for Gold At BlueLight

*CEO Mark Goldstein aims to make
Kmart's online retailer leader of the pack*

The two chief executives had been butting heads for months. Mark H. Goldstein, head of BlueLight.com, pleaded with Kmart Corp., the Web site's majority owner, to dump its traditional photo-processing business and let him offer digital-photography services on the site. But Kmart CEO Charles C. Conaway wouldn't budge. He wanted to continue offering photo processing, and he didn't want Goldstein promoting a competing service. In mid-October, the two called a truce: Conaway would continue to offer regular film developing but BlueLight could promote its own photography services, too. "We had to compromise more than we would have liked. But we agreed that photo-processing is good for Kmart, and what's good for Kmart is good for BlueLight," says Goldstein.

Such is the friendly fire between Kmart



executives and Goldstein, who for a year has been striving to make BlueLight.com a retailing giant on the Web. It's a match rife with strife: Goldstein and Kmart are opposites. Kmart, the nation's third-largest retailer behind Wal-Mart Stores Inc. and Sears, Roebuck & Co., is a 38-year-old company where change comes slowly. Goldstein comes from the high-tech startup

on Saturdays. He says he has been "too busy working" to get married.

Just recently, Goldstein started showing signs of settling down. He bought and is remodeling a 3,000-square-foot house on nearby Belvedere Island. "At some point it's time to grow up," he explains. "I have aspirations to have children, and you can't have kids on a houseboat." He's getting

Says Stewart: "He listens but he's not generally swayed. He stands his ground"

world and launched and sold three companies before piloting BlueLight. This is a supreme test of whether Silicon Valley and Main Street can successfully work together in the e-business era.

Goldstein has been on the offensive from the start. For instance, he insisted on having control over the business and on preventing Kmart from operating an independent site. "If you don't push and challenge and make demands, you don't create change," Goldstein says. "You're attacking processes that have been in place for decades."

Too hip? BlueLight's CEO has so far been diplomatic enough to avoid alienating his big brother. The retailer, which owns a 55% equity stake in BlueLight, just invested \$55 million as part of a second round of financing. Still, Kmart is preoccupied with its own operational problems. Because of poor inventory management and marketing, it posted a 22% decline in net income last year. So it's a challenge for Goldstein to make BlueLight a top priority there. Kmart wouldn't make top executives available for interviews, but spokeswoman Shawn Kahle notes that around the retailer's Detroit headquarters, Goldstein is considered a bit pushy. "Patience is not his first strength," she says.

Goldstein is about as far as can be from the typical Kmart shopper, who is a mom with a household income of less than \$50,000. At age 39, the hip Goldstein lives with his girlfriend on a houseboat docked in Sausalito, Calif. He does things to extremes, such as swimming in the frigid waters of the San Francisco Bay and taking two-hour runs up Mt. Tamalpais at 7 a.m.

interior-design tips from good-taste guru Martha Stewart, whose Martha Stewart Living Omnimedia Inc. is a BlueLight backer. Her color recommendations—lime green and eggshell.

But maturity hasn't quelled Goldstein's fundamental feistiness. His opinions are strong. He's got a hot temper. And he's stubborn. "He listens but he's not generally swayed. He stands his ground," says Stewart.



MARK GOLDSTEIN

Born: Dec. 12, 1960, in New York.

Education: University of Pennsylvania, 1983, B.A.

Career: Started in 1983 as a software marketer at Apple Computer. In 1987, he launched Reality Online, a financial-services software company—selling it to Reuters in 1994. A year later, he founded NetAngels, which developed Internet marketing software tools. Even before selling NetAngels to Firefly Networks in 1997, Goldstein founded Web software maker Impulse!Buy Network. He sold that to Inktomi in 1999. He became CEO of BlueLight.com in December, 1999.

His first business venture: Worked for beer distributor from his college dorm room.

Management philosophy: "If you

he'll have his admirers and detractors," Rex Golding, a partner at Softbank Technology Ventures, which owns a chunk of BlueLight, too. "Some people mistake courage of convictions for arrogance."

Does Goldstein have the right stuff to lead BlueLight? That's not yet clear. To sure, he helped create the unusual business—part free Internet-access provider and part mass merchandiser. But he never run a retail operation before. And record as an entrepreneur is spotty. Investors came away empty from NetAngels Inc., a Web-site personalization-software maker that he co-founded in 1995 & sold in 1998. "Every day I worry about not succeeding," he says.

As Martha Stewart would say, that's a good thing. BlueLight is anything but a sure bet. It has some strong pluses. While the company doesn't divulge revenues, it does say that more than 4.9 million people have signed up for the online service, placing it among the top three NetAccess providers. And, with about 1.5 million visitors to its e-commerce pages in September, BlueLight is on par with the Wal-Mart

don't push and challenge and make demands, you don't create change."

How he shakes things up: Goldstein marched into a meeting of Kmart execs armed with newspaper flyers from competing outfits to persuade them to promote BlueLight more aggressively.

Home: Lives on a houseboat in Sausalito, Calif. Moving in December into a house in Tiburon, Calif., with interior design by Martha Stewart. Color scheme: eggshell and lime green.

Recent Kmart purchases: Canned tuna, a battery for his houseboat, two pairs of swim trunks for \$2 each, a melon baller for \$3.

His exercise regimen: Swimming in the 60-degree waters of the San Francisco Bay every other day, a two-hour run up Mount Tamalpais on Saturday mornings at 7.



How business becomes e-business.™

The great e-business shakeout is well under way. For those who didn't make it, our condolences. At least the end was quick.

For those who have made it, who broke the code and figured out how to build a truly viable e-business, our heartiest congratulations.

As it turns out, many of these successful companies—including the majority of the Fortune e-50—have built their e-businesses on an exceptionally strong foundation.

The BEA WebLogic® E-Business Platform.™

This award-winning set of innovative software and services is uniquely designed to help businesses rapidly develop and launch advanced e-commerce initiatives. It's an end-to-end solution that includes rich personalization and complete B2B integration.

In fact, it's now the global standard by which all e-commerce software is measured.

Which explains why it's BEA's market-leading platform that powers Chase Manhattan, FedEx, Amazon.com, United Airlines, Wells Fargo, E*TRADE and over 6,500 other successful e-businesses. Find out how we can help yours. Visit us at www.bea.com.



www.bea.com

©2000 BEA Systems, Inc. How business becomes e-business and BEA WebLogic E-Business Platform are trademarks and BEA and WebLogic are registered trademarks of BEA Systems, Inc.

Target Corp. e-commerce sites, according to research firm Nielsen/NetRatings. But visitors spent less time at BlueLight than at the other two, and it has been getting low marks for customer service.

BlueLight's October relaunch of its Web site was designed to fix that. The new site plays up Kmart's clothing brands like Route 66, and is more aggressive with marketing, suggesting, say, a shirt to buy along with those pants. And it now offers 250,000 items, up from about 100,000 previously. Until now, BlueLight was "a car with a motorcycle engine in it," says Goldstein. "We're

chandisers like Wal-Mart.com and specialists like consumer-electronics seller CircuitCity.com. "BlueLight will be competing on price, and that's going to make it hard to be profitable," says Heather Dougherty, retail analyst at research firm Jupiter Media Metrix.

That's why it's crucial for Goldstein to get loads of help from Kmart. He's counting on Kmart to plug BlueLight in TV ads and newspaper flyers and on in-store kiosks. Complicating matters: The BlueLight deal was initiated by top Kmart executives who have since retired. Goldstein argues that he's better off with the new regime. Conaway, he says, "understands e-commerce

swimming trunks, he took the plunge. I was looking to see how willing I was to go outside of my comfort zone," says Rhoades.

Goldstein has always done things a little differently. He grew up in Rye, N.Y., a tony suburb of Manhattan, and had the entrepreneurial bug from the start. His father, Bernard Goldstein, ran a computer timesharing company called Computech. Goldstein tagged along to business meetings and receptions. A "B" student in high school, Goldstein preferred the part-time work world over studying. He worked as a security guard at a Twinkie factory.

It took him a while to find his métier. At the University of Pennsylvania, he majored in marketing and economics, but again, business grabbed his fancy. He made money by handing out T-shirts and caps

to beer distributors on Philadelphia campuses. After college he drove out to Silicon Valley, where he snagged a job at Apple Computer Inc. Apple was already a large company, and Goldstein wanted to run his own outfit, so he stayed for just two years before striking out on his own. Within a decade, he started and sold three startups—financial-services software company Reality Only, NetAngels, and Web promotion company Impulse!Buy Network.

Goldstein's father played a major role in his son's career. The elder Goldstein invested in each startup prior to BlueLight, although never as a principal investor and never putting in more than \$50,000. He passed on BlueLight since his son had lots of deep-pocketed investors. Dad was liberal with

vice, too. Sometimes his son took it, and other times he politely brushed him off, saying "my other line's ringing," the elder Goldstein recalls.

Now, Goldstein plans on succeeding with Kmart in a similar way: heeding its lead in some instances, sticking to his guns in others. Since Kmart has just two seats on BlueLight's five-member board, Goldstein says he views it as a partner rather than a boss. He insists he "just knows" when to push to get his way and when to back off. With BlueLight still on the bleeding edge of e-tailing, his intuition will be put to the test.

Contributing: Linda Himelstein
San Mateo and Joann Muller in Detroit

"If you don't push and challenge and make demands, you don't create change"

dropping a six-cylinder engine into it now."

Goldstein is betting that a large fraction of Kmart's 30 million store customers a week will buy merchandise at BlueLight. To attract customers, BlueLight hands out free Net access software on CD-ROMs in Kmart's 2,100 stores. The promotion has proven successful at signing up subscribers—about 40% of whom hadn't previously used the Web, says Goldstein.

Right track. Getting those subscribers to buy has been another matter. BlueLight Net access subscribers who also have become e-commerce customers number only in the tens of thousands, says Goldstein. Now that there's more merchandise on the site, his goal is to turn 25% of free-ISP subscribers into paying customers by the end of 2001. Goldstein says he's aiming to sell \$100 million of merchandise between now and the end of 2001, when he expects the company to break even.

Analysts think he's on the right track. The sales projections are attainable because the site is piggybacking on Kmart marketing. Making a profit will be harder. Spinway Inc. provides the plumbing for the dial-up service in exchange for selling the ad space on the site—so Goldstein is giving up a revenue source. On the e-commerce front, Goldstein faces fierce competition from general mer-



Goldstein, who lives on a houseboat, is not a typical Kmart shopper

and new merchandising techniques."

If anyone is conscious of the gap between Kmart's mostly blue-collar clientele and BlueLight, it's Goldstein. To help his employees relate to the Kmart customer, all 170 staffers must wear Kmart clothes every Tuesday and shop there twice a month.

Goldstein asks a lot of his employees, so he tests their mettle before he hires them. He has had a handful of candidates for high-level jobs dive from his houseboat into the chilly waters of San Francisco. Hue Rhodes, now BlueLight's director of channel development, was taken aback when he interviewed with Goldstein last year. But, borrowing a pair of Goldstein's

**WE ENABLED A DATABASE OF
OVER 800,000,000 NAMES
TO BE SEARCHED IN UNDER
THREE SECONDS.**

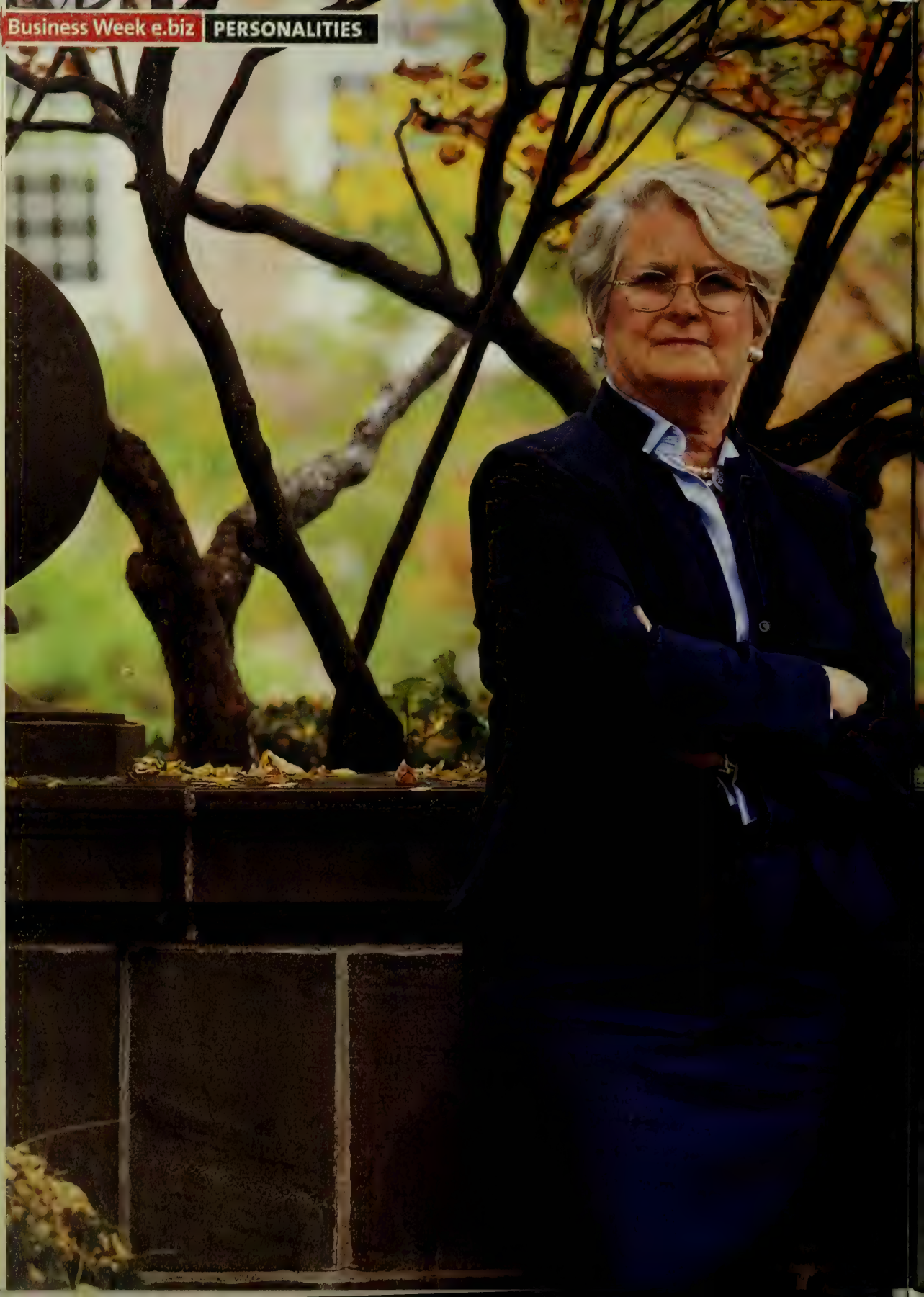
**OR, ROUGHLY, ONE NEW YORK CITY
EVERY .0278 SECONDS.**

The world's largest genealogical organization had a problem. They'd compiled over a terabyte of data, spread out over multiple static databases all over the world, and needed a way to access it quickly, relevantly, and on a fixed budget. *We love a challenge.*

Rather than pull all the information into one, sluggish database, we built a common index with a parallel query mechanism all three databases could understand.

lavaTM
STORM

Allowing results to be posted in less than three seconds. And as that should make the site pretty popular, we've enabled it to handle up to 65 million hits per day and be scalable to 500 million hits per day. How do we make the impossible seem easy? Simple. We've done it before. If you're in need of a little outside technical expertise, give us a call; we'll give you our thoughts. 877-650-5282. Or visit us at lavastorm.com.





by BEN ELGIN

Making Her Own Luck

Three years ago, Ellen Hancock's confidence was shot. Now she's building a Web-hosting empire

It was nearly three years ago, on a warm December morning, that Ellen M. Hancock hit rock-bottom. Fired five months earlier as Apple Computer Inc.'s chief technology officer by boss Steven P. Jobs, Hancock was still out of work. She had bucked long odds to become one of high tech's brightest female stars, but she was spending her days reflecting on three years of bitter disappointment: being run out of IBM in 1995 by CEO Louis V. Gerstner Jr. after 29 years, getting passed up a year

later for the vacant CEO job at chipmaker National Semiconductor Corp., and being pushed out by the cocky Jobs, who had dismissed her as a "bozo."

No wonder Hancock's confidence was shot. As she huddled with longtime friend Dan Lynch at shabby Hobee's restaurant in Cupertino, Calif., just a mile from Apple headquarters, she wondered aloud if she should bother to try to find another job. Did she have the skills to lead in the fast-moving Internet market? Was her reputation ruined after grappling with Jobs? Lynch, an investor in startups, poked at his Mexican-style hash browns before interrupting her: "Now you're somebody! Getting fired by Steve is a badge of honor."

Take the helm. It was like a slap on the back—rough, yet heartening. Hancock, who had always prided herself on her toughness, found her courage. She decided that she would look for another tech-industry management job, and asked Lynch to help her spot one. Amazingly, on that winter morning, Hancock's fortunes began to turn. Within weeks, she had her answer. Exodus Communications Inc., a small company

that hosts the Web operations of other companies, was looking for a new CEO with big corporate knowhow. Lynch was on the board and made the introductions.

Hancock has made her own luck since. After taking the helm of Exodus on Mar. 10, 1998, and leading the company through its IPO just nine days later, she has guided the company to an anticipated \$810.2 million in revenue this year, up from just

player like Hewlett-Packard Co. Carleton S. Fiorina just a stone's throw away in Silicon Valley. "I always do be with a goal out in front of me," Hancock says.

Exodus gives her a straight shot at goal. With a steady stream of companies handing computing jobs off to hosting services like Exodus, the potential for real profits is tremendous. Nobody knows

"My father expected all of us to do well. He didn't care about gender."

\$12.4 million in 1997. That's sure to get much bigger. On Sept. 28, Hancock announced the \$6.5 billion acquisition of rival GlobalCenter Inc. When that deal closes early next year, she will oversee a vast empire of 46 data centers and 5,000 customers—making Exodus by far the leading player in the up-and-coming market for hosting Web operations.

Success like this is a personal vindication for Hancock. Her stake in Exodus, worth about \$100 million, is twice as valuable as Gerstner's IBM stake. "Revenge is sweet," says the 57-year-old Hancock gleefully. She's not satisfied, though. Her aim: to become the most powerful woman in computing. That's a tall order, especially with a star

actually where this nascent Internet outsourcing movement is going. But if Hancock can take all of the lessons she has learned from past successes and past mistakes, and keep Exodus on the crest of this emerging market, she will gain a reputation well beyond the borders of techdom. "If Ellen can pull this off, she will be the First Lady of U.S. business," says former Apple executive Marco Landi, who now runs NavLink, a European data-center company.

It also would cap a remarkable career that could serve as an example for other women to follow. The Bronx (N.Y.) native bucked convention from the start, developing an affinity for math and logic while attending all-girl Catholic schools. Un-



ELLEN MARIE HANCOCK

Born: Apr. 15, 1943, in the Bronx, N.Y.

Education: Bachelor's degree in mathematics, College of New Rochelle, 1965. Master's degree in

mathematics, Fordham University, 1966.

Early goals: Hancock—a devout Catholic—had wanted to become a nun. She bagged that idea by her late teens, but still attends church most Sundays.

Career: Spent nearly three decades at IBM, climbing from junior programmer to senior VP in charge of 15,000 employees, 1966-95. She then spent two ill-fated years as COO of National Semiconductor and chief technical officer at Apple Computer, before bouncing back as CEO of Exodus Communications in March, 1998.

Management skills: Excels as an operations executive, driving large organizations and focusing on customers' immediate needs. "Maybe she's not a great visionary, but she's exceptional at execution,"

says Yankee Group Chairman Howard Anderson.

Work ethic: Known for her 80-hour work weeks, Hancock is typically online by 6:30 a.m. and works at least until midnight. Personally responds to every e-mail she receives—300-plus messages daily.

Conquering the glass ceiling: She never hesitated to be "one of the guys," whether it meant playing poker on the weekend or grabbing a couple drinks after work. "You build up trust that way," she says.

Biggest disappointment: Being pushed out of IBM's inner circle in 1995, two years after Louis Gerstner took the helm. After 29 years at Big Blue, a devastated Hancock walked out the door and put together the first resume of her career.

Family: Husband of 29 years, Jason, also a longtime IBM veteran, lives at the couple's home in Ridgefield, Conn. Ellen, who rents a condo in Los Gatos, Calif., flies back a couple of times a month. No children.

i-mode. You mode. Millions in Japan mode.

Describing i-mode as popular would be a huge understatement. Since its introduction in Japan in February 1999, i-mode has attracted over 13 million subscribers*.

And small wonder. Because i-mode provides cellular phone users with one-touch access to over 25,000 Internet sites*, as well as specialized services that include e-mail, online shopping, banking and ticket reservations. Users can even get advice on good restaurants in unfamiliar parts of town!

Moreover, every site is accessible from anywhere in Japan, and charges are based on the amount of data transmitted rather than the time spent on line. So service is surprisingly economical.

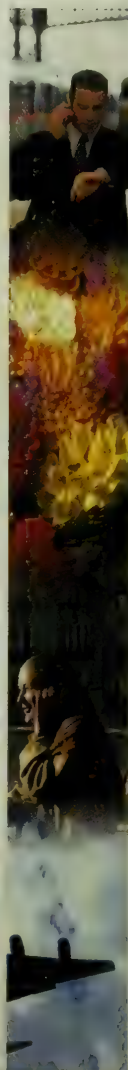
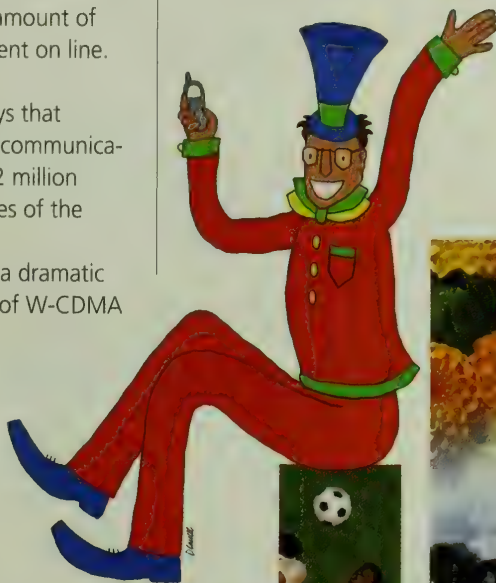
i-mode is simply one of the many ways that NTT DoCoMo — Japan's leading mobile communications operator — is serving more than 32 million customers and challenging the boundaries of the mobile frontier.

Come May 2001, i-mode will receive a dramatic boost from NTT DoCoMo's introduction of W-CDMA

(Wideband Code Division Multiple Access) — the world's first 3G mobile communications service.

Third-generation features will open up exciting new opportunities for business and pleasure and provide an even more tantalizing glimpse of the future of mobile multimedia communications.

** As of October, 2000.*



many women of her generation, Hancock poured all her energy into her career, rapidly climbing IBM's corporate ladder to become Big Blue's first female senior vice-president. Hancock, who is conscious of being a role model and has mentored several other women, draws accolades from

called managed service providers offer soup-to-nuts services covering all of a customer's Internet needs, including tending the servers and software for Web sites and e-commerce applications. Exodus is raking in just \$300,000 per customer each year, while managed-services players such as

She also was knocked at IBM for being slow to grasp the Internet. And while Exodus remains the hosting market's pound gorilla, with powerhouse customers from retailer Albertson's to eBay to Yahoo!, its command over the industry is under fire. If Hancock can master new services, she may silence naysayers once and for all. If not, Exodus could be relegated to bit-player status, and Hancock's reputation could be tarnished again.

The urgency is palpable. International Data Corp. predicts the market for managed services will jump from \$17 billion in 1999 to \$36 billion in 2004. By contrast, the market for basic hosting services—the major chunk of Exodus' business—will grow from just over \$6 billion this year to just under \$6 billion in 2003, according to Robertson Stephens.

Hancock isn't panicking. She announced Exodus' first managed-service bundles last month. One offering includes a database, servers and routers, and other critical components. Not only does Exodus build and install the software in its data centers, but customers no longer have to set foot in an Exodus facility. With its customer ranks jumping 70% so far this year to 3,700, Exodus has a strong customer base to offer these more lucrative services. Furthermore, with GlobalCenter soon on tap, Exodus should span enough of the map to start looking really attractive to multinational corporations seeking to consolidate their Internet operations.

So far, Hancock's bet on selling managed services to existing customers seems to be paying off. Its average take per customer grew 15% from last quarter. That means customers are expanding their Internet operations, consuming more power and bandwidth, and turning to more help from Exodus. "I could never hire the people

Hancock's Challenge

► PROVIDE HIGH-MARGIN SERVICES:

Exodus wants to expand from hosting others' Web sites to providing lucrative Web services. It's rolling out its first offerings now, but still playing catch-up: Exodus professional services rakes in \$9,000 a month per corporate customer, vs. \$80,000-plus for outfits like Loudcloud.

► COUNTERBALANCE THE DOT-COM FALLOUT:

A slowdown in the dot-com market has dropped new Exodus customer wins in its three most recent quarters from 545 to 503 to 414. Hancock must win over more established companies. Already, Net startups have gone from 80% to less than 50% of Exodus customers.

► DON'T TURN OFF PARTNERS:

Some 30% of new customers come from Web integrators like Scient, as well as software-service providers like Loudcloud. As Exodus moves into high-end services, relationships with partners are becoming strained. Hancock must navigate a delicate balance of cooperation and competition.

► INTEGRATE GLOBALCENTER:

On Sept. 28, Exodus bought rival GlobalCenter. The deal will make Exodus the No. 1 Internet host, with 46 data centers, 2,000 salespeople, and 5,000 customers. Hancock has hired an exec to spearhead integration, but, ultimately, the job of melding the two diverse cultures falls on her.

female executives. "I have a lot of respect for Ellen. She has made it easier for the rest of us," says Ruann F. Ernst, CEO of Digital Island Inc., which competes with Exodus.

Still, some of Hancock's biggest challenges lie dead ahead. Most daunting, Exodus' business model requires some major adjustments. Companies install and run their own computing systems in Exodus data centers, essentially renting space, power, and network bandwidth from Exodus. Renting data-center real estate has worked fine for Exodus as demand for data-center space still far outstrips supply. But, over time, such services are expected to be readily available, and pricing is expected to be plummet.

To avoid that fate, Exodus is expanding the scope of its services to match a new breed of Internet outsourcers. These so-

Loudcloud Inc. and Digex Inc. have contracts approaching \$1 million annually per customer. When it comes to providing buffet services, Exodus is playing catch-up. "Hancock hasn't been leading the market

"If Ellen can pull this off, she will be the First Lady of U.S. business"

with new products or offerings," says Jeanne M. Schaaf, a Forrester Research Inc. senior analyst. "That's why Digex and Loudcloud will eat their lunch."

Indeed, Hancock has never been considered a visionary. As IBM's networking chief, she saw Big Blue demolished in the emerging high-speed networking market by a then-upstart called Cisco Systems Inc.

handle the site 24 hours a day, seven days a week, 365 days a year," says customer Wes Hopmans, head of Internet operations at Crane & Co., a papermaker.

Hancock isn't shying away from the task ahead. In fact, she sets a rigorous pace for the entire company, regularly chalks up 80-hour workweeks. Even when ducking into the gym for a weekend workout, H-



The first rock star.

Here's to being first. Here's to leading. Here's to altering the face of business by revolutionizing every single facet of your company.

m
marchFIRST

A new world. A new way.

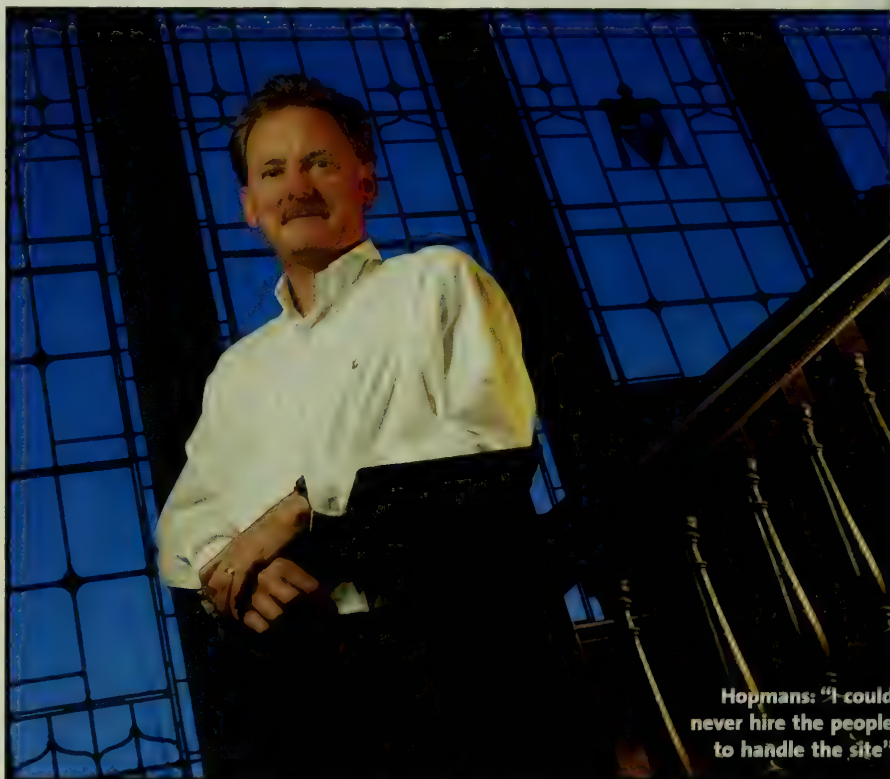
cock typically brings a stack of paperwork to the treadmill. "I'll send her an e-mail at 6 in the morning, and I'll have a reply 15 minutes later," says B.V. Jagadeesh, Exodus' co-founder and former technology chief, who now runs NetScaler Inc., a company that boosts Internet traffic speed.

Hancock has made sacrifices in her personal life. Her husband of 29 years, Jason, a retired 33-year IBM veteran himself, lives across the country in the couple's primary home in Ridgefield, Conn. The two cross paths only two or three times a month, either when Ellen is on business back East, or Jason makes it out to the Bay Area. Younger brother Peter J. Mooney Jr. says the couple's relationship is remarkable. "With both of them trying to move up at IBM, it could have been very tense," says Mooney. "But even when Jason realized Ellen's career at IBM was on a higher plane, he was always extremely supportive."

The long hours and sacrifice are part of a tireless work ethic Hancock has stuck to all her life. Born Ellen Mooney in 1943, she was the oldest of four siblings. Her mother, Helen, who emigrated from Ireland as a teenager, stayed at home to raise the children, while her father, Peter, an Irish American, began climbing the ranks at a New York advertising agency, Audio Productions, rising from errand boy to president. Peter expected no less from his children. When the family moved to sub-

nun in her teen years, Ellen caught business fever when her father and his pals came to the family home for dinner. "I couldn't cook, but I was just fascinated with the conversation and the range of topics. I remember saying, 'I want to be like this when I grow up,'" she recalls. Between her father's influence and the all-

sometimes still is—lonely for Hancock. She has honed a tough management style, mandating top results from her employees and doling out gruff reprimands when they fall short. "Maybe she was a little rough with people once in a while," concedes Terry Lautenbach, a retired IBM executive and one of Hancock's former bosses.



Hopmans: "I could never hire the people to handle the site"

girls school that she attended, Hancock never had doubts about what she could accomplish. "I never knew anything was wrong with me," she quips.

A straight-A student (except for a lowly B-minus in physics), Hancock went on

Hancock took to the "guy stuff" at IBM: Poker, drinks after work, motorcycles

urban New Rochelle, N.Y., he scouted out all of the kids' schools a year or two ahead of time, letting the teachers know the Mooney children were on their way. "My father expected all of us to do well. He didn't care about gender," remembers Hancock.

The rest of the world did. So Hancock swam against the current from the start. After harboring thoughts of becoming a

to study mathematics in college, earning a master's degree from Fordham University in 1966. One month later, she took a job as a junior programmer at IBM, hoping to parlay that into an engineering job with the U.S. space program. Instead, Hancock vaulted up Big Blue's ranks, becoming the first female to crack the venerable company's senior vice-presidential ranks.

Breaking the glass ceiling was—and

she quickly gained the acceptance of her peers. Her secret: Just be one of the guys. "You have to build up trust and then assert yourself," she says. That often translated into grabbing a couple of drinks after work or playing some poker on the weekend.

Not that she needed arm-twisting to do all that "guy stuff." For instance, Hancock took an immediate liking to motorcycles, purchasing a pair of Hondas in her last IBM days. Only after taking a spill on her handlebars on a Connecticut back road, taking gobs of skin off her elbows and forearms, did she finally decide to sell her motorcycles. "I had to wear long-sleeved dresses for days," she says.

With a reputation as a fierce competitor and a straight shooter, Hancock had little problem making her viewpoints known even inside Big Blue's male inner circle. In the early '90s, running IBM's network

After using
our B2B Internet
auction solution,
your suppliers
may have a
few words
for you.

Like, "Thank You."

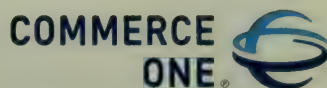
COMMERCE ONE AUCTION SERVICES

Real-time buying and selling opportunities with your trusted suppliers and partners within the comfort of your own auction site or anywhere throughout the Global Trading Web, a network of over 72 vertical and regional e-marketplaces. No equipment to purchase. No systems to install and support. Just browser-based, point-and-click functionality that gives you control of every transaction, including multiple variables and bid parameters beyond mere price and quantity. Taking the complexity out of current RFQ processes while enhancing supplier relationships. And making it all so easy, your suppliers may soon be running B2B auctions of their own.

See for yourself with our online demo:

www.commerceone.com/auctions/bw1

or call: 877.261.8516



MANY MARKETS. ONE SOURCE.™

division and overseeing 15,000 employees, Hancock set her sights on the corner office. When Gerstner was brought in from RJR Nabisco in 1993, Hancock's hopes were dashed. The ambitious senior veep and IBM's new chief did not see eye-to-eye.

Anderson, a longtime Hancock friend. She would sink even lower. She careered through two tumultuous years at National Semiconductor and Apple—both stints ending on sour notes. At Apple, her key job was to produce the next great op-

er in the hands of field managers to take these situations—and do it quickly.

Hancock also has adapted in some respects to the speedy nature of the business. For example, Exodus' growth prospects have been based on getting data centers up and running fast. The faster it adds capacity, the more success it likely to have. Hancock was hesitant at first when it came to pulling the trigger on these new centers. "One day, I told her we had to go to 21 [data centers] by the end of



HANCOCK on HANCOCK

► **When her father** brought business associates home for dinner, "I couldn't cook, but I was just fascinated with the conversation and the range of topics. I remember saying, 'I want to be like this when I grow up.'"

► **"I've never been accused** of being a visionary. But I surround myself with the smartest people... and I love to listen to them."

► **"I've learned you can't** leave open white space around your business. You have to beat people to the punch."

► **"I always do better with** a goal out in front of me

Hancock refuses to discuss the feud, but colleagues call it a classic personality clash. When Cisco came in and bested IBM in the high-end networking business, Hancock's fate was sealed. "I list that as one of the failures in my career, no question," says Hancock, who insists she has developed a healthy level of paranoia thanks to Cisco. "I've learned you can't leave open white spaces around your business. You have to beat people to the punch."

Hancock declined a diminished role at IBM, packed up her office, and began working on the first resume of her career—at age 52. According to several of her friends, it was an anguishing transition. "After 29 years, she defined herself by IBM. If you stuck her, she bled blue," says Yankee Group Research Inc. Chairman Howard

erating system for the Mac. But she irked staffers when she used a two-pronged approach: looking to acquire an operating system, while at the time making them push ahead on an internal rewrite.

Hancock's hard-won lessons are serving her well at Exodus. Like a construction foreman, she has directed the nuts-and-bolts strategy that underlies the company's rapid growth. Her management philosophy: delegate authority to force her lieutenants to become independent leaders. They're now in charge of responding to site outages. In the company's early days, a breakdown would set off a fire alarm of activity, pulling in all of Exodus' top brass, even though it usually was the customer's own software or staff at fault. Hancock quickly put more pow-

year. It sent chills down her spine," says Exodus co-founder K.B. Chandrasekhar. Throwing off the "indecisive" tag that plagued her at Apple, Hancock got the message and ordered the new data centers. Exodus is slated to have 36 in operation by the end of the year. "Now she's moving a lot faster," says Chandrasekhar.

Perhaps Hancock's biggest test will be avoiding an ambush from upstart competitors—the way Cisco got IBM. There are plenty of potential Ciscos out there, and to figure out how to deal with them, Hancock has her staff keeping tabs on both the newcomers and shifting market conditions. "I've never been accused of being a visionary. But I surround myself with the smartest people... and I love to listen to them," she says. In the end, however, Hancock is the one who makes the crucial decisions. And the fate of Exodus will determine whether she punctuates her career with an exclamation point or a question mark.

Contributing: Peter Burr

Can you build an eBusiness and still protect your IT investment?

Your business will be an eBusiness. That's a given, at this point. But how you get there is still up for grabs. Do you toss it all and start from scratch? That's what some are selling. Or find a partner who can get you there *without* trashing all your business software? That's what InterBiz does. With BizWorks, the eBusiness Intelligence Suite. Our eCommerce, eProcurement and eCommunity products. And our CRM solutions. All built on years of CA experience. All ready to integrate what you've got and what you need, to lead you into eCommerce—and beyond. Of course, if you need web-enabled manufacturing, distribution, financial or HR management applications, we have them, too. Call 1-800-997-9104 or visit www.interBiz.com.

COMPUTER
ASSOCIATES

InterBiz, publisher of BizWorks™ and world-class software applications in Financial, Banking & Supply Chain Management
Powered by JAS™

© 2000 Computer Associates International, Inc. (CAI). InterBiz and BizWorks are trademarks of CAI.



interBiz

Business Software for eBusiness



Ball: "I couldn't believe we created these drawings electronically but couldn't transmit them electronically"

by

MARGARET YOUNG

Wired At Webcor

*The builder counts on the Net to
keep it ahead of the pack*

At first glance, Parkside Towers in San Mateo, Calif., looks like any other commercial construction site from the past half-century: Cranes lift I-beams onto a two-story concrete shell. A backhoe claws at a pile of dirt. Workers wearing hard hats slog through thick, black mud hauling galvanized steel rods. But peek in the back pockets of some of those workers, and

you'll find Palm computers. In the cluster of trailers that serves as the on-site office, there's a high-speed connection to the Internet. All around San Francisco Bay, architects, engineers, and contractors are logging on to a Web site created especially for the construction job. "Using technology is the only way we can keep pace," says Andrew J. Ball, president of Webcor Builders Inc., the general contractor for the project. "You can't afford to slow down."

In a risk-averse industry—with traditions dating from the pyramids—San Mateo-based Webcor's embrace of technology makes it stand out from other builders. Thanks in large part to 46-year-old Ball's

love of technology, Webcor uses everything from wireless devices to customized software to help the dozens of partners on a project communicate with one another.

Ball gives Web-linked Palm handheld computers to all new customers so that they will have easy access to current info on a project—from delays to budget forecasts to weather reports. And the data connections and Web sites for each of the 40 or so jobs Webcor works on at any time give architects, engineers, and plumbing subcontractors alike instant access to complex drawings.

That sort of innovation is almost unheard of in the \$2.3 trillion global construction industry. Sure, builders use cell



phones, faxes, and computer systems in the corporate office. But they hardly push the envelope on technology. "It's an industry that's very pragmatic," says Carl Bass, president and CEO of Buzzsaw.com Inc., a San Francisco e-commerce startup that serves the building trades. "You have to prove that there's value" in technology.

For Webcor, the value is clear. And others in the industry would do well to follow suit if they hope to build a strong future. Webcor, which expects to see \$800 million in revenue next year, estimates it should soon reduce building costs by as much as 2% to 3%. Already, the compa-

could trim the time needed for approvals from developers and architects and could schedule crews more efficiently. The result: Webcor completed the Spanish Revival hotel in just 10 months. Not only did that save Webcor more than \$100,000 in overhead, but it also gave the Serrano's owners a boost: They got a four-month head start running the hotel, which meant as much as \$1.5 million a month in unexpected operating revenues.

Webcor's innovation hasn't gone unnoticed by its clients. Working with Webcor, commercial developer Spieker Properties can start construction just 20 days after a

And the architects, engineers, and owners can more quickly approve design changes. "We're seeing decisions that took days take hours," Wilbur says.

Ball started mingling computers with construction nearly 20 years ago. As a project manager on the Hilton Hotel in Irvine, Calif., in 1981, he designed a simple program for tracking orders and requests, scheduling and budgeting information on his PC. At the time, such logs were written out longhand in a single copy that never got circulated. Ball printed his computer logs and passed them out at meetings, which, for the first time, let everyone involved see where construction was falling behind schedule and why. "I realized the power of the computer then," Ball says.

That realization spurred Ball to press for more innovation. He had long dreamed of being able to zap computer-generated blueprints to owners, architects, and other project participants over the Internet, rather than printing them out and shipping them by courier. He thought he could save days—even weeks—if everyone on a project could simply look at the blueprints online and sign off on changes. "I couldn't believe we created these drawings electronically, but couldn't transmit them electronically," Ball says.

In 1994, he merged his company, A. J. Ball Construction, with Webcor and became president of

In an industry with traditions as old as the pyramids, high-tech savvy stands out

ny saved about \$10,000 per month in reduced overhead and downtime on a recent \$20 million project. In an industry where profit margins range from 2.5% to 10%, that can spell the difference between the red and the black.

The time saved is just as important. Webcor initially estimated that the 236-room Serrano Hotel in San Francisco would take 12 to 14 months to complete. Working with subcontractors who adapted quickly to Webcor's technological innovations, the builder

project wins approval from the local building department. Industrywide, it usually takes two months to put together schedules for subcontractors and to work through final modifications to the blueprints, says David Wilbur, Spieker's vice-president. With everyone tapping into the building project's Web site, the electricians, plumbers, and other subcontractors can more easily be scheduled to work around each other.

Web Builder How Webcor saves with the Net

GOAL	METHOD	RESULT
Save time and money by reducing the number of faxes, FedExes, and phone calls among headquarters, customers, architects, and job sites.	Provide high-speed data connections , Net access, computers, and printers at each of Webcor's 40 construction jobs.	A year-long project can be cut by as much as 12 weeks, saving hundreds of thousands of dollars in labor and administrative costs.
Streamline approval of design changes by owners, architects, engineers, and contractors.	Establishes a Web site for each project where everyone involved in a job can log on to see changed drawings.	Saves time and money on printing and hundreds of courier deliveries of blueprints during a job.
Better track construction and improve record-keeping of schedules and progress on building sites.	Updated schedules , weather reports, and changes in plans are continually logged online where subcontractors and field supervisors can monitor progress.	Reduces time spent on meetings and phone calls, cuts administrative staff, and helps to more efficiently schedule subcontractors.
Save money procuring construction materials such as concrete, steel beams, drywall, and glass.	Solicits bids through online marketplaces Bidcom, Cephren, and Buzzsaw.	Mixed outcome. Webcor has bought some materials via online bidding but usually works with subcontractors who buy their own raw materials.

Go Ahead. Host Your Web Site With Another Company. It's Your Money.

Making Money On The Web Begins By Not Wasting Money On The Web.

Unless you've got money to burn, Interland is the way to go. Our complete solutions include everything from shared hosting to dedicated and high-availability hosting to Web site design, all at an unbeatable value.

That's why we're rated #1 by *PC Magazine* and *Windows NT Magazine*. So whether you're already on the Web or ready to get started, call us to learn how we can make the Web work for you today, and grow with you well into the future.

The Interland Standard

- Unconditional 30-day, money-back guarantee
- E-mail accounts for your Web site
- 150 MB starting at \$19.95
- 24/7 toll-free support
- 99.9% uptime

Call Today Toll Free
877.782.5391
www.interland.com

NASDAQ: ILND

interland
We make the Web work for you.



September 1, 1999 September, 1999

Copyright 2000 Interland, Inc. All rights reserved.

aply named company. But the "web" element in the name is pure coincidence: W, E, and B are the initials of the 29-year-old company's founders.

In 1995, at a construction industry convention in San Diego, Ball stumbled across Blueline Online Inc., a tiny, unfunded startup that promised to revolutionize the building industry by linking

further," says Robert Majteles, Cephren's chief executive. One important outcome of that collaboration: Ball's dream program allowing blueprints to be shipped electronically to everyone in a project.

construction projects involve dozens of dependent businesses—developers, architects, engineers, and subcontractors—everything from windows to plumbers who come on and off a site over the course

Webcor is now able to zap blueprints to all the partners involved in a project



At Spieker Properties, Vice-President Wilbur finds "decisions that took days now take hours"

contractors, architects, and others over the Web. Ball promptly volunteered Webcor as guinea pig and ponied up \$50,000 in seed money. Over the next several years, Webcor employees spent thousands of hours working one-on-one with the Palo Alto startup, now known as Cephren Inc. "They're always pushing us

While that kind of innovation plays well with Webcor's clients, its construction foremen, architects, and subcontractors have had a harder time making the leap. "My project managers and engineers said, 'Why do we need to do this? It doesn't work,'" Ball recalls. "I said nothing's going to work unless you put time into it." Large

of months or even years. That means he has to lay a lot of groundwork educating new players about the importance of technology. When subcontractors seem reluctant to try out Webcor's online tools, the company has an "enforcer" on site who makes sure they learn the system. And several architectural firms Ball works with resisted stalling the high-speed data connection needed to transmit blueprints. Listening to Ball's arguments about the time savings such data lines could create, the firms eventually lent and finally installed them.

In spite of a shakeout among construction companies that are focusing on bringing Internet technology to the building trades, Ball is convinced that such efforts will continue to pay off. Sure, he says, construction-oriented e-commerce startups are struggling. For example, Redladder.com is shutting down, and BuildNet.com in October canceled its initial public offering. Even Cephren—in which Webcor owns a small stake—is merging with its chief rival, San Francisco's Bidcom Inc. Still, Ball remains bullish because the industry needs the innovation to prosper. "Our bet is that somebody with this type of technology is going to succeed," he says.

The bet means Ball is continuing to press his partners for ever more progress. As Webcor crews break ground on F&M Inc.'s new \$200 million campus in San Clara, Ball sees the project as a chance to boost the capability of the Palm computer for his customers and employees use. To date, the Palm has been able to handle only text-based information such as schedules and construction progress. Now, Ball is pushing Palm and Cephren to make blue print details, construction photos, and other graphical information accessible. Webcor, it seems, there's more than one way to break ground. ●

e.biz online

For a Q&A with Webcor President Andy Ball, go to ebiz.businessweek.com

inside homeshoppingnetwork.com
you'll now find a microsoft and intel e-commerce solution.

because they knew that if they didn't get to market quickly,
they didn't need to worry about getting there at all.



demand rises and falls in the retail world at Internet speed. So if your e-commerce site is open 24/7 you need a reliable and scalable platform. And you need it quick. That's why HSN.com chose to switch from the Sun Solaris platform to the Microsoft® Web solution platform and Intel®-based servers. The result? They got to market in only six weeks.

Microsoft | **intel**

Detailed information on some of the thousands of other companies who have turned to Microsoft and Intel is available at www.microsoft.com/eccommerce.

© 2000 Microsoft Corporation and Intel Corporation. All rights reserved. Microsoft is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries. Intel is a registered trademark of Intel Corporation. The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

3M: Glued To the Web

**Web
Smart**

The 98-year-old company's online database is generating New Economy efficiencies

David Crosier can't believe his good fortune. He's the guy who's supposed to keep Staples Inc. in Post-it Notes and Scotch tape. These days, he's rolling in supplies. Not too long ago, the Staples vice-president for supply-chain management couldn't even find a Post-it Note to jot down his complaints about Post-it maker Minnesota Mining & Manufacturing Co. Staples' stores were consistently low on 3M products. Crosier would put in an order for 10,000 rolls of Scotch tape and get 8,000. It was always a crash-out. Worse, 3M couldn't be counted on to get them to Crosier and his stores on time. The problem was causing "stock-outs" of popular 3M office products.

Then Crosier began using 3M's new online ordering system to buy office goodies. The Web site did away with the frustration of paper forms and countless phone calls—and helped 3M get rid of a lot of steps

where potential errors had been taken place. Crosier won't reveal specific numbers, but in the 18 months since he has used the site, he says that 3M's fill rate has improved by 20%, and its on-time performance almost doubled. "The technology takes a lot of inefficiencies out of the supply-chain process," he says.

How did the 98-year-old 3M achieve such New Economy efficiency? Halfway across the country, in a nondescript office in the quiet town of St. Paul, Minn., Al L. Messerli has the answer. He is showing off his baby, a fully loaded database stuffed with sales information, product descriptions



Staples' Crosier receives all the products he orders

IS IT REASONABLE TO IMAGINE A FUTURE
RULED BY WIRELESS TECHNOLOGY?

IS IT REASONABLE NOT TO?



WIRELESSWORKS

Enterprise systems

Internet platforms

Solutions

Wireless devices

In the same way that the Internet changed how business works, wireless technology is about to revolutionize our entire world. Which means that you need the right partner to help solidify your wireless strategy. And that's where we come in. As a leading wireless systems integration firm, we're devoted exclusively to engineering solutions for a mobile planet. With senior business consultants and engineering technologists who understand the dizzying world of wireless applications, service providers, devices and evolving networks. And experience working with both Fortune 1000

leaders and major Internet infrastructure companies. For our free wireless primer or more information, go to www.stellcom.com/primer. Or call 1-888-554-2024. You'll see that we have the answers to tomorrow's wireless questions. Even if they haven't been asked yet.

stellcom™

engineering the way the world works™

tions, and customer records—all the corporate data you could possibly want only a nanosecond away, thanks to the Internet. The 55-year-old information manager for 3M has spent five years building the system. If you don't believe it's fancy, he can show you a wall of awards to prove it. And if

force productivity, sending worldwide sales per employee up 10% in 1999, to \$220,000.

Now all 3M senior executives get their financial and sales information from Messerli's database, which is known as the Global Enterprise Data Warehouse (GEDW). Clunky name aside, the data warehouse is delivering

from cleaning pads to fiber optic ca

Now 3M doesn't have to ask customers what they buy. Customer accounts for all 3M worldwide offices can be summarized to give a quick-as-a-snap, global picture. "I couldn't live without GEDW and Messerli," crows Peter E. Davis, the manager for 3M's industrial markets division, which makes general-use and specialty tapes, adhesives, and abrasives.

Messerli wants more such connectivity among 3M's 70,000-plus employees. So his database averages only 10,000 users a day, mostly domestic workers. By the end of this year, when the database and the company's Web site are fully connected, Messerli hopes there will be 20,000 internal users and millions of consumers accessing the database through 3m.com. "We v

"I don't think they had any idea of the shape their data was in"

you don't believe the database is important, 3M execs swear that without it, they could not solve major management problems that have long plagued the company.

The issue was cooperation. A free-wheeling product-development environment helped 3M grow from a modest seller of sandpaper to a huge, \$15.7 billion company that sells more than 50,000 products in 200 countries. But, truth be told, the company was stuck like glue when it came to getting all its parts to work together. For years, 3M had operated as 40 separate companies crammed under one roof, all with unique business practices and policies. Salespeople from different departments called customers independently, and each business unit collected its own sales and product information. Three years ago, 3M Germany lost a prominent customer, only to discover six months later that the customer was lured away by a competitor—3M France. "If the CEO wanted to know all the business we did with a customer," says Messerli, "it would be quicker to just ask the customer." When the CEO sought the information from within, it would take weeks, maybe months, to collect the data.

Snapshot. That changed when customers such as Staples began complaining. 3M execs began developing an online strategy around Messerli's newfangled database. Since 1997, the company has invested \$30 million in the database, while ongoing maintenance costs have been \$2.6 million a year. On the other hand, by junking old equipment used by each unit, such as PCs, software, and networking equipment, 3M is saving more than \$10 million a year in maintenance and customer-service costs. Sales reporting that is more accurate and efficiently gathered is saving an additional \$2.5 million a year, says Messerli. Meanwhile, the technology is helping boost sales-

customer, product, sales, inventory, and financial data direct to the desktops of 3M workers and partners, who can access the info via the Net. The GEDW also is pumping data to the company's Web site, www.3m.com, where the public can read product descriptions on everything

Getting out the Goods

3 M sells more than 50,000 products to customers in 200 countries. That has caused problems with deliveries, inconsistent data, and inventory levels. Using the Internet, 3M has been able to reduce errors and improve efficiencies. Here's how:

► BAD DATA

Problem: With 230 sales offices and distribution centers globally, much of 3M's information was erroneous. Nearly 40% of the records in its U.S. customer database, for example, had invalid addresses.

Solution: By checking records against a Web database of valid U.S. addresses, the percentage of invalid addresses is down to less than 10%. New software could drive that lower.

► POOR SERVICE

Problem: With ordering systems using phones and paper forms, there was a good chance that customers would not get their orders.

Solution: A new inventory system lets customers see what's in stock and order online. The number of customers getting goods on the first try is up by 39%.

► INVENTORY BLOAT

Problem: As retailers streamlined inventories, 3M had to build stocks to fill orders fast. But in 1998, inventory costs contributed to the 45% drop in earnings.

Solution: Using a Web-based system to gauge demand, 3M has cut inventories to three months of sales, from almost four months two years ago. The new system added \$437 million to 3M's cash flow.

► TOWER OF BABEL

Problem: With more than 70,000 employees across the globe, 3M had trouble linking employees, managers, and customers through incompatible networks.

Solution: 3M uses 180 inter-linked intranet sites, some dedicated to specific tasks, such as online meetings.

I registered my sharp idea"

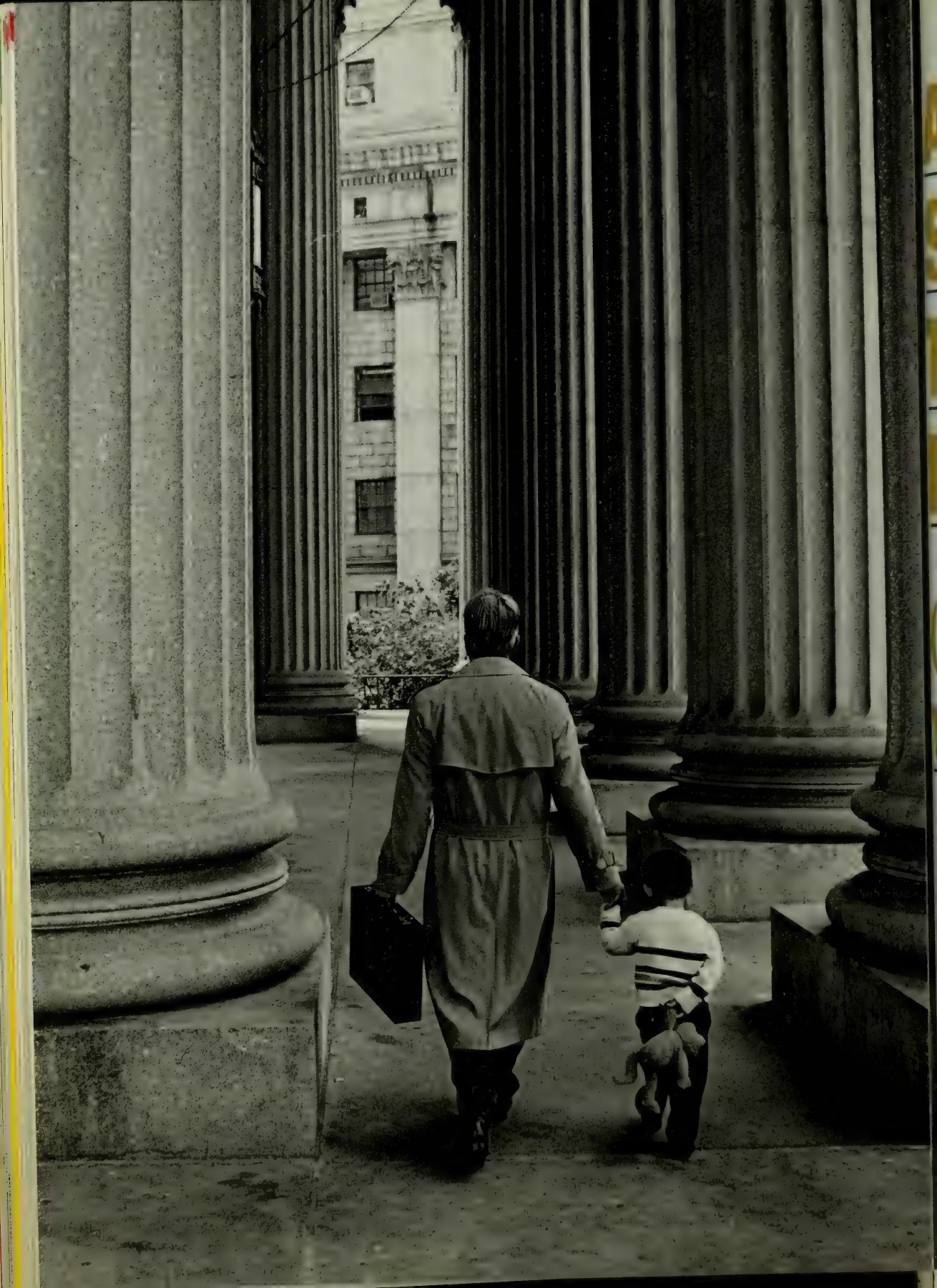
www.engardefitness.com



Sharon Monplaisir, Olympic fencer and entrepreneur, registered her domain name to put her business online at [register.com](http://www.register.com). Visit us at www.register.com or call us at 1-800-7-WWW-NET, and we'll help you register your domain name right over the phone.

register
• com

the first step on the web.



ANNOUNCING SOLUTIONS FOR THE NEW, NEW ECONOMY.

**(YOU KNOW,
THE PROFITABLE ONE.)**

The promise of e-business is every bit as robust today as it was when the "new economy" was declared. It's just that things that were labeled passé and irrelevant when IPOs were soaring have returned with a vengeance – planning, infrastructure, even profitability are back in fashion. Welcome to the new "new economy." No company is better suited for this world of value-oriented e-business than SAP. We have the best solutions for collaboration, supply chains, improving customer relationships and generally adding value to a company's business proposition. Out with the "new." In with the "new new." Type in www.sap.com

THE BEST-RUN E-BUSINESSES RUN mySAP.com



this tool to permeate all of 3M," he says.

The database is forcing 3M to get its facts right. Gathering and concentrating company records into a central data warehouse made 3M aware of the sorry condition of its information. Because 3M has such a diversified product line and has operations scattered to the far reaches of the globe, the company has multiple sources of product and customer data, and much of it was inconsistent or just plain wrong. Products such as Post-it Notes were spelled half-a-dozen different ways, customer names and addresses were inconsistent, and no department adhered to any standards for abbreviations. Trillium

"Remember, we're just starting to realize the potential of this thing" –Messerli

Software Inc. was hired to clean up the mess and discovered that nearly 40% of 3M's U.S. customer accounts had invalid addresses.

Bad data were costing mightily. Wrong addresses delayed deliveries, and 3M paid a penalty to shippers such as FedEx Corp. for providing incorrect Zip codes. By the end of 1999, 3M got the rate of valid addresses up to around 90%. Now, 3M saves some \$100,000 a year, plus \$100,000 more in reduced surcharges from FedEx and the like.

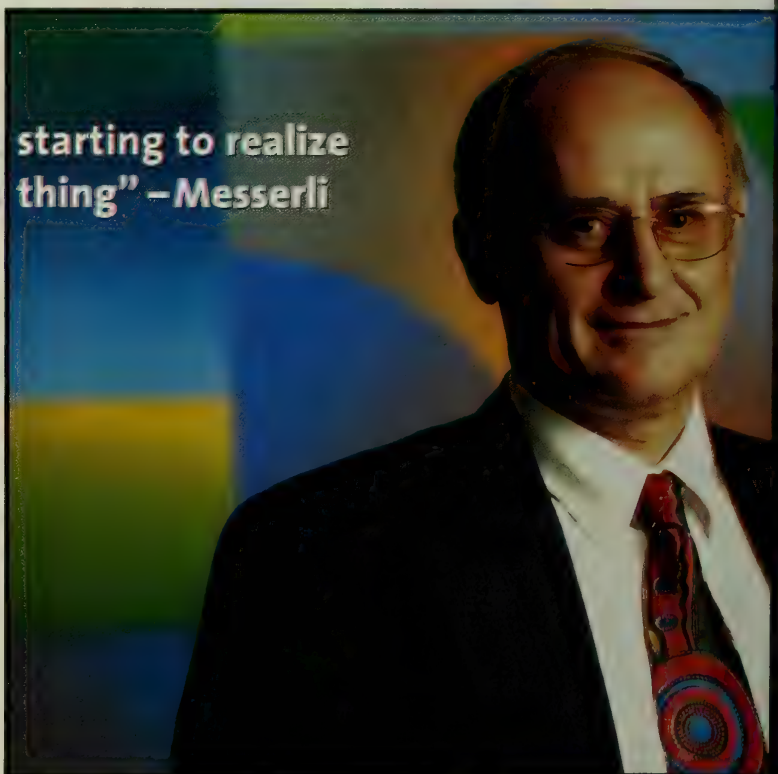
Keeping the data clean is a constant battle. "Zip codes are constantly changing, so we have to continue to scrub," says Wes Hillman, a project manager at 3M. Hillman is working on Web browser technology that will validate addresses as they are entered against a database of known U.S. street addresses. If no match is found, the user is alerted that it is an invalid address. The software will be ready later this year.

Getting cozy. Hard data on 3M's bottom line are now just a few clicks away. Earnings info is available by market sector, customer, and product. Unprofitable products, non-performing partners, and low revenue customers can be trimmed while management focuses on the most profitable opportunities. The results of price changes and marketing strategies are monitored, and the payoffs of new-product introductions can be calculated—a key metric for a company with a goal of producing at least 30% of each year's sales from products less than four years old.

The company won't hit that milestone unless it can better manage inventory. 3M has struggled with major changes in the

retailing industry. Increasing numbers of independent hardware stores are giving way to huge office supply superstores, such as Staples. The superstores don't pack their warehouses with inventory; they expect suppliers, such as 3M, to do that. 3M has been flummoxed by the new world of inventory management. In 1998, it had to slow down its factories to reduce inventory levels. Because stores weren't stockpiling inventory, that caused a buildup in unsold goods,

The data warehouse isn't all about internal efficiency, though. It's good for looking over your partners, too. Some 3M executives have been eyeballing the Web sites of companies that sell 3M products and have not been too pleased by the descriptions. "Our products have been misrepresented on the Web," says 3M's Davis. For example, Davis says 3M's polyurethane protective tape has been described as regular tape, making no mention that it's resistant to abrasion.



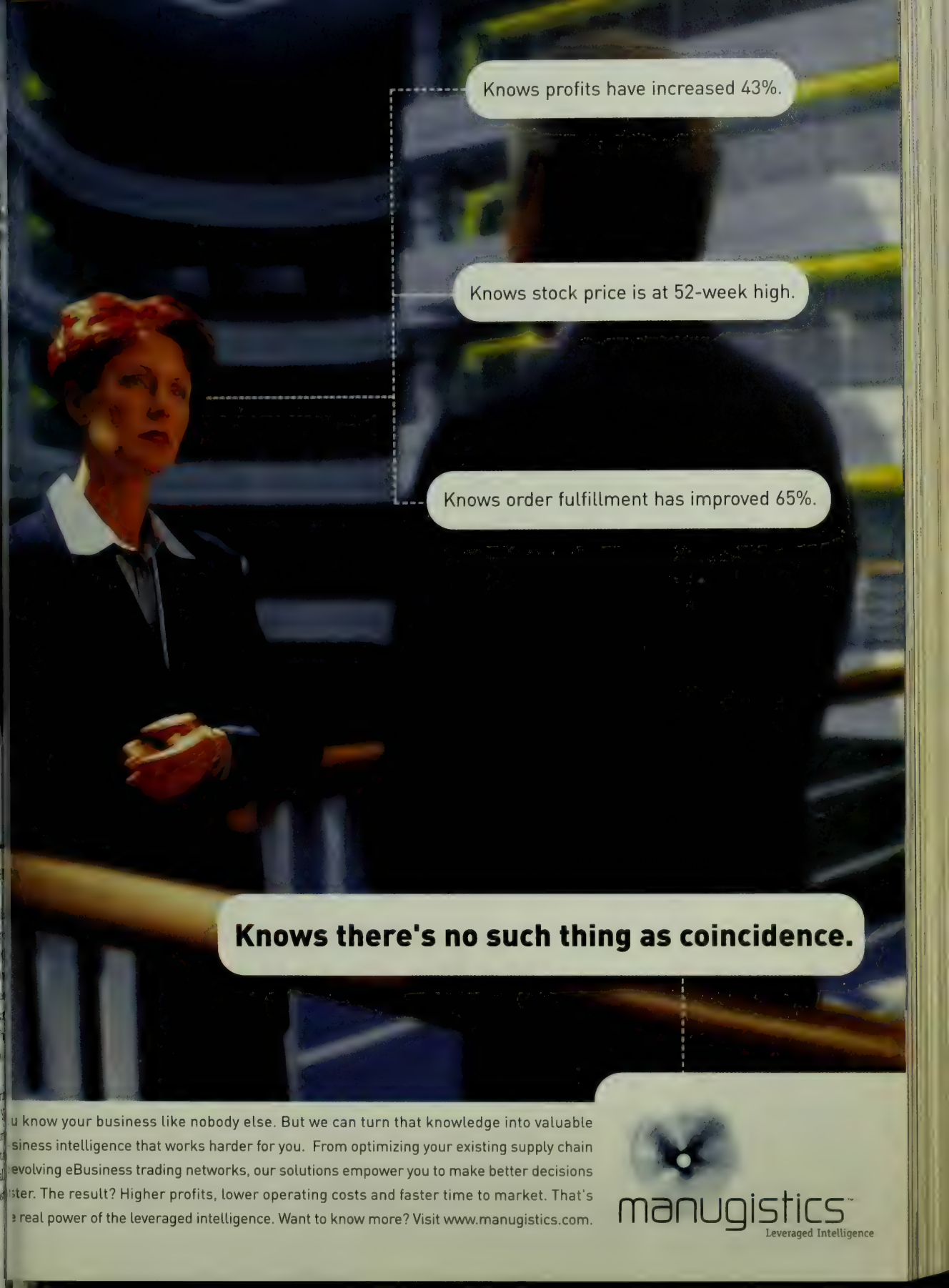
which squeezed profit margins. "3M was not close enough to their customers to anticipate demand," says Goldman, Sachs & Co. analyst Jack L. Kelly.

Now, 3M is getting downright cozy with its customers. The data warehouse is generating a demand-planning system that monitors inventory levels for products and customers. Product demand is anticipated, and production planning is scheduled to deliver the right amount of supply. Since 1998, 3M has reduced inventory levels from almost four months to its target of little more than three months, which has added \$437 million to 3M's cash flow. "Integrating demand, supply, and production planning could be a major plus for 3M if they can pull it off," says Kelly.

erosion, scratch, puncture, and impact. beef: Product differentiation was lost.

So, Davis has been writing product descriptions and digitizing photographs to in the data warehouse. So far, about 30, have been stashed there. They can be downloaded easily into the online catalogs of customers as W.W. Grainger Inc., which carries more than 6,000 3M products. This saves customers time and gives 3M control over the presentation of its goods online.

3M has taken bold steps toward winning the company for the New Economy. Messerli, the proud papa of the company's data warehouse, thinks this is just the start. "We're just starting to realize the potential of this thing." A sentiment worthy of a Post-it Note, in case anyone ever forgets. ■



Knows profits have increased 43%.

Knows stock price is at 52-week high.

Knows order fulfillment has improved 65%.

Knows there's no such thing as coincidence.

You know your business like nobody else. But we can turn that knowledge into valuable business intelligence that works harder for you. From optimizing your existing supply chain to evolving eBusiness trading networks, our solutions empower you to make better decisions faster. The result? Higher profits, lower operating costs and faster time to market. That's the real power of the leveraged intelligence. Want to know more? Visit www.manugistics.com.





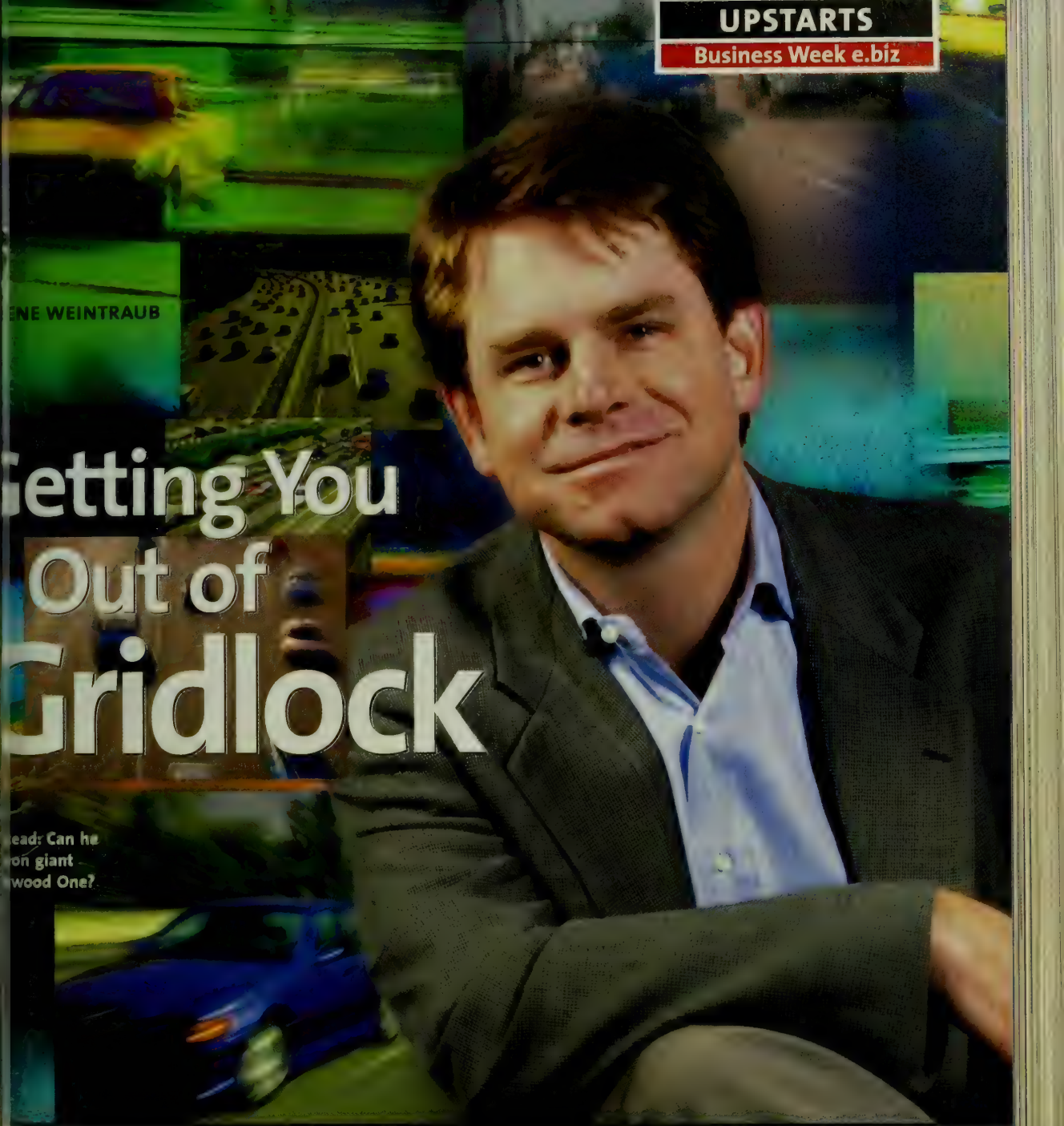
Your business is exciting enough—you don't need the adrenaline rush of wondering if your business-to-business Web sites and corporate portals all have timely, accurate information. Or if everyone will be able to get the information they need, when they need it.

With Xpedio™ Content Management from IntraNet Solutions, you can publish business content from any data source to the Web, automatically. Your users can access personalized, secure content from any Web client—including mobile and wireless devices. And you'll deploy in days, rather than months. It's why more than 1,250 companies and 350 partners rely on IntraNet Solutions' products to make managing Web business content so routine it's a bit... well, boring.

www.intranetsolutions.com

IntraNet
SOLUTION
Business Content Management™

ENE WEINTRAUB



Getting You Out of Gridlock

Lead: Can he
on giant
wood One?

*TrafficStation is
moving fast, but it has
to get around some major
roadblocks of its own*

Geoﬀ Halstead may be the only guy in Los Angeles who loves traffic. That's because it's his business and his obsession. Halstead, co-founder and CEO of TrafficStation Inc., still cringes at the memory of missing a meeting in Chicago two years ago because he was stuck in a car jam for five hours. He

fantasizes about how that scene might play out in a year or two: A computer would call his cell phone to warn him of the gridlock ahead and direct him to an alternate route. "It would be as if the radio traffic guy were available on demand and he actually cared about your

TrafficStation is eking out revenue from a few Web portal deals and a few thousand subscribers who pay \$5.95 a month to receive traffic alerts on their wireless devices. And the company faces a formidable challenger in Westwood One Inc., the New York-based company that provides traffic

uphill battle to convince people that it is worth paying for," says analyst Joe L. Lo of Jupiter Research.

Halstead thinks he has the answer. People may not pay for traffic data alone, but they might open their wallets if it's bundled with other information, such as weather reports, maps, stock quotes, and more. Indeed, a 1999 study by Los Angeles-based consulting company Driscoll-Wolfe shows that only 20% of people would pay for traffic data, but 61% would pay if other services were included. "Some people don't commute, others don't have a choice of routes," says Clem Driscoll of Driscoll-Wolfe. "It's a bundle that sells traffic."

So TrafficStation is trying to join many bundles as it can. It's partnering with leading wireless service and content providers—such as AT&T Wireless Global—that will package its data with other information. It's also in talks with the Big Three auto makers and technology companies that could build TrafficStation directly into onboard navigation systems.

Halstead is used to challenges. He has three co-founders—all friends—plenty of rejections from venture capital

"It would be as if the radio traffic guy were available on demand and actually cared about your specific problem"

specific problem," Halstead says from his 16th-floor office in downtown L.A., where he has clear views of several of the city's worst bottlenecks.

Too good to be true? Not if the 37-year-old Halstead has his way. For two years, he has been building TrafficStation into what he hopes will become the largest provider of personalized traffic information. With TrafficStation's service, he says, frustrated commuters will be able to pick up a wireless device and get up-to-the-minute highway info when and where they need it.

First, though, the company has to get around some major roadblocks. Today,

reports to 2,200 radio stations and 200 TV stations. It recently bought TrafficStation rivals SmartRoute Systems in Cambridge, Mass., and Metro Networks Inc. in Houston and is now rolling out its own wireless traffic-alert service.

Indeed, Westwood One is Goliath to TrafficStation's David. With decades of experience in the traffic business, and \$358 million in sales and \$24 million in profits last year, Westwood One is the powerhouse to beat. By contrast, the upstart is armed with a mere \$11 million in venture capital and little hope of going public in a hostile market. "It's going to be a real

TrafficStation's Team Strategy

TrafficStation wants to deliver personalized, up-to-the-minute traffic information to drivers anytime, anywhere. But it will need partners to reach frustrated commuters—and get them to pay for the service. Here's who is on board.

MARKETS

Wireless Service Providers TrafficStation needs carriers to help market its services by giving it prime position on wireless portals.

Wireless Content Providers Studies show that traffic news alone won't sell. So TrafficStation is trying to bundle its gridlock alerts with other data that commuters might want, such as maps, weather reports, and restaurant guides.

Carmakers Deals with the Big Three and tech outfits making onboard navigation systems would drive TrafficStation directly to dashboards. Subscribers, industrywide, are projected to jump to 11 million in 2004 from 820,000 this year.

KEY PROVIDERS

AT&T Wireless, MetroCall, and Telus of Canada. Estimated new customers are 5 million by the end of 2001.

Vicinity/Map Blast!; Weather-News International; Phone.com, a wireless Web software maker.

Discussions under way.

OUTLOOK

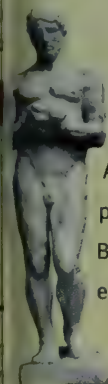
TrafficStation still lacks deals with Verizon Wireless, Sprint PCS, and Nextel in the U.S. Their total reach is 38.4 million subscribers.

TrafficStation needs more. One survey shows people will pay for six services, including maps and roadside assistance.

TrafficStation needs at least one deal to survive.



Why settle for mere parts when you can have a fully integrated eCRM solution?



In customer relationship management, parts are not parts. Only parts that fit together seamlessly elevate customer service to a work of art. As new communication channels emerge, every part of your CRM must work together perfectly. Because no matter how a customer contacts you – e-mail, voice, fax – you must respond promptly or face losing a customer.

Quintus' eCRM solution provides a single integrated view of customers across all channels - e-mail management, web-enabled contact centers, Voice over IP, CTI and more. Customers receive the service they've come to expect, in the time frame they've come to demand, in any way they choose to make contact. Period.

More than 500 companies including Mercata.com, United Airlines, Ashford.com and Ticketmaster already use Quintus.

Shouldn't you? Contact us at **www.quintus.com**,

1-877-eContact, or **sales@quintus.com**.



QUINTUS

Turn the e-generation into loyal customers.

ists as they scrounged for initial funding in 1998. Their business plan "was a little raw," says Paul Nadel, managing partner of EastWest VentureGroup, who initially turned them down.

In fact, Halstead and friends hardly had a business plan at all. They spent the next several months devising one. First they persuaded transportation departments in six cities, including Los Angeles and Houston, to license real-time data rather than try to collect it themselves. Then they devised a

Now the company is working on its marketing strategy. It aims to expand its reach through deals like the one with AT&T Wireless to offer TrafficStation data through one of the phone company's Web services. TrafficStation says the wireless carriers it has signed on so far could bring in 5 million customers by the end of 2001, out of a combined reach of 30 million cellular subscribers. But TrafficStation has barely scratched the surface of the wireless world. "Partnering with AT&T is a good start, but

ing partnerships with companies developing the technology. "This whole infrastructure will be built," Halstead says. "And behind it will be a huge opportunity to offer position-based traffic services."

The ultimate coup would come by being able to reach dashboards directly. That's why TrafficStation is seeking alliances with car manufacturers and companies that make onboard navigation systems such as OnStar. Mike Peterson, an OnStar product director, says the company plans to include



plan to form partnerships with wireless players that could deliver their data to drivers' cell phones and pagers.

"Good start." When they went back to Nadel six months later, he agreed to back the company and now serves on its board. With \$11 million from Nadel and others, TrafficStation then went looking for more clogged streets and launched its full service in September. The company now receives traffic reports from government agencies in the 28 most congested metropolitan areas in North America. The agencies provide traffic data by the minute to TrafficStation's team of 75 data crunchers who sort and feed it into a computerized traffic-alert system. Subscribers can log onto trafficstation.com, define which highways they take, and type in a phone number or e-mail address so they can receive regular reports on how far traffic is backed up on their route. They also can check maps on the site to see exactly where the trouble spots are, with the severity indicated by numbers ranging from 1, which could mean a dead animal on the road, to 5—bad accident blocking all lanes.

Halstead says the new alliances will push TrafficStation's revenues to \$45 million in 2001 and make it profitable in early 2002

they'll need to sign up one or two of the other big U.S. carriers by early next year," says Jupiter's Laszlo.

To broaden its content, TrafficStation is teaming with the likes of Phone.com Inc., which develops wireless content, to bring services such as stock quotes and news into the mix. As with traffic reports, customers can specify on a Web site what information they want to receive and when. Halstead predicts the new alliances will push his fledgling company's revenues to \$45 million in 2001 from \$1 million this year, and make it profitable in early 2002.

Further down the road, Halstead sees another spur to his business: In October, 2001, all cell phones will be required by law to pinpoint a user's location for emergency purposes. That will help TrafficStation determine a car's location and guide it away from gridlock. TrafficStation is now pursuing

personalized traffic information but will not elaborate on which outfit it might partner with to offer the service. The number of drivers subscribing to onboard navigation services is expected to jump to 11 million in 2004, from 820,000 this year, according to market researcher Strategis Group Inc. "That's the sweet spot," says Jupiter's Laszlo.

TrafficStation will need to speed its marketing to stay ahead of Westwood One or look for a well-funded suitor. That could be the only ways the gridlock-obsessed Halstead can keep his startup from getting caught in its own jam.

e.biz online

For a Q & A with Shane Coppola, executive vice-president of Westwood One, TrafficStation's biggest rival, visit ebiz.businessweek.com



Samantha, a.k.a. "Sam"

Jack
(Sam's fiancé)

Do you have what they want?

► **If you're seeking more profitable relationships with online shoppers**—like Samantha and Jack—e-centives' solutions are what you need! Today's savvy consumers shop online to save time and get more value, and e-centives® gives them plenty of both.

If you're a portal or destination site, e-centives offers a sophisticated online promotional infrastructure you can use as a membership benefit to attract and retain new members. If you're a merchant, advertiser or manufacturer, e-centives lets you deliver promotions to pre-qualified databases of consumers across our Partner Network, your own partner network, at your own site, and through opt-in e-mail.

e-centives gets results by delivering the right offer to the right consumer at exactly the right time—and keeps them coming back for more!

Visit www.e-centives.com/corp or call **1.877.ECENTIVES** to learn more about e-centives unique online direct marketing infrastructure technology, services and expertise.



www.e-centives.com/corp

HEATHER GRE

Keep the Excess Moving

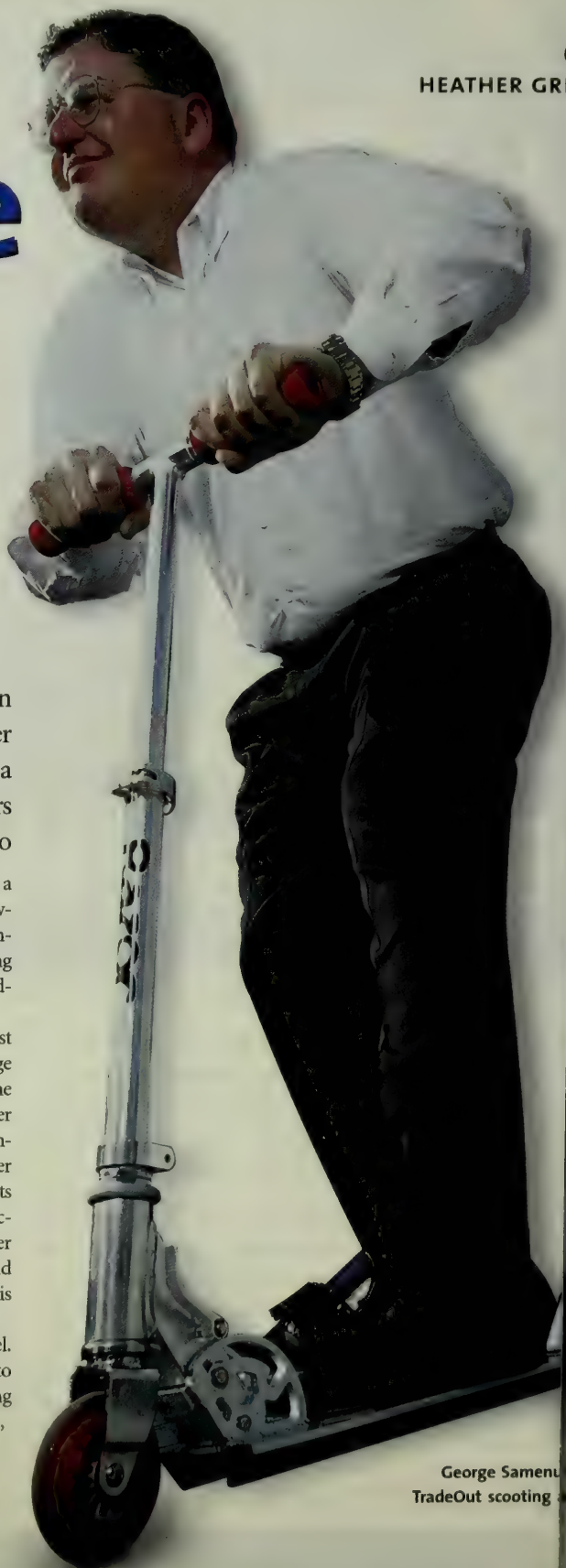
TradeOut's online exchange deals in companies' surplus inventory

The White Elephant retail stores in rural Virginia live and die on other companies' cast-offs. Started as a scrappy consignment shop eight years ago, the enterprise has expanded into

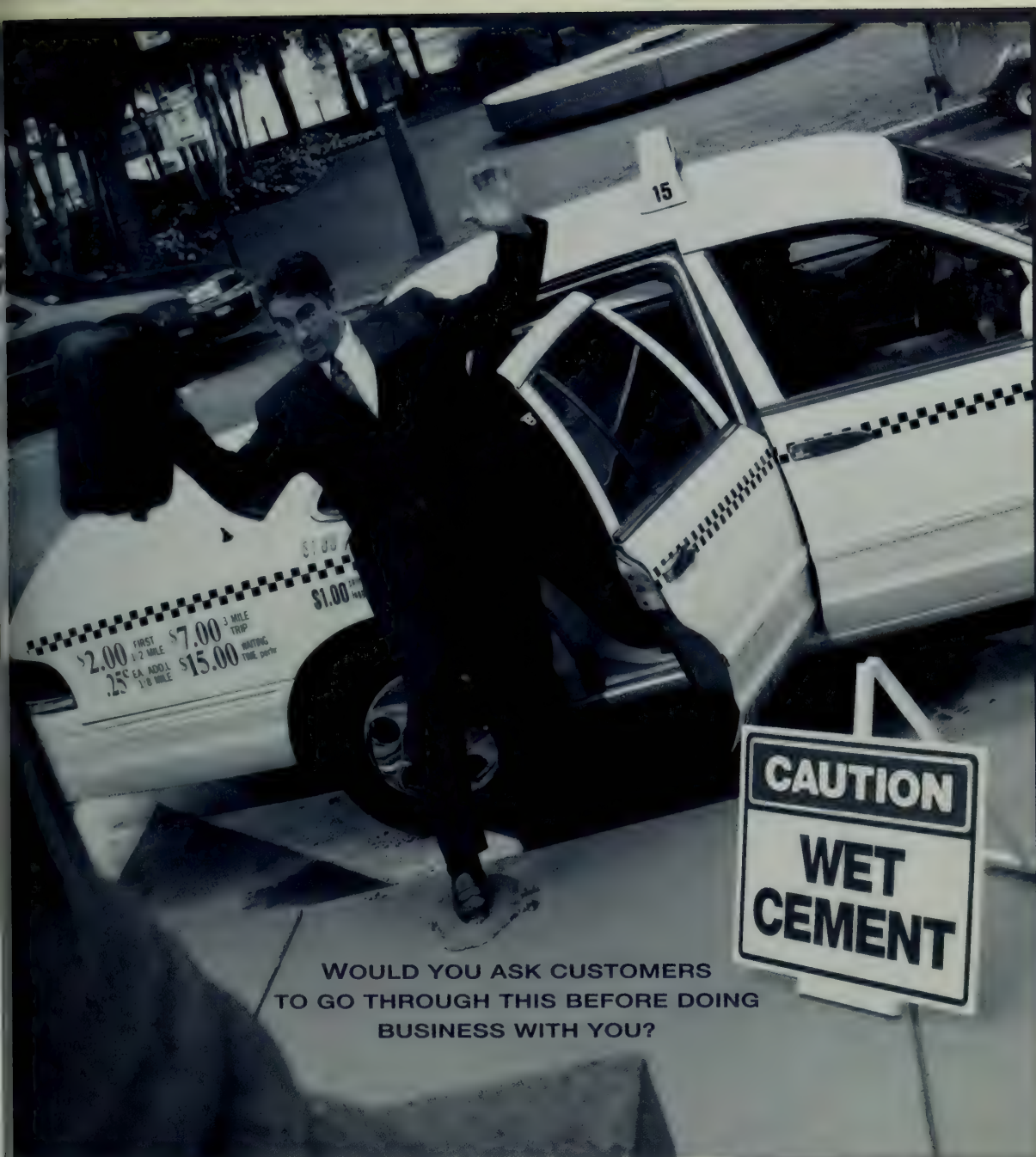
a chain of four stores around historic Middleburg, Va., selling a wide array of used and surplus down comforters, luggage, jewelry, furniture, and clothing. But success put store owners Cynthia and Leslie Brookman on a buying treadmill, attending distant trade shows and constantly faxing and phoning middlemen—an exhausting process.

That's why an advertisement in a gift-dealer newsletter last fall piqued their interest in TradeOut Inc., an online exchange that deals in excess inventory. After two months of browsing the site, the Brookmans took the plunge, ordering sterling silver jewelry. Since then, they have bought about \$90,000 in goods, including OshKosh B'Gosh Inc. boys' apparel and Nicole Miller women's clothing, and plan to buy about 20% of their products through TradeOut by year-end. Buying direct from manufacturers on TradeOut.com lets White Elephant cut out other middlemen, get prices to 60% below usual wholesale, and stock stores more efficiently. "The traditional way of buying is tiresome," says Cynthia Brookman.

That's exactly how TradeOut hopes other buyers will feel. The trading exchange, launched 16 months ago, is trying to carve out a space for itself as the eBay Inc. of business buying and selling. Instead of Pez dispensers and baseball cards, TradeOut gets companies, ranging from Stanley Works to General Electric Co., to post listings for trucks, electric generators, and lathes. Indeed, eBay, which invested in TradeOut



George Samenuha
TradeOut scooting



WOULD YOU ASK CUSTOMERS
TO GO THROUGH THIS BEFORE DOING
BUSINESS WITH YOU?

NOW A FEW WORDS ABOUT YOUR WEB SITE.

To build rewarding relationships with your customers, you have to make it easy for them to do business with you. Today, that means implementing a Web strategy that allows you to interact with customers in ways you never could before. At SilverStream, we provide the software and services that help you deliver an Internet experience that has the breadth, depth and professionalism your customers and trading partners expect. We're setting new standards for building next-generation eBusiness Web sites. Sites with the most advanced eCRM technologies and B2B integration capabilities, to give you a real competitive edge – now and in the future. Are you ready to take your eBusiness to a whole new level?

www.silverstream.com

SilverStream®

Are you ready to do eBusiness?

a year ago, provides an attractive model: By using the Net to bring together far-flung consumers and small businesses, eBay quickly became one of the very few profitable dot-coms. Boasts TradeOut Chief Executive George Samenuk: "We have an exchange with the same characteristics as eBay."

Except the opportunity is even bigger. At almost \$400 billion in annual sales, the surplus-goods market is nearly five times the size of eBay's original collectibles market. By unloading old equipment from offices, warehouses, and factories, as well as inventory that didn't sell, companies "avoid the disaster of excess capacity," says analyst Brett Tarr of researcher Jupiter Communications Inc.

And like eBay, TradeOut offers companies a way to dispose of their surplus much more efficiently. "Every company has some idle assets, but they have to send out faxes to let liquidators or customers know," says Michael Petti, program manager for excess and obsolete sales at Stanley, a TradeOut investor that uses the service to sell everything from saws to storage containers. "If we are going to be Internet-savvy, we don't want to be selling by faxes."

Idle assets. TradeOut founder Brin McCagg wasn't thinking about crates of unsold saws when he set out in late 1997 to start another company. An avowed serial entrepreneur, the New York City native founded his first company, an industrial-waste recycling company, immediately after graduating from the University of Pennsylvania's Wharton School in 1990. He left in late 1997, and soon became intrigued by the notion of making supply chains and product returns more efficient.

Then, during the summer of 1998, he got a flash of inspiration from eBay's IPO prospectus—quickly realizing its model was perfect for the corporate market, too. "eBay was providing a liquid market-

place for the junk that's in people's garages," says McCagg. "But the junk that is in businesses' warehouses and offices in the form of surplus inventory or idle assets is much greater, and the market is even more inefficient." McCagg started noodling with a business plan and raised money that fall, founding the company in January 1999. TradeOut went live six months later and in early 2000 brought in more experienced managers from IBM as chief executive and chief financial officers.

Now, thanks to signing up partners like

GE, Stanley, and Sara Lee Corp. this year, TradeOut is gaining traction. It currently sells seven types of products—from apparel to metalworking machinery, automotive gear, and commercial transportation. From a humble showing last year of \$10 million in gross merchandise sales and revenues of \$830,000, TradeOut so far this year has conducted \$100 million in sales, bringing its net revenues to about \$5 million. Although it's still unprofitable, losing \$18.8 million last year, more of its listings are turning into sales: In the third quarter, it sold about 19% of the items listed, up from 5% a year ago.

More visitors to the site, which now lists \$1.1 billion worth of items, are turning into buyers, too. The number of purchasers has risen to 3,200 from 350 at the end of last year. That's likely to spike further thanks to a two-month cross-promotion program with eBay. By placing links to TradeOut on its site and and promoting the service through e-mails and newsletters, eBay aims to provide its "Power Sellers"—about 100,000 individuals who run their businesses solely on eBay—with a way to buy in bulk and then sell the items on eBay. So far, about 7,000 eBay sellers have signed up on TradeOut, though Jupiter's Tarr wonders whether surplus suppliers will like the products being sold as excess.

Indeed, there's no telling yet whether TradeOut can keep the momentum going. So far, 175 other companies are pouring into the surplus market with a bunch of approaches. Auctioneer DoveBid Inc. is matching TradeOut's focus on multiple industries. Others, such as RetailExchange.com Inc. in the apparel market, are going deep into single industries. Meanwhile, more established services such as industrial auctioneer FreeMarkets Inc. are adding excess-inventory marts to their lineup. Says Len Prokopetz, senior manager of business development services at Deloitte Consulting: "It's very diffi-

TURNING SURPLUS INTO SALES

In a huge market for surplus goods...

Total value of excess goods (2000):

\$400 billion

Value of excess goods sold online (2000):

\$16 billion

DATA: JUPITER RESEARCH, BAIN CONSULTING GROUP

...TradeOut is building momentum...

	1999	2000
Value of available items	\$600 million	\$1.1 billion
Amount of goods sold	\$15 million	\$100 million
Items posted for sale	8,400	60,000
Registered users	12,700	51,000
Buyers	350	3,200
Sellers	230	1,400

DATA: TRADEOUT INC.

...but it faces a wealth of rival sites

59

in transportation products, such as TruckCenter.com, Hookup.com, and AutoTradeCenter.com

50

in general surplus inventory, including DoveBid, FreeMarkets, and Rebound.com

23

focused on specific industries, such as RetailExchange.com, Kitchenstuff.com, and Closeoutnow.com

DATA: DELOITTE CONSULTING



iAsiaWorks
Global Technology. Asian Focus.



When it comes to Internet Data Centers and Hosting in Asia **asiaWorks for you.**

Internet business in Asia can be complex, with uncertain standards in connectivity, network infrastructure and in-country support. iAsiaWorks' Pan-Asian footprint of world-class data centers provide the highest quality speed, peering relationships and local expertise in 11 Asia-Pacific countries and the USA, giving you the opportunity to host right where your customers do business. iAsiaWorks can get you up and running quickly and easily throughout the region with tailored services that reflect the needs of your business. And with 24 x 7 x 365 support and expert on-site technicians, you can rest assured your online presence is secure with us.

www.iasiaworks.com

to predict which model will be the winner."

Consolidation already has lurched into overdrive. Exchanges ranging from the automation-products auction house IndustrialVortex to the industrial-equipment mart Equipp.com are disappearing or selling out to other firms. Deloitte says the number of company launches plummeted to 15 in June, from 178 in January, while the number of failed or merged marketplaces has gone from 2 to 15 in the same time period.

To avoid the shakeout, TradeOut has avoided betting too big at the outset. Instead, it's building out a few industry markets by courting key selling partners in each. In March, for instance, TradeOut

Out's deal with Penske Corp., which has a fleet of 152,000 trucks. Before selling online, the company typically sold the 18,000 trucks it replaces annually through its own site, as well as through wholesalers and at its 500 locations nationwide. In April, teams from Penske and TradeOut met to plot out how the partnership would work. From a small pilot in the Northeast of 150 trucks

Lepak Trucking in Oklahoma City, discovered in September that he could buy used Penske trucks on TradeOut, he made a quick decision to replace his whole fleet with 60 trucks. "We had been looking for years to do this, and now we could because of the cost-effectiveness," Lepak says.

Even so, TradeOut can't afford to glut. Expansion capital is now scarce, even in

"There will be three or four major exchanges and then a lot of room for niche players"



Leslie and Cynthia Brookman of White Elephant save time by purchasing surplus items from TradeOut

signed up GE and created two new markets centered around the assets GE wanted to sell. That prompted GE Equity and six other GE units to invest \$15 million in TradeOut. GE, which annually has billions in excess inventory, is selling off-lease vehicle inventory such as cars, trucks, and trailers through TradeOut.

Bringing on crucial partners like that takes a lot of time, though—and time is in short supply on the Internet. Take Trade-

in late June, the company launched nationwide in July and then began promoting more heavily in August. In mid-October, it finally posted all of its currently available inventory, or about 1,500 trucks.

That extensive up-front work has paid off. So far, Penske has sold 590 vehicles for about \$6.5 million and cut 10 days out of a buying cycle of up to 45 days. Even more important, it has reached new buyers. When Jeff Lepak, owner of Louis V.

e-commerce. TradeOut filed to go public in March but quickly shelved the plan after dot-com stocks tanked last April. It has raised some \$80 million to date. Although it's spending \$9 million a quarter, the company aims to turn profitable by the end of next year. Even so, it's in the process of raising more money as a cushion, says James Mooney.

Even more important, TradeOut is pushing to broaden its revenue streams. It's considering expanding into sporting goods, consumer electronics, toys, and it recently started building private exchanges for some corporations. For now, it's still relying largely on charging bimonthly listing fees and a 5% commission on sales.

Will that strategy be enough to make TradeOut a major player? It better, since there won't be many of them. "There will be three or four major exchanges and then a lot of room for niche players,"

says Janet Suleski, a senior analyst at Research Inc. Some rivals already are like winners: FreeMarkets has established relationships with more than 80 companies, including United Technologies Corp. and Visteon Corp. Still, says Suleski, TradeOut has many of the key partnerships in place to join the major league. It can keep those partners and their customers happy, it may avoid becoming another surplus dot-com. ■

HEWLETT-PACKARD EZENIA! ERICSSON TRELLIX ALCATEL AUCTIONROVER.COM LANTE
PARTS J.D. EDWARDS COMMERCE ONE ICG COMMUNICATIONS FOOD.COM DELOITTE CONSULTING
TICKETWEB TRELLIX MICROSOFT ECAMPUS.COM PEOPLESOF ROCKWELL SOFTWARE LANTE
ZENIA! PEOPLESOF J.D. EDWARDS LANTE AUCTIONROVER.COM ERICSSON ALCATEL IBM BOOKS

IBM's software is built with precision. With vision. With Rational.

NETWORK ASSOCIATES EZENIA! MICROSOFT FOOD.COM SUN MICROSYSTEMS ALCATEL HEWL
IXL ERICSSON FOOD.COM SUN MICROSYSTEMS RECRUITSOFT.COM CALICO COMMERCE COMMERC
ARE COMMERCE ONE IBM TICKETWEB MICROSOFT RECRUITSOFT.COM TRELLIX EZENIA! J.D. EDV
CASE PARTS AUCTIONROVER.COM BOOKSONLINE.COM CASE PARTS CONTEXT INTEGRATION ECAMPUS

IBM is the world's largest IT company and a leading provider of e-business software and services. IBM uses Rational's e-development solutions, from visual modeling to software testing, in conjunction with IBM's VisualAge[®] application development tools and the WebSphere software platform. They're not alone. Thousands of companies worldwide apply Rational's software engineering best practices, unified tools and services to increase their software development speed and quality. In fact, 47 of Fortune's top 50 e-businesses use Rational's software. Want to build software better and faster? Visit us at www.rational.com/IBMSuccess1 for the complete IBM story.

Rational
the e-development company

© 1999 Rational Software Corporation. Rational, Rational logo, the e-development company, Rational Suite, PerformanceStudio and ClearCase are trademarks or registered trademarks of Rational Software Corporation in the United States and other countries.

VisualAge, and WebSphere are registered trademarks or trademarks of IBM Corporation in the United States, other countries or both.



Nissenbaum:
Where's the
accountability?

by

MARCIA STEPANEK

Making A Killing Online

*Ghoulish auctions run the gamut
from bad taste to the truly shocking*

Serial killer Angel Resendez-Ramirez smiles as he sits behind bulletproof glass on Death Row in a maximum-security prison in South Livingston, Tex. Nicknamed the "railroad killer" because he almost always killed his victims close to railroad tracks, he has admitted to murdering 12 women across the U.S. and faces a sentence of death by lethal injection. Yet, while he's being interviewed by the Spanish TV network Univision in October, he jokes and revels in his fame. Locks of his hair and shavings from the callouses on his feet have been sold on Internet auction site eBay for \$9.99 a pop. And he wonders aloud whether there might be a market for his

When Resendez-Ramirez was caught and locked up, Konvicka remembers feeling relief that his mom's murderer was being brought to justice. Now, he's disgusted. "A deep anger welled up in me" when he learned what the killer was doing online, says Konvicka, a Houston police officer. "Serial killers shouldn't profit from their murders. Their victims are dead and gone and they're still here, breathing, and making a profit on what they've done. It's not right. There ought to be a law."

Trouble is, there isn't. In Texas, as in most other states, there's nothing to prevent criminals from selling so-called murderabilia on the Internet. eBay and other sites

"You wouldn't walk into a store and buy a gang-rape video, which was for sale on eBay" —Helen Nissenbaum

"bodily secretions." He gets a cut from dealers each time a little piece of him is sold. "I'm famous," Resendez-Ramirez says in Spanish. "Why shouldn't I?"

Tom Konvicka can think of some reasons. His mother, 73-year-old Josephine Konvicka, was one of the victims. The drifter broke into her house on the night of June 4, 1999, and slaughtered her in bed.

don't prevent it, either. In fact, there's little to discourage the sale of a whole range of questionable items online. As the Internet has grown in popularity, it's a ready-made market connecting individuals with a vast audience of potential buyers—all protected by a cloak of semi-anonymity and the hands-off policies of Web auction sites. That wide-open flea market has produced

a cornucopia of items for sale that are arguably in bad taste or unethical, if not downright illegal. Alongside Beanie Babies on mainstream auction sites, you will find the nude autopsy photos of murdered children, Nazi and Ku Klux Klan paraphernalia, votes in the Presidential election, and organs available for transplanting. How's this for unsettling? A "Peek-A-Boo Dahmer

pornography in a realm where nobody knows their age? Selling body organs online isn't necessarily a crime, but a doctor who participates could breach professional ethics. And how do you prevent the trafficking in items like neo-Nazi paraphernalia that are illegal in some places (such as Germany) but not in others? "It's loose and dirty, still, and the regulators are still trying to fig-

the company has published guidelines prohibit such things as alcohol, fire and human parts. It lists pornography Nazi items only as "questionable." If people break the rules, eBay attempts to prevent them from selling on the site again—spots them, that is.

The company claims it's all part of eBay's philosophy of building a community based on trust. But that's not the whole story. By not screening items, eBay shoulders potential liability and high monitoring costs. Indeed, at this point, the site is not easy to police. With 7.7 million registered users, eBay almost matches the population of New York City. At any given time, it has some 3 million items up for auction, adding 600,000 new items every day.

Now that Net auctions have become such a magnet for potentially dicey items, some states and federal agencies are stepping up their efforts to stop abuses. This summer, prompted by the sale of murder-related items on the Net, California lawmakers passed a law that makes it illegal for prisoners to profit off their crimes. Meanwhile, the U.S. Fish and Wildlife Service is investigating repeated incidents of en-

The law has been slow to respond to the new realities of life in the wired world

Slayset" sold on eBay for \$69.69. It's a Jeffrey Dahmer doll with a victim doll tucked inside, and a toy garbage can with little body parts that glow in the dark.

Sure, a lot of the offbeat stuff is harmless. Someone paid \$4,000 for Elvis' dental records. A fan paid \$23.50 last summer for a piece of half-eaten toast left behind in a New York hotel room by N'Sync superstar Justin Timberlake. An 18-year-old Ontario youth offered to sell his soul—and 45 people placed bids of from \$4 to \$11. Dan Lewis, a Tufts University student who founded Philadelphia-based whatTheHeck.com, which tracks "weird" items sold over eBay and posts them, says: "A lot of people are trying to get attention, or a good laugh."

Not a garage sale. Few laugh, however, when somebody crosses the line. A growing chorus of ethicists, lawmakers, consumer groups, and Internet activists say something needs to be done—either stepped-up monitoring by auction sites themselves, or statutes that police the Netways. The auction sites "are not simply the cyber-equivalent of somebody's garage sale," says ethicist Helen Nissenbaum, director of the Science, Technology, and Ethics program at Princeton University. "By refusing to take responsibility for what is sold on their site, they're cashing in on an overall lack of social accountability the Net offers people." Nissenbaum believes that while the sale of murderabilia or Nazi items are not illegal, it's "morally reprehensible," and doesn't belong online.

Problem is, when it comes to the Web, it's sometimes difficult to tell what's illegal, what ought to be illegal, and what's just in bad taste. It's clearly against the law to sell things such as endangered species and certain kinds of firearms. But how do you prevent minors from buying alcohol and

ure out what they should be doing," says Shari Steele, director of legal services for the Electronic Frontier Foundation, which monitors law and ethics in cyberspace.

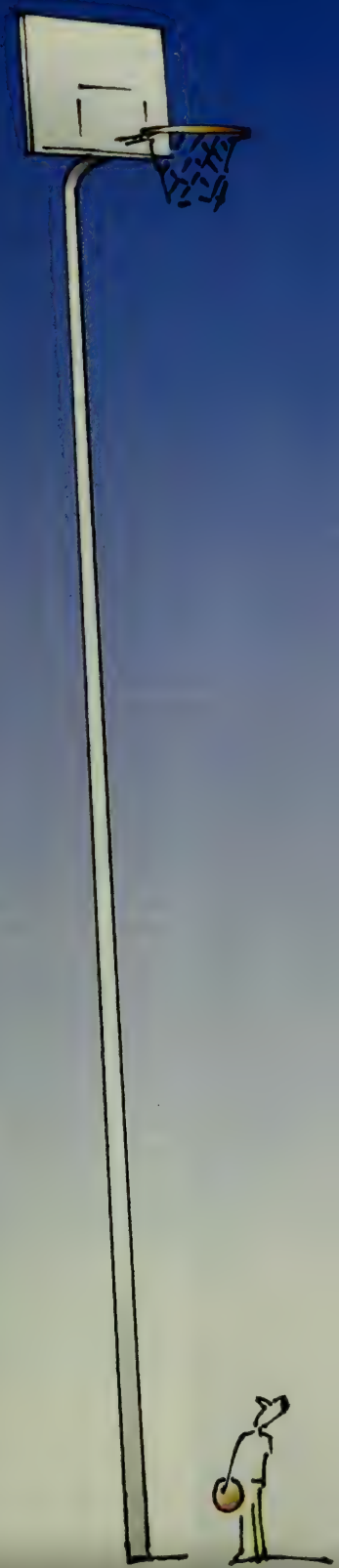
Given all the confusion, society's first line of defense could be auction site operators—but they're having none of it. Indeed, eBay, which makes up to \$500,000 a day on commissions, has a laissez-faire attitude about what is sold on the site. "As a rule of thumb, any merchandise that you could sell at a swap meet or to a neighbor should be available there," says eBay spokesman Kevin Pursglove. "We're not into censorship." Still,

Pushing the Limits

Online auctions have opened the door to trading items that might have never been sold in public marketplaces. Online auctioneers believe in protecting the right of people to sell whatever they want in cyberspace, though some citizen groups want limits. Here's a sampling of what has been sold on eBay in the past year:

ITEM	DATE	NO. OF BIDS	HIGH BID
Drug-free urine	2-19-99	10	\$123.00
Dead kitten	6-30-99	5	\$150.00
Testicle	9-12-99	0	Asked \$500,000
Vial of dirt from serial killer John Wayne Gacy's crawlspace, where he stored his dead victims	9-27-99	18	\$20.50
KKK hood	9-14-00	6	\$74.95
Pedophilia video	9-27-00	2	\$16.77
Woman's dirty panties	10-2-00	5	\$21.67

DATA: EBAY.COM

A tall basketball hoop stands against a blue sky. At the base of the hoop, a small, simple line drawing of a person is holding a basketball. The person is looking up at the hoop.

*Some of the biggest
names in the game
come up short when
it comes to building
digital marketplaces.*

Building B2B marketplaces is making some industry giants look small. The truth is, if you hand the ball to one of those so-called "dream teams," you'll be up against a sizable integration challenge.

VerticalNet Solutions will help you get your online marketplace together far more effectively—and faster. Our eMarketplace Suite provides a comprehensive set of tools required to develop a high-liquidity digital marketplace. All within one marketplace, our suite delivers content, community, and commerce transaction modules, including auctions, catalogs, exchange, RFP/RFQ, structured negotiation, and a broad range of e-procurement and e-distribution services.

Over the past five years, VerticalNet has built 57 online communities where buyers, sellers, and third parties meet to enjoy greater business efficiencies. Each combines content, community and commerce modules to satisfy the specific needs of the industry served.

Ready to seize an advantage in the competitive B2B game? Visit www.verticalnetsolutions.com right away or call 866-263-6040.

 **VerticalNet Solutions**

gered wildlife being sold over eBay and Yahoo. And the FBI's Internet Fraud Complaint Center gets more than 1,000 complaints of online auction fraud each month—most of them involving eBay traffic. Agents have begun turning some of these cases over to local law enforcement authorities.

Other auction sites are being watched, too. In October, state elections officials in Illinois and New York temporarily shut

What kind of person would sell or buy a lock of a murderer's hair? According to Andy Kahan, a victims' rights lawyer in the Houston mayor's crime victims office, it's mostly professional dealers who sell "to people who want to be cool or fearless or who simply find pleasure in somebody else's pain." Whatever the motivation, this is big business. Just ask Ted Svejda, a memorabilia dealer from Plano, Ill. Among other things, he peddles wood from the

he care about the effect on the families of crime victims? "Sure, it probably hurts victims' families to see this stuff," Svejda says. "But I'm not going to let that stop me from making a buck."

The very nature of the Web makes unthinkable more possible. Absent the Internet, many people might not have been exposed to the opportunity to revel in items or bloody murder photos, or been offered an easy chance to buy them with the fear of social backlash. "You wouldn't go into a store and buy a gang-rape victim's hair which was for sale on eBay," says Princeton's Nissenbaum. "Most people would be caught purchasing this stuff in public

The anonymity of the Web makes the previously unthinkable easily accessible

down Voteauction.com, an Internet site where Americans could sell their votes to the highest bidder. More than 15,000 people in 14 states had registered for the auctions before officials stopped trading. The site now operates as Vote-auction.com on a server in Germany. Authorities say they are keeping close watch and will nab all who accept money for their votes—and the people who pay them—charging them with violating state and federal election laws. "This is an outrage to the system of democracy," says Peter Eisner, managing director of the Center for Public Integrity, a non-profit research center in Washington, D.C. "It undermines the system."

Nightmares. As troublesome as such sites may be, it's the murder cases that elicit anguish. Even though it has been 18 years since Harriet Semander's daughter, Elena, was killed by Coral Eugene Watts, the terror continues for her—online. Normally, Semander says, she would have only occasional nightmares about the night when her daughter's body turned up in a neighborhood trash dumpster. But her nightmares started coming every night last spring when she saw that Watts' locks of hair and autographs were being sold on eBay. "I became physically sick when I saw this," Semander says. "And what made me even sicker is that eBay is profiting from this type of thing being sold. It's wrong, just morally wrong."

remains of the Wisconsin farmhouse of deceased serial killer Ed Gein, who inspired Alfred Hitchcock's *Psycho*. Svejda says he used to deal only underground, and had just a trickle of business. After he started trading on eBay, sales doubled—though he wouldn't reveal sales figures. "It's like everybody is coming into my shop now, not just the people who traded in this, but new ones altogether," he says. Does

Endangered species. Indeed, the medium makes the market. When environmentalist Gary Appelson logged on eBay earlier this year and typed in the words "tortoise shell" at the search prompt, he found more than 50 auctions featuring sea turtle shell ornaments, glasses, and even a guitar pick. He contacted authorities, including U.S. Fish & Wildlife

Service special agent Bob Snow, who investigates wildlife smuggling in the San Francisco Bay area. In the past year, Snow says, he identified roughly 300 auctions on eBay involving items prohibited by the Endangered Species Act, including the sale of leopard bones and a frozen baby white rhino. "eBay is a magnet for people who previously didn't have many outlets," Snow says. Before, the market was limited. Now, via eBay and other online auction sites, "you're immediately linked up to millions of people."

The Web amplifies ethical dilemmas, too. Consider MediPost.com, a site that connects plastic surgery doctors and patients on the Net. People who post their information on the site, and participating physicians bid for jobs. Medical ethicists are outraged because the site encourages people to make medical decisions based mainly on price. "This is not like an armchair. These are human lives,"



Killer Resendez-Ramirez sells his hair on auction site eBay.com



Take me
to the corner
of business and
technology.

Where networking rules. Today, business demands value-driven networking that's global and completely integrated. You need to **manage** your infrastructure for mission-critical use by corporate users, suppliers, customers and prospects. You must **transform** your organization to thrive in a web of business communities. And you need to **innovate** and seize opportunities at Internet speed. In this new economy, AT&T Solutions offers deep networking knowledge, customer-focused teamwork, strong global alliances and an ability to work with any technology. We help you corner the market on success. Because today, networking rules.



Dr. Mimis Cohen, chief of plastic surgery at the University of Illinois at Chicago and Cook County Hospital, who worries that unscrupulous doctors will cut corners, endangering a patient's health.

What irks him most: The site asks doctors to provide info about their education and experience—including their history of malpractice suits—but takes no responsibility for the veracity of that information. By contrast, a regular hospital is legally

First Amendment as a motivation for its hands-off attitude. And the American Civil Liberties Union has sided with eBay when critics call for banning the sale of Nazi and KKK memorabilia—calling it a free speech issue. Says eBay's Pursglove: "Our community tends to see any efforts on our part to discourage certain sales as a violation of their First Amendment rights."

Indeed, some eBay denizens are quite touchy about anything that would crimp

Her attitude is just one of many reasons why it's difficult to stop the auctioning of illegal or bad-taste items on the site. The federal government doesn't have the resources to find and shut down online auctions of endangered species. Neither do most of the auction sites. Even as eBay started shutting down an auction for a sea turtle, new ones started popping up, according to Appelson. He calls on eBay's company to review all incoming items. For now, though, eBay plans to rely on its guidelines—and on its community members—to blow the whistle on anything beyond the pale. Pursglove says

Much of the trade in "murderabilia" is conducted by professional dealers

bound to take responsibility for the credentials and services of doctors who practice there. The site defends itself. "If a doctor wants to lie on a résumé, that's not MedicineOnline's problem," says Richard Van Meter, a doctor and MedicineOnline.com executive board member. "It's the consumer's problem. That keeps liability costs low and out of MOL's lap."

That's eBay's answer, too: Since it does not sell anything itself, it's not responsible for what is sold on the site. eBay asks sellers to report any breach of guidelines—in other words, to police the site themselves.

Far from putting handcuffs on auction sites, existing laws actually provide them with some cover. Under the Digital Millennium Copyright Act of 1998, for example, site operators can't be held liable for illegally distributed material if they are "unaware" of the illegal status of the item, or if they lack the ability to control the trade. While this law focuses on copyright protections, eBay is citing it as part of its defense against a suit by six San Diego residents who bought sports memorabilia on the site that turned out to be fake. The plaintiffs are seeking a refund of the \$1,000 they paid, and are calling for eBay to be held responsible for fraud on its site.

If the plaintiffs win, it could force eBay to be accountable for certain items on its site. An outcome like that, legal experts say, might sink eBay's profits and force it to shrink so it can afford to adequately monitor sales of items on its site. eBay has argued repeatedly that it should not be held responsible because it doesn't list items for sale and never has the items in its possession. eBay attorney Rob Chestnut declined to be interviewed for this story.

eBay claims a healthy respect for the



Semander was sickened to learn that autographs of her daughter's killer were being sold on eBay.

their freedom. Teresa Hoyt, of Kalamazoo, Mich., runs a home business, fatcats.com, reselling PG-rated videos that she buys on eBay to others via the Net. She says she sees offensive items on the auction site, but doesn't complain to eBay, and wouldn't want anything to be done about it. People go to the Web because they can buy or sell almost anything there. "I don't want eBay telling us what's right or moral by telling us what we can sell and what we cannot," she says. "If we don't like something, we can always turn the computer off."

creasing site traffic will make it harder for people to conduct bad business on the site. "The more we grow," he says, "the more people in our community are watching."

That's little comfort to Harriet Semander, the mother of one of Coral Gables, Fla., Watt's victims. Semander fears that as more eBay grows, the more people will be "buying" offensive stuff. With creeps like criminals like Watts and Resendez-Ramirez virtually on the loose, eBay's self-monitoring system may not be enough.

Contributing: David

MANAGE THEM ALL WITH ONE COMPREHENSIVE E-BUSINESS SOLUTION.

e-Fulfillment
exceptions
Order Management
Extraprise Transactions
logistics pick-pack-ship
Virtual Inventories
supply chain
Returns



Yantra is the web-based e-business engine that successfully manages high volume transactions.

To build a successful e-business, you must flawlessly manage thousands, maybe millions of complex transactions on the internet. Yantra is the powerful e-commerce engine that seamlessly manages all of them across your enterprise and extraprise. Our best-of-breed solution

delivers simplicity to even the most complicated e-businesses with flexible business rules, scalability, and 90-day implementation. No one solution does more to build and retain satisfied customers than Yantra. The future success of your business starts by contacting us today.



YANTRA
The engine of e-business.

www.yantra.com

1-888-292-6872

© 2000 Yantra Corporation. Yantra is a registered trademark of Yantra Corporation.



Routine

has its reasons.

Change isn't one.

A dynamic network is how business manages change.

You are now able to link your internal systems and your automated business processes across the Internet with customers, vendors, and partners. And in turn, with these businesses' customers, vendors, and partners. This is how businesses manage change—a dynamic network, a limitless network of business connections, all powered by the ebusiness platform from Vitria. vitria.com



VITRIA

y JIM KERSTETTER

A man with dark hair, wearing a dark long-sleeved shirt and light-colored shorts, stands with his hands on his hips in a wooded area. The background is filled with trees and foliage.

Tiny Plumtree was tapped by giant P&G to supply software—and both parties are benefiting

The drops from a leaky pipe in the ceiling were heavy, and loud—enough to make everyone at the meeting in Plumtree Software Inc.'s tiny San Francisco conference room edge. Especially Dan Gerbus. The Procter & Gamble Co. executive flew into San Francisco that morning to meet Plumtree's managers for the first time. He wondered if P&G, with annual revenue of \$38 billion, was crazy to trust a multimillion-dollar software project to a company

Kunze
the deal
Plumtree
ability"

A Fruitful Relationship

with only 10 customers and led by executives who just three years before had been hashing out a business plan in a Berkeley (Calif.) boarding house. Plumtree marketing chief Glenn Kelman picked up on the anxiety of Gerbus and the two P&G managers traveling with him. "You could just see from the looks on their faces that they were wishing like hell they could just buy something from IBM," Kelman says.

Uncomfortable or not, it's a scene being repeated all across the corporate landscape. Cutting-edge technology firms, many of them young and untested in the ways of big business, are being tapped to help Industrial Age icons get wired for the New Economy. Jarring differences in size, culture, and business savvy are forcing companies like P&G to venture into uncharted management territory to make sure those differences don't spell disaster. "Not since the turn of the last century have we seen so many young and inexperienced companies linking up with older corporations to do make-or-break projects at high speed," says management guru Gary Hamel, chairman of consultancy Strategos. "For old and new companies alike, it's becoming a whole new management migraine."

Strange bedfellows. The relationship doesn't have to be a headache. If those strange-bedfellow projects are managed adroitly, they can be a boon for both—and a source of some unexpected inspiration. Consider the tale of how the Plumtree-P&G deal came together a year ago and what the two companies have learned. Plumtree has provided P&G with software so that complex corporate data spread throughout the company can be presented to employees in an easy-to-use Web browser. But beyond the normal buyer/supplier relationship, both have picked up valuable lessons to help each other forge the management techniques needed to thrive in the New Economy.

P&G, a 160-year-old industrial giant that makes everything from Tide detergent to Pringles potato chips, never thought that seeing how a startup stays nimble would point out new ways to motivate P&G employees. "We're this old elephant," says P&G Chief Information Officer Stephen N. David. "We need to start acting more like a

gazelle." Already, P&G is giving engineers a chance to broaden their experience by working on cutting-edge Net software so they won't be pigeonholed into mundane tasks such as computer maintenance. And P&G has seen how quickly Plumtree can deal with problems, thanks to its engineers' breadth of knowledge.

Four-year-old Plumtree gets a mentor. But the company isn't coddled. Instead, the brash

jumping through a lot of hoops for Plumtree and a giant leap of faith for P&G. There are cultural differences as wide as the 2,000 miles from P&G's headquarters in Cincinnati to the San Francisco offices of Plumtree. P&G workers are known throughout the consumer-products industry as "Proctoids," who work in a culture famous for rules governing the most routine procedures, including how to write a company memo. Plumtreevians, as they call them



A Tale of Two Cultures

They soul
and Old Economy icon Procter & Gamble. But a joint softwa

LESSONS FOR THE STARTUP

Big can be beautiful. P&G execs have quietly steered Plumtree through problems with other large customers. When a Plumtree project at Motorola ran into miscommunication snags, a P&G exec sat both groups down and smoothed ruffled feathers.

Be wary of young arrogance. Plumtree engineers thought their software was tops, but they found it was lacking features once the P&G project got started. The result: An improved version of Plumtree's software that it can sell to other customers.

They say "jump." You say, "how high?" A customer like P&G can make or break an upstart. When P&G's execs demanded proof that Plumtree could meet P&G's requirements, Plumtree engineers worked around the clock for a month to pass the test.

Get adult supervision. Plumtree has young engineers working on the P&G project. But the key personnel on the project are industry veterans—a 41-year-old former consultant for Oracle Corp. and a lead salesperson with a long history in enterprise software sales.

young engineers at Plumtree, who thought their software was tops, are shocked to learn what it takes to support a huge customer, both in terms of corporate polish and hands-on engineering experience on massive corporate computer systems. They also get valuable insight into features important to large organizations, and even find a financial backer that can help land business with other biggies. "From a credibility, reputation point of view, it's a company-making deal," says Plumtree CEO John Kunze, a veteran of Adobe Systems Inc.

Of course, getting the deal done meant

selves, are proudly quirky. They dress the way they please and unwind in the office with wrestling and Nerf football games.

P&G's Gerbus didn't care what Plumtreevians wore or whether they horsed around in the hallways. P&G had spent the past two years struggling to rebuild its information systems, so employees wouldn't run into confusing data such as 30 descriptions for water or six ways to define "dark blue." For P&G, SAP software was the first step in bringing order to that information. SAP's software forces the company to define its operations step by step, from

all the ingredients that go into its detergent to the shipping schedule of the trucks that deliver Tide to stores. The project is now two-thirds complete and has stretched to tens of millions of dollars.

By the spring of 1999, however, P&G realized the SAP software was going to be too difficult for nontechnical employees to use, and it couldn't be easily integrated with the company's Web systems because the software wasn't originally designed for the

dime. Gerbus figured they would do a lot to land a marquee customer like P&G. One company he got in touch with was Plumtree. Kunze hesitated at first when a July 26, 1999, "cold e-mail" from Gerbus to info@plumtree.com asked if Plumtree could provide a trial copy of its software. Although P&G was unquestionably a whale of a customer, Plumtree was just getting its act together. The third version of its soft-

negative about things," says Kunze.

Gerbis had a 68-page list of requirements—a doozy of a roster that asked questions ranging from the background of Plumtree execs to a clarified corporate vision. Kunze knew he would have to expand his technical consulting staff in a hurry.

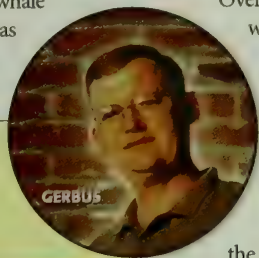
Over the next four months, while he was negotiating with P&G, he scrambled to hire seasoned executives. In December, Wendell Robinson, a veteran Oracle Corp. consultant, was brought in to run the project at P&G in Cincinnati.

The next step: a demo before the P&G high-tech brain trust at its headquarters. This time, Kunze almost blew it. On Oct. 8, he and John Hogan, Plumtree's vice-president for development, were about to demonstrate an early version of what a P&G corporate portal would look like. It would have a central Web page, which employees could tweak for their own needs. That page would guide them through P&G's maze of data, without ever really exposing them to its complexity.

Server problems. Kunze and Hogan faced Gerbus and about a dozen other stone-faced P&G tech people. But there was a problem: The PC server in San Francisco that ran the demo wasn't working. All someone had to do was press a button to reboot it. Unfortunately, it was 6 a.m. on the West Coast, and there was no one at the office. "I kept stalling," says Kunze. "I must have given the longest PowerPoint presentation of my life." Finally, after an hour, someone rebooted the computer. Now, Kunze leaves nothing to chance. The Plumtree demo server has a backup, as well as support personnel who can be paged at a moment's notice.

After the presentation, Gerbus still wasn't convinced. For nearly two months, Plumtree ran a "proof of concept" test of its software that duplicated all the tough software integration chores, ranging from e-mail systems to databases, needed on the larger project. The demo also allowed Gerbus to work with Plumtree's engineers so he could explain technical problems and listen to how they would respond. "I don't want to have to go out three years from now and find a new solution because the company I picked didn't make it," he says.

On Nov. 29, Gerbus returned to San



the Odd Couple: New Economy startup Plumtree Software
ect is teaching both companies management lessons.

LESSONS FOR THE BIG COMPANY

Make the startup jump through hoops.

P&G's list of requirements from Plumtree was 68 pages long. P&G made Plumtree prove it was up to the challenge through product demos and details of how it would handle the project.

Ensure the startup doesn't fail. P&G invested \$2 million in Plumtree. Why? P&G saw it as a sound financial investment, and it gives P&G an active role in the future of Plumtree. That may sound like a lot of money, but it's nothing compared to the cost of a global project that goes sour.

Bridge the cultural gap. A startup may have engineers who are a little nervous about working in a big corporate environment. When Plumtree developers landed in Cincinnati, P&G techies socialized with them, from eating at the local chili joint to sampling the local brew.

Let the startup culture percolate. At P&G, the Plumtree project is letting young P&G engineers work on cutting-edge Net software while learning how to get the job done differently.

et. P&G needed something only startups
ade at the time—cutting-edge corporate
ortal" software. Portal software grabs data
it of those difficult-to-navigate corporate
systems, such as inventory management,
d presents them in a browser format
at is no more difficult to understand than
Web page on Amazon.com Inc. Sounds
mple, but the software is very complex.

Gerbis started searching for a solution
that could work throughout P&G. He al-
ready knew he'd have to go to a startup. His
ly choice: Run the startups through a
ough shakedown before he'd give them a

ware was turning heads. But its service or-
ganization was still just seven people. Kunze,
37, knew a project at P&G could easily con-
sume all of Plumtree's resources.

Kunze overcame his big-customer fear. On Aug. 13, he invited Gerbus, 48, to visit Plumtree's downtown office. Gerbus arrived with two co-workers, and for four hours, small groups of nervous Plumtree executives filed into the conference room to be grilled by the poker-faced Gerbus. He thanked each presenter and never gave the slightest indication what he thought. "When he left, there was no way to feel positive or



P&G's need for cutting-edge software led Gerbus to Plumtree

Francisco. Over a salmon dinner at the chic Scala's Bistro, he inked a tentative deal with Kunze on a dinner napkin. Gerbus knew, though, that when a company like P&G buys from a young company, the start-up's solvency is every bit as important as its technology. So Gerbus convinced the P&G board that Plumtree would be a good investment. In June, P&G invested \$2 million in Plumtree for a roughly 2% stake.

Gerbus still wasn't satisfied. He had to make sure that the Plumtree engineers felt comfortable enough at P&G to work their magic. He found a private office for them with phones, data ports for their laptop computers, and a printer that he scrounged up. And he and his staff took them out on the town, to local brew pubs and to the Skyline Diner, which serves a cinnamon-flavored meat chili. Sounds touchy-feely, but it worked. The young Plumtree engineers felt on equal footing with P&G's tech staff. "I thought it would be a lot more corporate than it was," says Bridget Frey, a 22-year-old Plumtree engineer.

Gerbus wasn't through mentoring. Plumtree engineers may have had a great understanding of Web design, but few of them had ever been exposed to truly massive computing systems like those at P&G. P&G's tech people had built a huge directory of the company's employees, one of the largest of its kind. It was up to P&G to teach Plumtree how to build something that would work with what they already

had—and what Plumtree could expect to find in other huge networks. The results are in a fourth version of Plumtree's software released last month, which has many changes suggested by P&G, such as a more flexible Web-browser interface. This software can handle huge amounts of data process-

that improve computer operation.

The relationship is running smoothly. Fifteen months after the initial encounter, P&G and Plumtree are two-thirds through a project that will reach nearly 100,000 employees when it's completed this year. Neither Plumtree nor P&G will say

Plumtree welcomes criticism at monthly "bug night"

ing and includes new, patent-pending technology for supporting hundreds of thousands of users at once.

The learning isn't limited to Plumtree. P&G's tech folks are becoming more receptive to criticism, thanks to Plumtree. Hogan told Gerbus how, at Plumtree, criticism is welcomed at monthly "bug nights." Everyone at the company spends the night looking for glitches in Plumtree's software. P&G's quality-assurance program, on the other hand, is rigid. There's little incentive to look for bugs because everything from a PC to a mainframe is installed and loaded according to strict company criteria. But Gerbus saw the benefit of the free flow of criticism. By the end of the bug night, Plumtree had a better piece of software. Gerbus and his bosses are trying to bring in some of that dynamic tension to their engineering process. They hope to create a financial incentive system to reward people who make suggestions

much the contract is worth. But analysts estimate its value at \$5 million.

Now, Plumtree has a powerful ally on its side. In June, Plumtree announced a 200,000-seat deal with Ford Motor Co. worth about twice the P&G deal. Gerbus was a reference. And Plumtree is up to about 200 employees. Plumtree has more than 100 customers now, nearly half of them added since the beginning of the year. And the average size of deals jumped from \$100,000 to \$200,000.

Make no mistake, Plumtree is still a startup. In the first six months of this year, it earned \$8.8 million in revenues, with \$5.3 million in losses. Last month, Plumtree filed to go public—after the interviews were over for this story. Analysts expect the company's public offering by yearend. It will be under more scrutiny. That's O.K., says Kunze, because they'll "have P&G as a mentor to guide them through another learning experience—on Wall Street. ●

Strategy



Our VP of Business Development wants to sell to 5 B2B eMarketplaces

Reality



Which 5: TBD

Solution



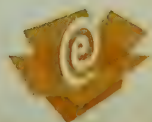
The sell-side @dge

Different eMarketplaces, same strategy. It's not only important to hook up to several B2B eMarketplaces – it's imperative. That's why with OrderFusion's sell-side eCommerce platform, you don't have to limit what eMarketplaces you sell through. You can hook up to any one or every one. Now wherever your customers go – you go too.

Everything can change tomorrow. Your customers and eMarketplaces can merge, change and part again. All the while, electronic and human sales channels need accurate and consistent information to sell effectively. With OrderFusion you'll know who's browsing, who's buying and every detail in between.

I've got it all under control. From customer-specific catalogs and pricing to quotes and advanced order management, Orders of Magnitude™ delivers. By linking to your existing systems and providing total synchronization between all your sales channels, this system looks as good from the inside as it does from the outside.

There's no time like the present to implement the eCommerce platform of the future. Visit www.orderfusion.com today and download *The Keys to Sell-Side eCommerce Success*. Or for more information on OrderFusion and Orders of Magnitude call 888-653-8096.



OrderFusion™
The sell-side @dge

Rage Against Online Brokers

Complaints are soaring despite repeated pledges to make customer service Job One

A large, stylized, gold-colored letter 'M' with a 3D effect, serving as a drop cap for the first paragraph.

organ K. Roach thought he had made a small killing in the stock market. In August, 1999, the software programmer logged on to online broker E*Trade Group Inc. and bought options worth 4,200 shares of America Online Inc. for an average price of \$80. A few hours later, he put in an order to sell his stake for \$95 a share.

The result: A tidy profit of \$8,510.

Except the trades never happened that way. Instead, Roach charges, E*Trade bought his shares for \$8 a share more than his order called for, yielding a loss of \$23,188. The screw-up was so bad that E*Trade not only froze Roach's account but his wife's IRA account, as well.

Repeated attempts to get E*Trade to correct its blunder proved futile. In December, he sued the online broker. "The

error was theirs, and they could have rectified it," says Roach, who on Oct. 1 won \$38,226 to cover his losses and expenses. "But E*Trade just stonewalled me." E*Trade says it believes the award is unwarranted because Roach's self-directed account made him personally responsible for the action.

This is no isolated case, however. In fact, complaints against Internet brok



firms are soaring—despite repeated pledges from firms such as Ameritrade, Charles Schwab, TD Waterhouse, and E*Trade to make customer service Job One. A study released in late October by the Securities & Exchange Commission reveals that 4,258 complaints, including messed-up trades like Roach's as well as problems getting into accounts, were lodged against online brokers for the 12 months ended Sept. 30. That's almost four times the level from

E*Trade Chief Executive Christos M. Cotakos admitted in a recent conference call with analysts that the company's customer service has been lacking. But he insisted: "Over the past year, our customer-service staff has gotten more experienced."

Other brokers are starting to get the message, too. Ameritrade Inc. says it halted all of its costly ad spending for five months starting in March when it became clear that it was growing faster than expected.

cliffe, Colo., who has accounts at six different firms.

Why are customer-service problems getting worse now, years after most online brokers started? Those who follow the industry attribute these problems to teething pains in a business that continues to grow rapidly. "Anytime an industry grows fast, you're bound to see problems," says Matthew L. Vetto, Internet financial services analyst at Salomon Smith Barney.

But the brokers have now grown so knowledgeable their problems and are making efforts to deal with them by spending on technology for voice recognition, automated advice and hiring heavily trained build customer service.

Problem is, it's all too little, too late for customers or the government. The latest SEC filings show

that online brokers still spend far more on building brand and acquiring new customers than on improving customer service operations. Ameritrade, for instance, spent \$26.3 million in the first nine months of its fiscal 2000, or 102% more than last year, on customer-service related items. But some \$157 million went to advertising in the same period, up 30% from the previous year.

The same goes for E*Trade, which in the nine months ended in June has spent marketing-related investments by 50% from a year ago, to \$422.2 million. Spending on technology to improve customer service rose at a slower rate, to \$366.5 million.

Indeed, the customer-service problems

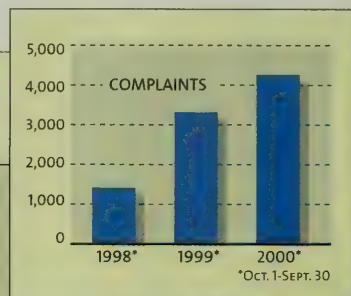
Ticked-Off Customers

The number of complaints against online brokerage firms has been soaring in recent years

What Irks Customers (number of complaints)

- Errors in processing orders: **265**
- Problems in getting best possible price: **254**
- Margin position sellouts: **289**
- Failure to process or delays in executing orders: **716**
- Difficulty in using account or contacting broker: **293**

DATA: SECURITIES & EXCHANGE COMMISSION



1998—a rate that exceeds the number of new online brokerage accounts in the same period.

That trend not only angers customers, who claim they're collectively losing millions of dollars thanks to the problems. It also has the government up in arms, ready to step in. Even before the new report, the SEC on July 28 proposed a new rule to require brokers to make available to the public monthly reports on how well they're executing trades. Moreover, they would have to tell customers on request where their orders were routed so they can track what went wrong. "Even though that's only one of the proposed rules," warns SEC spokesman John D. Heine, "it certainly doesn't exhaust the possibilities."

For their part, the brokerages say they are improving all the time and they deserve credit for pouring more money into bettering their infrastructures and customer-service operations. E*Trade, for instance, has reduced the amount of time it takes for a customer to get a call answered, from 77 seconds a year ago to 28 seconds today.

"We rebuilt our technology, our call centers, and added hundreds of customer associates," says Ameritrade President Jack R. McDonnell. Frank J. Petrilli, president and chief operating officer at TD Waterhouse Group Inc., boasts a 47% increase in spending on his infrastructure this year, to \$48.1 million. That has gone into retooling the Web site to make more account data available online, as well as 12 new branches and two new call centers in the past

Most online brokers spend more on building brand and acquiring customers than on service

year. "Our hold time for each phone call is not even 10 seconds," says Petrilli.

Those are certainly steps in the right direction. But industry experts say they don't go far enough. Online brokers remain far too willing to sacrifice customer service, they say, in favor of capturing new customer accounts or building up their brands. "They're learning at the public's expense, and that's not right," says securities expert Douglas J. Schulz, from Invest Securities Consulting of West-

is largely a reflection of too few dollars spent to make the trading systems handle the load of customers they've tried so hard to attract. Truc Hoang, of Westlake, for instance, is suing E*Trade, claiming she lost money last February because E*Trade's site went down, delaying her trades and causing the block of stock she wanted to buy to become \$10,000 more expensive. When the trades were finally executed late, she lost \$40,000, says her attorney David Webster, who hopes to turn the

- Focused on data from day one • Serving business customers only • #1 rated Internet backbone
- Frame Relay/ATM network running at 99.999% reliability

CONFIDENCE

THUMBS-UP FOR INTERMEDIA'S QUALITY & SERVICE!

www.intermedia.com

For Hot Career
Opportunities

www.intermedia.com

Visit Our
Web site

boardwatch

#1 rated Internet backbone, *Boardwatch* magazine 1999

**Network
Computing**

#1 rated Managed Security, *Network Computing* magazine 1998

TeleChoice

#1 rated overall ISP, *TeleChoice* survey 1999 and #1 in customer service 1998

Pinnacle Award

Pinnacle Award winner for service and innovation, *X-Change* and *Phone+* magazines

Data Communications

Top 25 ISP, *Data Communications* magazine 1999 and 1998



"Dynamic100" Top Technology Company rankings, *Forbes ASAP* magazine 1999 and 1998



Top 100 Growth Company and "Hot Growth Company," *Network World* magazine 1999

Now that's confidence.

ME ATM INTERNET LOCAL/LONG DISTANCE PHONE 800-250-2222

NASDAQ: ICIX

Intermedia Communications, Inc. All rights reserved. Intermedia Communications is a registered trademark and the logo is a trademark of Intermedia Communications, Inc. All other trademarks appearing herein are the property of their owners. Network reliability is based on internal network reports for Q1 and Q2 of 1999.

intermediaTM
COMMUNICATIONS

into a \$20 million class action suit.

Shabby treatment. The problems extend beyond site performance issues that delay trades or execute them at the wrong time. More and more customers are unhappy that they cannot contact a broker when they need to. And when they do get through, they find that the representa-

sold his holdings, and then tried to settle by offering him \$1,500. Khadivi says he declined the offer, and soon after, E*Trade liquidated his account. "They then reported me to a credit bureau and a collection agency," he says. At that point, he sued E*Trade and after 14 months won the case when the National Association of Securities Dealers ordered the online broker to shell

service woes come at the worst possible time for online brokerages, which are reeling from the impact of a shaky stock market. Overall, online trading volume is more than 20% in the second quarter, an estimated 13% in the third quarter. As a result, the stock prices of most online brokerages have tumbled in the past year and are now mired around their historic lows. E*Trade has seen its shares drop more than 80% from its peak of \$72 in 1999. Ameritrade, at \$15 a share, is off 36% for the year. TD Waterhouse Group has lost 45% of its value since its launch last year.

The problem is that at the same time, customers are clamoring for better service. Investors are demanding profitability and, foremost, to get there, online brokers must spend a lot to get new revenue streams from other types of financial services, hoping to become a one-stop shop for consumers.

E*Trade, for instance, is diversifying its revenue streams into insurance and banking by acquiring other companies like Banc Financial. "E*Trade has put a lot of coals in the fire—the near-term costs are high, but the potential for future returns could be good," says Salomon's Yoram Ameritrade, meanwhile, has joined MBNA Corp. to issue credit cards and has allied with NetBank for banking. Another count broker Schwab is now moving upstream, hoping to mine wealthy customers with its acquisition of U.S. Trust Company.

Still, none of that will pay off if online brokerages don't fix the problems in their core businesses. For customers and the industry, the prescription is clear: "They've got to slow down opening new accounts," says Schulz. "It's unfair to clients, and it's not sound business practice."

Indeed, customer dissatisfaction could

The Largest Brokers on the Net

	ONLINE CUSTOMER ASSETS (IN BILLIONS)	NUMBER OF ACCOUNTS	AVERAGE TRADES PER DAY
Schwab Online	\$413.5	4,100,000	234,700
Fidelity Online	326.2	4,554,000	117,615
TWE Online	113.0	1,953,000	132,164
E*Trade	56.7	2,722,159	169,000
Ameritrade	34.8	1,164,000	123,929
DLJdirect	24.8	431,000	29,619
Datek	14.3	558,044	103,825
Fleet Online	13.0	394,000	21,900
NDB	9.9	245,600	14,900
Scotttrade Online	5.8	224,156	27,464
INDUSTRY TOTAL	\$1,032.5	17,055,039	1,012,095

Does not include brokerage firms, such as Merrill Lynch & Co., that do not break out their Internet operations.

DATA: COMPANY REPORTS, SALOMON SMITH BARNEY

tives don't know enough to answer queries. "They're putting inexperienced people on phones in charge of complaints, which gets unhappy customers even more frustrated," grouses Schulz.

Take Ali Lee Khadivi's case. A software designer from San Jose, Calif., Khadivi says he placed an order to buy 1,000 shares of Perot Systems Corp. in February, 1999, at \$71. Shortly afterward, Khadivi decided "it wasn't such a good buy," so he canceled the order. E*Trade executed it anyway. Khadivi called as soon as he saw the trade and several times later, but was bounced around and didn't get a clear response. "They treated me like I was someone stupid and like I didn't know what I was doing," he says.

Worse yet, the stock plunged, E*Trade

out \$61,203. E*Trade declined to comment, but said at the time that although it disagrees with the judgment, it would comply.

Online brokerage firms claim they're already spending a lot of money on technology to prevent these problems. Indeed, Charles Schwab & Co.'s third-quarter earnings report shows that capital ex-



The stock prices of most Net brokers have tumbled in the past year and are near historic lows

penditures reached record levels. "Marketing levels were down, and it appeared that it was spending on its underlying infrastructure and equipment to enhance efficiencies," says Gregory W. Smith, online brokerage analyst at Chase Hambrecht & Quist.

How much more brokers can afford remains in doubt, however. The customer-

particularly damaging for Internet companies. Customers can quickly spread the word—good or bad—to hundreds of thousands of others with a click of a mouse. Even E*Trade's Cotsakos admitted in a recent analysts' conference call, "The best marketing tool is high-quality service." Now, he and other online brokers must start using it. ●

*If information is power,
then inspiration must be the
power of our potential.
The power that moves us from
the systematic to the spontaneous.*

INSPIRATION IS THE NUMBER ONE CAUSE OF GREATNESS.



*From ideas to results.
At Compaq we believe technology
is no longer simply a
tool for information.
It's a tool for inspiration.
Redefining access.
From set time to any time.
From one place to a million places.
With the touch of a button,
we no longer fire up
just our computers,
but our imaginations.
We're moving beyond
the limitations of Information
Technology to a new technology.
Welcome to the new IT.
Inspiration Technology
from Compaq.*

COMPAQ
Inspiration Technology

CHRISTOPHER PALM

Stock Info for the Masses

Multex.com sells research to the little guy—and is making money

When MultexInvestor.com debuted in November, 1998, it represented everything the Internet revolution was supposed to be about: Giving the little guy access to information once hoarded by the big shots.

Suddenly, small investors could log on and get thousands of stock research reports from big-name brokerage houses like Merrill Lynch, J.P. Morgan, and Bear Stearns. Until then, these data-rich reports had been sealed behind big oaken doors, spirited

only to professional money managers and the wealthiest individual investors.

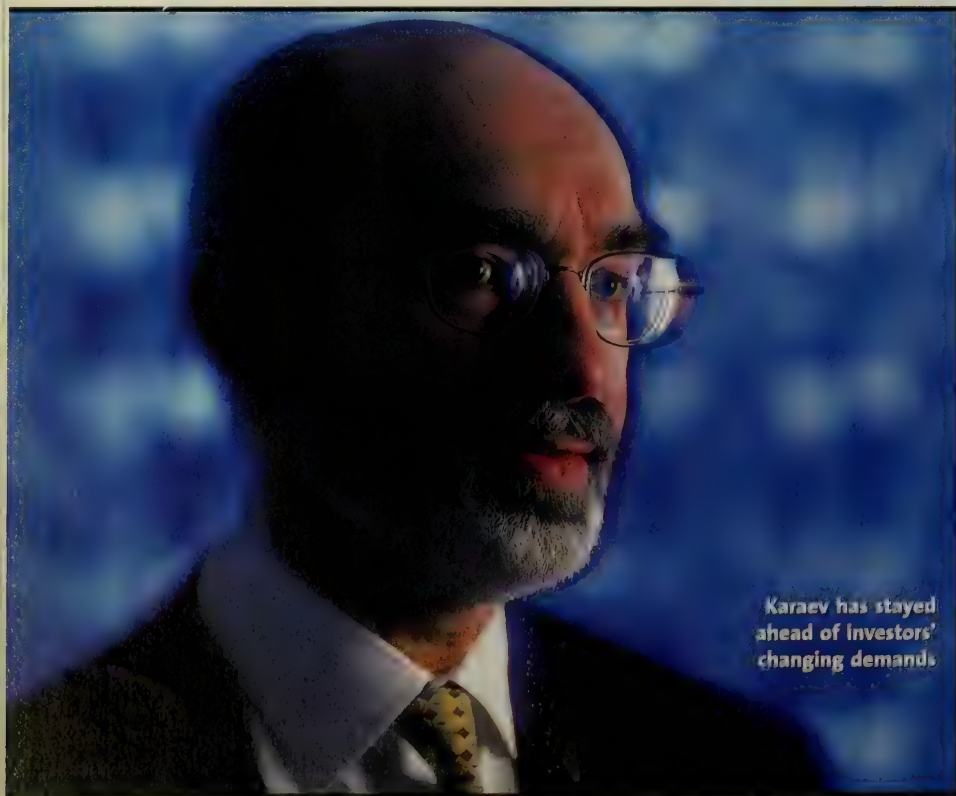
Soon, more than 100,000 people a month were registering to use MultexInvestor.com, one of a family of Web sites operated by New York-based Multex.com.

And in October, Multex.com unveiled many Net companies may never see profit. It earned \$210,000 on sales of \$22.8 million in its third quarter. "It proves our business model works," boasts Isaak Karaev, chairman and founder of Multex.com.

Clearly, not all dot-coms are dot-bombs. What Multex.com's story shows is that survival on the Web depends on the right formula: a unique product, a diverse stream of customers, and a low-cost way of reaching them. Multex.com has it all. It gets it

search from brokerage firms for free in exchange for information about new customers and a cut of sales. Multex.com then sells research to individual investors on a per report basis or to professional money managers through yearly subscriptions. It also designs Web sites for brokerage houses. Sponsorships and banner advertising—the major revenue sources for many Web companies—make up just 19% of Multex.com's sales. "Our success lies in being able to package research in different ways," Karaev says.

Still, a small profit doesn't guarantee that Multex.com will continue to be a big company. It is in a constant fight with more established rivals like First Call Corp. and Zacks Investment Research. Then there's the possibility that brokerage firms will bring the research distribution in-house, eliminating the need for third-party players. And if the stock market continues to wobble or falls further, consumers may lose interest in research entirely. Despite the



Karaev has stayed ahead of investors' changing demands.



TECHNOLOGY SHOULD NEVER GET IN THE WAY OF A BIG IDEA.

*Sometimes, before you can think big
you have to think small.*

Small, like the Compaq

ProLiant DL360 Server. With a

*1.75-inch profile that fits everywhere,
you can have your*

big start-up idea anywhere.

Even in the back of a van.

Welcome to the new IT.

Inspiration Technology

from Compaq.

COMPAQ
Inspiration Technology

compaq.com

© 2000 Compaq Computer Corporation. COMPAQ and the Compaq logo are registered trademarks of Compaq Computer Corporation. Inspiration Technology is a trademark of Compaq Computer Corporation. All other trademarks are the property of their respective owners.

quarter's profit, Multex.com will finish this year in the red. As Wall Street continues to punish dot-coms, Multex.com's shares have dropped 82% in the last 18 months, from \$65 in April, 1999, to \$12 today.

So far, Karaev has proved adept at navigating the changing demands of investors.

When he founded Multex in April of 1993, Karaev, a computer programmer at Automatic Data Processing Inc.'s financial information division, was looking for a better way to electronically deliver research from brokerage firms to money managers. The

leader in the business was First Call, a division of publisher Thomson Corp. But First Call's transmissions were just a few paragraphs, and it operated a closed system that required a dedicated server and special computers at each customer's site.

After Karaev raised \$7 million from ver-

The Multex Method

You might call it chump change: \$210,000 in profits for a company that took in \$22.8 million last quarter. Yet this measly profit is more than most Net companies have seen. How did Multex.com, which sells research reports to investors and brokers, get to the black while others struggle? An analysis:

► **Mooches content for free:** Over 750 brokerage houses and research firms give Multex their research for nothing. They are paid mostly through stock-trading commissions from end-users. By contrast, business news site TheStreet.com pays writers to create info. Content costs are 57% of TheStreet.com's sales, while they're 18% of Multex's total take.

► **Big Web buddies:** Because it is armed with gobs of research, the likes of Yahoo! and America Online link to Multex. Multex pays a small fee and splits the revenues from the sale of research. Other Net companies stuck with commodity information must pay far more to attract customers. Dr. Koop.com, for example, paid \$89 million to get on AOL for four years.

► **Long-term sales:** Some 70% of Multex's revenues are long-term contracts for products such as MultexExpress, which runs proprietary sites for brokerage firms for about \$245,000 per year. Only 19% of its revenues come from advertising, which can be more fickle. Financial news rival Marketwatch Inc. gets 68% of its revenues from online advertising.

DATA: COMPANY REPORTS



POWER

EXECUTION

COMMITMENT

IF YOU WANT TO FINISH FIRST

are capitalists, he developed software that transmitted research directly to a client's e-mail. First Call launched a competing product, but Karaev—working with a smaller staff and budget—charged a few hundred dollars a year, while First Call's rates remained in the thousands of dollars. When the Web took off three years later, Karaev revamped his product so money managers could access reports via the Net. He changed the name to Multex.com and he took the company public in March of 1999.

By racing to the Web, Multex.com was able to provide an alternative to First Call that its would-be rivals found hard to duplicate. Today Multex provides 2 million reports from 750 brokerages and research houses. And Multex.com has been quick to launch new businesses. As Karaev called a brokers to convince them to use his service, he discovered they needed someone to design and manage their Web sites. So in 1997 he launched MultexEXPRESS, and added in such clients like U.S. Bancorp per Jaffray Inc. MultexEXPRESS accounts for the third of Multex.com's sales.

The final leg of Karaev's business is

MultexInvestor, which offers stock research to small investors. The reports sell for between \$10 and \$150 each. Several firms, like Merrill Lynch and J.P. Morgan, sponsor the site and use it to lure customers. Users are offered such incentives as free access for a month in return for providing their contact information to brokerages that want to pitch their services.

Chase H&Q analyst Gregory W. Smith expects Multex.com to earn \$26 million next year on revenues of \$143 million, up from an estimated loss of \$2.1 million on \$82 million in sales this year.

Multex.com keeps carving out new markets. In September, seven brokerage houses announced they would partner on The-

"Our success lies in being able to package [stock research reports] in different ways"

Still, competitors are gaining fast. First Call and Zacks continue to improve their Web services. First Call's parent, Thomson Corp., has been aggressively buying firms that make portfolio management software and stock analysis tools, in a bid to create a one-stop shop for money managers. "All Multex does is research," says Suresh Kavan, chief executive of Thomson's money manager division. "We serve the portfolio management company from beginning to end."

But when investors start searching the dustbin for dot-com stocks with real value, Multex.com is likely to rise to the top.

Markets.com, a research and trading portal for institutional money managers. The firms chose Multex.com to build and run the site. "They have the best technology," says Laurence Tosi, a Merrill Lynch & Co. executive. This coup is more evidence that the investors who knocked the stuffing out of Multex.com's shares should do a bit more research on this dot-com winner. ●

e.biz online

For more on how Multex has become a dominant player in its niche, go to ebiz.businessweek.com

VISION

DIRECTION

INNOVATIONS

INTERNET DEVELOPMENT

VENTURE FUNDING

rare[®]
RARE MEDIUM

YOU NEED TO HAVE WHAT IT TAKES TO WIN.

888.RMEDIUM • www.raremedium.com • NASDAQ: RRRR



BY PETER ELSTROM

peter_elstrom@ebiz.businessweek.com

It Ain't Over 'til It's Over

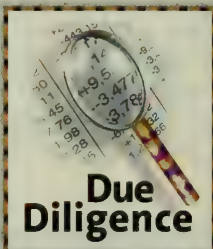
The shorts are betting against it, but this is one e-tailer that may survive

It's tough to keep up with all the Internet retailers biting the dust these days. Just in the past few weeks, we've seen the disappearance of beauty goods store Eve.com, teen Kibu, and luxury goods e-tailer Miadora. Short-sellers are betting that one of the next fall may be a company called Global Sports Inc., which has its fortunes linked to e-commerce. About 1.8 million shares of the company's stock have been sold short,

according to the National Association of Securities Dealers. That's an astonishing 68 times the average daily trading volume in the stock. Compare that with a mere five days of short interest for e-tail punching bag Amazon.com Inc. and less than a day for the much-maligned Priceline.com.

But short-sellers may be betting on the wrong company going belly-up. Although it's dependent on electronic commerce, Global Sports isn't one of the let's-spend-everything-we-have-on-TV-advertising dot-coms. Rather, it's a new model of what e-tailers can do to make money. Global Sports builds and runs the e-commerce sites for other, better-known companies, such as Athlete's Foot, Sports Authority, and BlueLight.com, the online arm of Kmart. The companies with the established brand names do the marketing, and Global Sports takes care of managing their Web sites.

Here's an example. Last year, Global Sports struck a deal with Athlete's Foot to take care of the Atlanta retailer's Web site. Global Sports designs the site, buys the inventory, stores the goods in its own warehouse, and is responsible for shipping products to customers. Athlete's Foot markets the site, sets the prices online, and advises on design so that Web pages fit with the company's image. The two companies split the revenues generated from the site. Typically, Global Sports gets 92.5% of a sale and its partners 7.5%. "We're very happy," says Robert J. Corliss, CEO at Athlete's Foot Group Inc.



"We felt that we didn't have the resident expert [to build our own Web site]."

Sure, talk is cheap. And Global Sports' financial future begins to look a lot brighter. For starters, although hasn't shown up on the balance sheet yet, the company is getting the cash it needs to keep going. Cable company Comcast Corp. and shopping channel QVC Inc. have agreed to invest \$40.8 million in exchange for stock in the company. Global Sports is paying about \$38 million in stock to buy Fogdog Inc., a online sporting-goods retailer that had \$42.5 million in cash at the end of September. All told, Global Sports has about \$100 million in cash to keep funding its operations.

stock has gotten pounded along with the rest of the dot-com tritrus. As high as \$25 a year ago, shares dropped to \$5 last summer before recovering to their current \$8.

But once you start tearing apart the company's financial future begins to look a lot brighter. For starters, although hasn't shown up on the balance sheet yet, the company is getting the cash it needs to keep going. Cable company Comcast Corp. and shopping channel QVC Inc. have agreed to invest \$40.8 million in exchange for stock in the company. Global Sports is paying about \$38 million in stock to buy Fogdog Inc., a online sporting-goods retailer that had \$42.5 million in cash at the end of September. All told, Global Sports has about \$100 million in cash to keep funding its operations.

Of course, all the cash in the world won't save a money-loser company. But it looks as if Global Sports could turn profitable by mid-2002. The company, which just started in e-commerce last

year, hit revenues of \$9 million in the third quarter, topping analysts' expectation of \$8 million. And its gross margins were healthy 30%, up from 29% in the second quarter. By comparison, Amazon's margins are about 25% and those for sporting-goods retailers range between 25% and 30%.

Another pitfall for most online retailers is marketing. They have to spend buckets of money on advertising and other promotions to get people to their sites. Not Global Sports.

BUILT TO LAST?

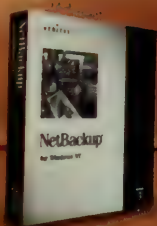
Short sellers have been swarming the stock of Global Sports, but the company looks like it's going to survive the Internet shakeout. All figures in millions, except margins

	1999	2000*	2001*	2002*	2003*
Revenues	\$5.5	\$42.0	\$100.0	\$175.0	\$300.0
Gross margins	30%	29%	30%	30%	30%
Net income	(\$26.5)	(\$55.1)	(\$29.8)	(\$5.5)	\$15.9

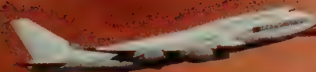
*ESTIMATES

DATA: ROBERTSON STEPHENS

Little and easy-to-use things
connecting people, creating ideas.
Unusually powerful tools for business.



An ingenious data backup/recovery
strategy using VERITAS NetBackup
software for your enterprise.



Which meant the new business team
could retrieve the pitch in 15 a.m.
and catch an earlier flight.

MR. BIG

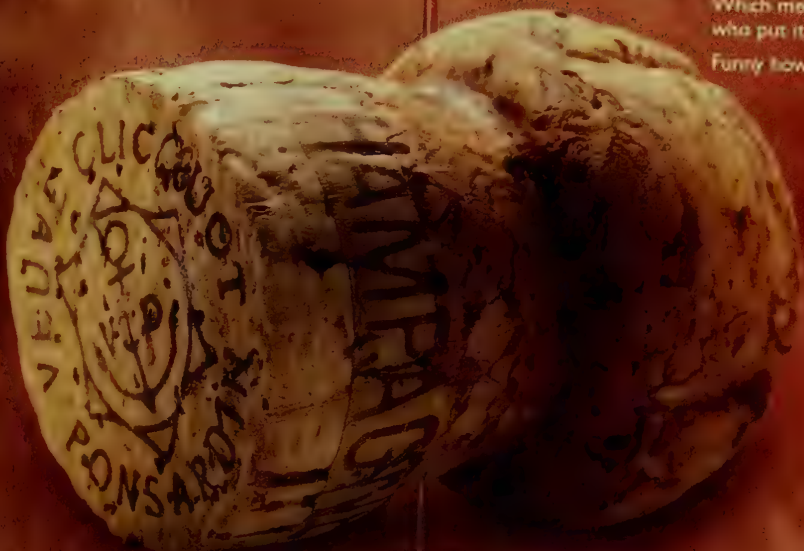
Making them early to the presentation -
which impressed the prospect.



And earned them the privilege of being
in an "exclusive meeting."

Which meant a toast to the IT wizard
who put it all together.

Funny how one thing leads to another.



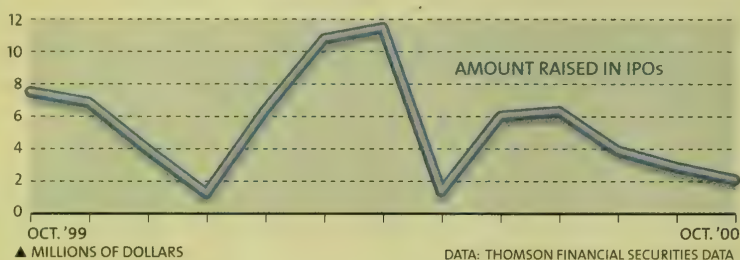
datalink

Information Means The World.

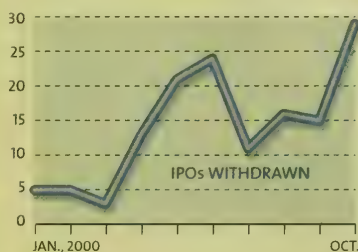
856-213-1919 / www.datalink.com/bizweek

CRITICAL NUMBERS OF THE MONTH**The IPO Market Is Getting Tougher...**

In October, the amount of money raised in initial public offerings by tech and telecom companies dropped 25% from September, and 50% from the average monthly totals in 1999 and 2000

**...and More Companies Are Giving Up On Their IPO Dreams**

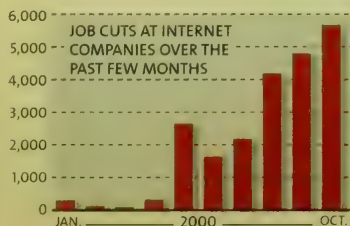
Number of tech and telecom initial public offerings that have been withdrawn or postponed each month since the beginning of the year

**LARGEST IPOs WITHDRAWN OR POSTPONED IN OCTOBER**

COMPANIES	AMOUNT TO BE RAISED (MILLIONS)
Verizon Wireless	5,000.0
Nextel Intl.	773.5
B2 Bredband	329.0
idealab!	300.0
Tality	140.3
MCE Companies	122.9
Inflow	105.0
C-Quantial	101.5
Wireless Inc	76.5
Jones Intl. Networks	76.0

The Pink Slips Pile Up

Announced job cuts at Internet companies hit a record in October

**LARGEST LAYOFFS IN OCTOBER**

Efdx	300
Priceline Webhouse Club	235
Chipshot	193
Internet Pictures Corp.	175
Urban Fetch	160

lete's Foot and other partners spend most of the money for promoting their own Web sites. That allowed Global Sports to decrease sales and marketing expenses from \$9.5 million in the second quarter to \$8.6 million in the third quarter, even though revenues increased 16% sequentially. If that trend holds, Global Sports can crank up revenues, and profits are realistic.

Revenues certainly look as if they're headed north, too. So far, Global Sports has signed alliances with 13 partners. That includes four in the third quarter—NetPerstore Buy.com, toy site Toysrus.com, the online arm of QVC, and FoxSports.com. FoxSports.com didn't want to get into e-sports, but now that it has partnered with Global Sports, it's seeing many of the people who come to its site for news also buy sporting goods. "It's perfect for us," says Danny Greenberg, senior vice-president of the Fox site. "We don't do anything to promote it, and we get a check every month." Levitan predicts that revenues will more than double, to \$100 million, this year and will hit \$175 million in 2002.

The economies of scale can be tremendous. Global Sports spreads the costs of Web design, inventory, and warehouse across all its partners. That's the reason the company was able to decrease its inventory in the third quarter by 3%, to \$14.9 million, even though it had a bump in sales.

There's something else I'd like to do in other dot-coms, if I were investing, which of course I'm not, since I've chosen the glamorous life of journalism. Michael Rubin, the company's 28-year-old CEO, has been spending cash out of his own pocket to buy Global Sports stock. Since the beginning of August, he has doled out more than \$200,000 for about 25,000 shares. "I believe in the company," he says.

Short-sellers often can be leading indicators of companies headed for trouble. They're probably right in predicting 10 times ahead for pet supply site Pets.com and online jeweler Ashford.com Inc. Global Sports? I'm betting Rubin and his partners are going to be around for the long haul. ●

e.biz online

As first predicted in this column in the Oct. 23 e.biz, Verizon Wireless postponed its planned initial public offering. For an update, check out ebiz.businessweek.com

For e-business only Oracle means no assembly required.

E-Business Kit		E-Business Suite
Microsoft	Database	Oracle
Epiphany	Marketing	Oracle
Siebel	Sales	Oracle
Clarify	Support	Oracle
IBM	Webstore	Oracle
Commerce One	Procurement	Oracle
SAP	Manufacturing	Oracle
i2	Supply Chain Mgmt	Oracle
SAP	Financials	Oracle
PeopleSoft	Human Resources	Oracle

Get the complete
E-Business Suite
from Oracle.
Or an e-business kit
from lots of vendors.
The choice is yours.

ORACLE
SOFTWARE POWERS THE INTERNET

www.oracle.com

SPECIAL REPORT: LOGISTICS

Business Week e.biz

by

FAITH KEENAN

Logistics



Gets A Little Respect

Delivering the goods on time
is suddenly a sexy business

Pity the poor logistics manager. No one really cares how a can of peas gets from Buffalo, N.Y., to Austin, Tex. Or what it takes to get that bright red sweater to your doorstep. As long as the grocery shelves are stocked and the clothes from the mail-order catalog arrive a few days later, we never give a second thought to how the goods are delivered.

Until now. Buying online has spoiled customers. Go to a Web site, click on that



book or CD, and two days later the doorbell rings. There's no room for delays or misplaced orders. Just ask Toys 'R' Us. The Federal Trade Commission fined it \$350,000 last holiday season because of a breakdown in its order and delivery systems. The Web site mistakenly informed customers that things were on the way when they were really out of stock. Now, the company is counting on Amazon.com Inc. to handle its fulfillment tasks.

Toys 'R' Us is not alone. The ghost of Christmas past is haunting a lot of dot-com companies. Last year's delivery disasters have persuaded plenty of e-tailers to turn to outside experts to help deliver products to front porches—or to beef up their own logistics capabilities. They now know that what happens after a customer pushes the “buy” button is just as critical as a user-friendly Web site. “The whole industry recognizes that to be successful, delivering the product on time and accurately is absolutely essential,” says Jonathan Morris,

executive vice-president of online outlet store Bluefly Inc. “If it's not right the first time, the customer doesn't come back.”

Suddenly, logistics is sexy. Online companies that used to focus on creating a slick Web site and spent tens of millions on advertising to try to build a brand are now turning their attention and dollars to the more mundane business of delivering the goods—from knowing what's in stock to how fast it can get out the door (page EB124). “We've learned that we need to spend more time on the back-end systems than the front,” says Connie Fuhrman, a senior vice-president of BestBuy.com, the online arm of the electronics retailer.

Like the dot-coms, Old Economy companies are paying more attention to making the trucks run on time, too. Many of them have well-established warehousing and shipping systems in place, but now, thanks to the Web, they're coming up with ways to get things delivered to customers faster and cheaper. The newest thing: collaborative

logistics. Using the Web to hook up manufacturers, retailers, and truckers, companies can easily pass along the information they need to share trucks and warehouse space with others. “Executives have begun to understand there is a great deal of value in moving things around and storing them, not just making great products,” says Gerry Tyndall, executive vice-president for e-commerce at Ryder System Inc.

Logistics is no easy chore. It involves more intertwined pieces than a Rubik's cube. A single global shipment of toys, for example, requires an average of 27 parties to complete, according to Forrester Research Inc. Along that path, anything can happen. Maybe a customs broker fails to submit the right papers or a truck gets a flat tire on the way to pick up cargo. The customer doesn't know why the delivery is late, and often, neither does the company that made the sale. A recent Forrester survey showed that 76% of logistics managers at major companies couldn't trace the

THE @EVOLUTION OF LOGISTICS

STEP 1



THE OLD WAY

Nabisco, of Parsippany, N.J., figures the amount of Planters cashews that Wegmans Food Markets in Rochester, N.Y., might sell in a quarter—without consulting the supermarket chain.

THE NEW WAY

Nabisco and Wegmans exchange sales forecasts via the Web and agree on an amount to supply Wegmans. Calculations are largely based on current sales data from the checkout counter, past patterns, and upcoming promotions.

STEP 2

THE OLD WAY

Nabisco alerts its Brazil office via fax or phone, and employees deliver orders in person to local cashew growers. Farmers put the raw cashews on trucks, which take them to the port. The shipping company notifies Nabisco when the cashews set sail.



THE NEW WAY

There's not much difference here, only Nabisco now contacts its Brazil office via e-mail. Employees still have to contact local farmers in person.

STEP 3

THE OLD WAY

When the cashews arrive in Jacksonville, Fla., a freight forwarder handles the paperwork needed to clear the shipment through customs and scours for a truck to deliver them to Nabisco plants. The truck may travel only half-full and have no cargo on the return trip, making it costly to Nabisco.

products en route or get updates. That data gap can delay deliveries and potentially cost retailers and manufacturers millions of dollars in lost sales or wasted resources.

The Web opens up new channels of communication so companies can anticipate problems or shortages and respond quickly. This holiday season, the smart dot-coms will be using sophisticated software to link their Web sites with warehouses. EToys,

would pick and pack a toy. EToys had hired Fingerhut Business Services to handle its deliveries, and that added a step to the process: The order would go to eToys and then have to be placed in Fingerhut's processing system, along with orders from other clients. Because of that setup, eToys struggled to meet the holiday surge in volume. And that's why it took the whole process in-house this year.

The Web helps companies anticipate problems and respond quickly

For example, one, has spent \$43 million to set up its own distribution network. After a customer clicks the buy button, the order reaches the eToys warehouse within two hours. Those couple of hours allow for a fraud check and for a customer to cancel the order. What a change from last year, when it took 24 hours for an eToys order to get to the warehouse floor where a worker

Other dot-coms hope they've done enough trouble-shooting to avoid those mishaps. Kmart Corp.'s BlueLight.com is tackling its first season online with SubmitOrder.com Inc., a new fulfillment company in Dublin, Ohio. When a customer clicks on the site to order a Razor scooter, that order goes immediately to SubmitOrder. Within an hour, the order moves

to a picker to pull the scooter off a shelf and send it on its way to a UPS truck. Also every hour, SubmitOrder's computers send an update to BlueLight so it knows what's in the warehouse and can either replenish an item or yank it off the Web site if it runs out.

This season, many e-tailers have picked the logistics help they expect will be able to respond in a flash to spikes in demand. This year, Bluefly, for example, switched to National Catalog Corp. in Virginia because it agreed to do whatever is necessary to ship orders in one day. National Catalog added a second shift of workers and allowed Bluefly to place employees at its warehouse to monitor and help manage the process. "It's very important for us in an age when everything is expected to happen instantaneously to be able to transmit that order, have a pick-ticket printed, have a worker go find it, and ship it out the same day," says Morris. Of the 133,582 orders shipped in the second quarter,

The Internet is changing the face of logistics, speeding up how companies communicate with suppliers and move goods. Here is an example of how the Net is overhauling the way Nabisco and Wegmans Food Markets do business.



90% went out the same day, he says.

The logistics problems are just as complex for old-line companies—and the potential rewards for harnessing the Web are just as alluring. For them, logistics is no longer simply a matter of getting from Point A to Point B. It's now about wiring every point in the supply chain—the sales office, manufacturing plant, warehouse, and the truckers. The Web allows everyone in the chain to share information and coordinate their movements simultaneously, making quick adjustments possible without a snafu (page EB120).

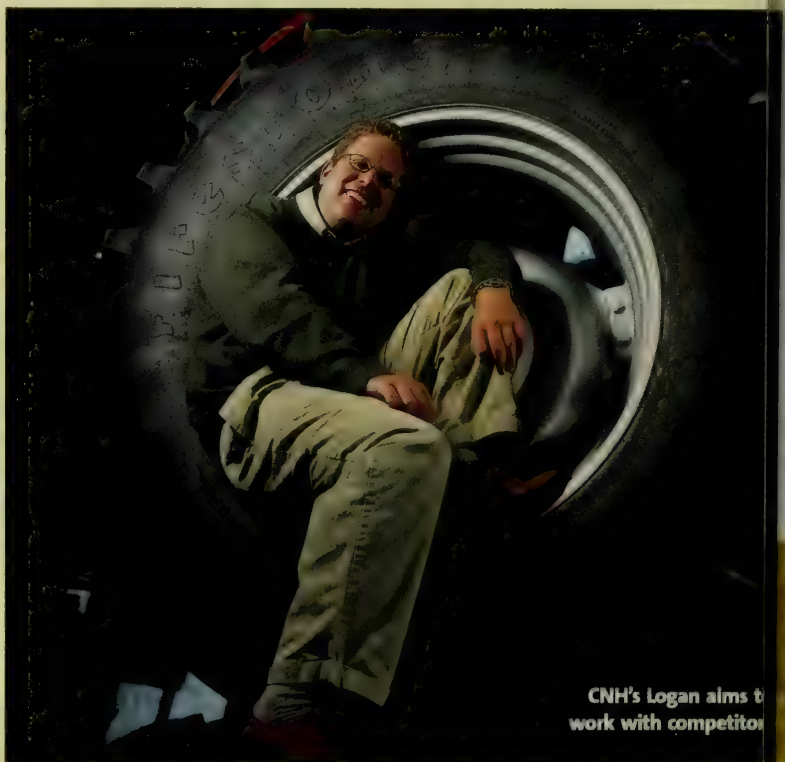
Better collaboration. For Ace Hardware in Oak Brook, Ill., the savings are pouring in. The company persuaded its retailers and suppliers to feed forecasts and orders into an online system. With everyone hooked to the Net, suppliers might respond to an order by sending an e-mail suggesting that Ace order 210 cases of wrenches rather than 200 because the larger amount means a full pallet and a lower price. That saves time at the warehouse because the supplier doesn't have to break up a pallet, pull out 10 cases, then shrink-wrap the short pallet again for storage. At the delivery site, there's less chance for loose cases to be lost. That saves Ace the trouble of redoing the paperwork so it's not charged for the lost or misplaced items. The result of all this: Ace's transportation costs are down 18%, and warehouse costs have been slashed 28%.

Better collaboration means customers can get what they want when they want it. Subaru of America used to supply cars to dealerships based on past sales. But that tactic didn't take into account that a dealer may have sold a lot of black cars because that's all the dealer had to offer to begin

In the latest advance in logistics, some companies are sharing transportation information and resources with other, unrelated companies. Companies share trucks, in some cases, with others shipping goods in the same direction, or use somebody else's truck on a return trip. Why share? For many manufacturers, transportation costs run up to 6% of revenue on average

more quickly. Sorel says he could save up to two weeks on deliveries.

This collaboration won't be easy, though. Companies may not be able to overcome incompatibilities in their computer systems and production schedules. A bigger hurdle: Competitors may want to play along. That's the dilemma for CNH Global, a maker of farm and construction



and make up the largest chunk of logistics expenses. So there are lots of potential savings. General Mills Inc., for instance, has been testing an online transportation exchange since July and expects to save

construction equipment based in Racine, Wis. It asked several companies in the Midwest—Deere, Caterpillar, and Komatsu—combine equipment bound for over 100 miles on a nonstop train from Chicago to Baltimore. The potential savings: up to 8 days of travel time. But Deere is holding back. "I don't think it can achieve savings by handling logistics on its own. 'I don't want to put my hand to my competitors if I can get there faster, smarter, and with better quality,'" says Jay Fortenberry, director of worldwide logistics.

Sooner or later, though, as more companies learn to share via the Net, the competitive advantage may shift to team players. And loners could end up being derailed.

Logistics helps companies provide what customers want when they want it

with. By letting the dealers key in their preferences in models, colors, and even accessories, Subaru can deliver more of what customers want. Dealers in Colorado don't end up in the dead of winter with a lot of white cars they can't sell. "It's difficult to measure the bottom-line impact," says Steve Morel, Subaru of America's director of logistics. "But when we are in the field and talking to dealers, they all say their model mix is much better than it was before."

\$800,000 in its first year by sharing a truck route with Fort James Corp., which makes paper towels and Dixie cups.

The next logical step is teaming up with competitors. Take the auto business. Once a car is unloaded from a train, it can sit for days waiting for more cars to fill a truck. Subaru's Morel says the company is talking to another carmaker that imports vehicles about sharing rail and truck space and getting cars to dealers

e.biz online

For a Q & A with Kevin Lynch, CEO of Nistevo Corp., visit ebiz.businessweek.com



Are you seeing the whole picture?

In e-business, what looks good one minute can be deadly the next.

That's where Informatica comes in. We give you instant access to all of your information no matter where it is. Delivered to you no matter where you are. So you can make informed decisions. See the whole picture now, at www.informatica.com/elunch-bwe. Or call 1-800-970-1179.

INFORMATICA
NOW YOU KNOW™



What's the best
way for customers

AVAYA
communication™

The Former Enterprise Networks Group
of Lucent Technologies

They're not just customers.
They're relationships. Give them the care
and feeding they need to grow.
Would they prefer a rep on the phone?
A transaction on the web?
Or a rep talking them through the transaction?
To have you call them back? Fax them?
Or send what they need to their PDA?
With Avaya you can do it all.
And keep the conversation going.
Visit avaya.com or call 800-784-6104.

to reach you?
Any way they want.

Communication without boundaries



by

FAITH KEENAN

One Smart Cookie

Nabisco really delivers—by sharing space in the truck with its suppliers and rivals

Bill Whitehouse runs up some hefty trucking bills. As vice-president for global procurement at Nabisco Inc., Whitehouse oversees deliveries to 80,000 buyers of 500 types of cookies—from Oreos to Chips Ahoy!—more than 10,000 candies, and hundreds of other food items. And he arranges incoming shipments of countless raw ingredients to Nabisco. Moving all the

goods costs some serious dough: more than \$200 million a year in transportation expenses.

What vexes Whitehouse is that he's paying for too many trucks that arrive at their destinations or depart half-empty. He reckons Nabisco could whack at least 10% off that bill by using the Web. That's why the 102-year-old company is leading the way in a revolutionary movement called collaborative logistics. Using the Web as a central coordination tool among producers, truckers, and retailers, companies can share trucks and warehouse space with other companies—even competitors—that are shipping to the same locations.

When it comes to using technology to collaborate, Nabisco has already shown itself to be one smart cookie. In a pilot last year, it used electronic links to share warehouses and trucks with 25 other manufacturers such as Dole and Lea & Perrins and coordinate orders with retailers.

In one test involving 8,000 orders from Lucky Stores Inc., the Southern California retailer was able to cut inventory costs by \$4.8 million—because it found that it could more closely match orders and deliveries to consumers' needs. Moreover, Lucky, acquired last year by Albertson's Inc., got lower prices on several items because suppliers could fill

their trucks instead of shipping them in part-empty trailers. Nabisco saved \$78,000 in shipping costs, and all manufacturers combined saved nearly \$900,000. Says Tom Speh, a professor of distribution at Miami University in Oxford, Ohio: "Nabisco was a forerunner."

Most of the communications in that pilot were still done on an old-fashioned, one-to-one basis, with both retailers and manufacturers sending data electronically to the warehouse. But now, Nabisco is looking to the Web to get many more

partners involved in the hopes of saving even more money.

In September, Nabisco and 10 other companies, including General Mills and Pillsbury, started testing a collaborative logistics network from Nistevo Corp., Eden Prairie, Minn. At Nistevo.com, companies post the space they need or have available and share trucks and expertise. Rules worked out in advance might say out who pays for the miles that a truck must travel to pick up cargo after it has dropped off a load. But the goal is to

involve everyone, from suppliers and truckers to retailers, sharing the savings.

At the very least, Nabisco hopes the Web system will help it schedule routes better among its own divisions. "The people bringing in raw materials and shipping out finished goods didn't know they had the opportunity to use the same truck," says Whitehouse. "They don't communicate well enough." Using Nistevo, Whitehouse hopes to fix that and realize concrete savings within a year.

He will need to move fast. Last June, Nabisco was acquired by Philip Morris Inc. That means it will have to integrate 70 more brands into its supply chain. More so, however, that's going to require the kind of collaboration that the Web can provide. •



Whitehouse: Saving lots of dough



**IF WE GOT YOU INTO
eBUSINESS ANY
FASTER YOU'D HAVE
TO STRAP YOURSELF IN.**

Now you can go from zero to eBusiness in record speed. Introducing Aspect® eBusiness Architect, the revolutionary new development tool that creates improved and integrated eCRM and eCommerce processes. By simply using a palette of graphic icons, eBusiness Architect lets you quickly generate eFlows: visual representations of your business rules that integrate your multimedia contact center, front- and back-office systems, and future applications into one, centrally managed eBusiness. All without complicated code or costly deployment. Aspect eBusiness Architect. With power like this, there's no stopping you.



ASPECT

The Starting Point for eBusiness™

**BUILD eBIZ APPS FASTER, SMARTER, CHEAPER.
GET YOUR FREE eBUSINESS ARCHITECT DEMO
TODAY. 1-888-412-7728 www.aspect.com/go/bwa**

Aspect, the Aspect logo, and the phrase "The Starting Point for eBusiness" are trademarks and/or service marks of Aspect Communications Corporation in the United States and/or other countries. © 2000 Aspect Communications Corporation.



Now there's a simpler way to manage
your customer-employee-supplier-partner-
intra-extra-Inter-cross-platform-global-
way-too-complex-digital-economy net.



It's one Net. Dive in.

You can't conquer the world of eBusiness being a lonely fish in an isolated pond. You need the freedom to connect. So your employees, partners, suppliers and customers can work together. And all their different operating systems, intranets, extranets and the Internet, can work as one Net. Securely and reliably. That's the strength of Novell's Net services software. It lets existing technology work together. And gives you the power to change your eBusiness as fast as the Net economy. So dive in at www.novell.com

Novell.

by

FAITH KEENAN

Warehouse Trouble

Delivering the goods looked like a good business. Now it's mighty crowded

Ready for the next dot-com shakeout? This one could come in the very old bricks-and-mortar world—among the so-called fulfillment companies that store and deliver the goods for online retailers. Scores of these outfits have been racing to fill their warehouses to the ceiling with items as small as a package of paintbrushes or as large as a kayak. Now, however,

looks as if some of those shelves may carry only dust.

Over the past few years, companies have been lured into the fulfillment business by the boom in online sales. Today, they see opportunity in the debacles of Christmas, 1999, when thousands of gifts ordered online didn't make it under the Christmas tree in time. Analysts figure online mer-

chants will be turning even more to fulfillment companies that have the logistical expertise necessary to deliver the goods. According to a mid-year estimate by investment bank Stephens Inc. in Little Rock, by 2005 the market for fulfillment services is projected to leap 900%, to \$10 billion.

Now it looks as if those figures may be overly optimistic. What many fulfill-

ment companies saw as a potentially lucrative business may be too crowded. Evidence of a possible glut is already showing up in prices: Fulfillment companies are charging roughly \$1.50 an order plus for each item in the order. Just a few months ago, the going rate might have been double those figures. "The market probably won't support more than

premier players," says Kit Quillen, a fulfillment analyst at Stephens. "There will be a lot of companies that also-rans out there."

There already are. Fingert Business Services Inc., ballyhooed just two years ago as a fulfillment powerhouse because of its history as a catalog company scaling back its fulfillment and sourcing business. Other casualties could come out of a list of 86 fulfillment companies compiled by Southwest Security Group Inc., a brokerage in Las Vegas. Of those, about one-third are less than two years old. Kit Case, a senior vice-president at Southwest, says they include startups such as SubmitOrder.com Inc. in Columbus, Ohio, which, according to President J. T. Kreager, has invested millions in state-of-the-art warehouses, inventory management, and customer service systems. Many others are divisions of established companies such as UPS e-Logistics, a service of United Parcel Service Inc., and JCP Logistics, which



**SubmitOrder.com's
Kreager: The upstart
has invested millions**

WE'RE HELPING SEGA GIVE MILLIONS OF GAMERS A VOICE.



WHAT CAN OUR IP VOICE INNOVATION DO FOR YOU?

Who would have thought you could talk to other gamers around the world while you play over the Internet—for free? Sega and InnoMedia did and teamed up to make it a reality. InnoMedia's unique Voice-over-Internet Protocol (VoIP) technology is helping our partners deliver new ways of communicating that others have never imagined. Whether it's real-time voice interaction between gamers or providing voice to the next generation of technology breakthroughs, InnoMedia is working with leaders in various industries to deliver future communication experiences.

Are you ready to take your product to the next level and revolutionize an industry? Find out how through our vision brochure and explore the possibilities. www.innomedia.com/vision



filling orders for department store J.C. Penney Co. and others. Even Ryder System Inc., better known for its trucking operation, offers e-fulfillment services from a few warehouses.

The timing couldn't be worse. Just as these companies are gearing up to deliver the goods, plenty of dot-coms are either shutting down or choosing to fill their own orders. On Oct. 20, cosmetics seller Eve.com announced that it was closing. It

For instance, ClickShip Direct Inc., a unit of Damark International Inc. in Minneapolis, counts BestBuy.com, the online unit of the electronics retailer, among its clients. SubmitOrder boasts BlueLight.com, Kmart's Net play, as a client and investor.

Why would retailers that already have a distribution network ask someone else to handle online orders? Because their current systems are geared to delivering cases of goods by the truckload to stores, not single

sought its business. "Demand is not making space availability at this point," says BestBuy.com chose ClickShip because it was nearby in Minneapolis, it had better terms with UPS and Federal Express and it was realistic about meeting BestBuy's tight 90-day time frame to be up and running. In the end, BestBuy didn't even miss its own deadline: It took more time than expected to hook up the company's retail outlets to allow store pick-ups and returns, so the company started shipping in June rather than in January.

Fulfillment services are facing tough times ahead. The survivors are likely to be companies with big-name retailers such as BestBuy as clients, those with already well-greased delivery systems such as UPS, and those who offer several services including a customer call center like the one operated by SubmitOrder, analysts say. "Fulfillment is rapidly becoming a commodity service," says Jupiter's Schatsky. "Many companies have to find more services to maintain margins." That may be the only way for these brick-and-mortar operations to survive another e-commerce shakeout. ●

"Fulfillment is rapidly becoming a commodity service"

joins Miadora.com, a jewelry e-tailer, and furniture site Living.com, which both closed their online doors on Sept. 22.

At the same time, there's a strong do-it-yourself movement. Bigger players such as Amazon.com Inc. have built their own distribution networks. And startups such as Fogdog.com, recently acquired by sports fulfillment house Global Sports Inc., have found creative ways to use the Internet to source directly from stores. EToys Inc. also has gone on its own, ending a contract with Fingerhut after a disastrous 1999 Christmas. The online toy seller claims Fingerhut didn't deliver on its promises, and eToys ended up filling orders. "We're controlling our own destiny," says James Leonard, director of distribution and logistics at eToys. Fingerhut and eToys are embroiled in arbitration over Fingerhut's claim that it is owed \$14.8 million for unpaid services. In September, Fingerhut filed a defamation suit against eToys CEO Edward "Toby" Lenk after he claimed in a newspaper article that his company fired Fingerhut. In the suit, Fingerhut says the parting was by mutual agreement.

In fulfillment, control is key. If a company can afford the \$20 million or more it takes to build a state-of-the-art warehouse and delivery system, it's worth it in the long run, say experts. If it runs its own show, a retailer can make sure orders get filled as soon as they're received. By sharing a system with others, companies risk getting short shrift. "If you're a smaller client, you may not get the attention you want," says David Schatsky of Jupiter Research.

Instead of zeroing in on just pure-play e-tailers, fulfillment companies are trying to fill their shelves by lining up deals with traditional retailers and their online arms.

books or turtlenecks to front doors. It's a whole different ball game, requiring faster response time and more precise packing. Many traditional companies are asking outsiders to do it, at least until they can put their own systems in place. Wal-Mart Stores Inc. is keeping Fingerhut on the payroll while it builds out its own system.

Retailers and other Web companies have plenty of fulfillment services to choose from. Connie Fuhrman, senior vice-president at BestBuy.com, says 15 companies

How to Deliver?

Established retailers are learning what e-tailers already know: Distribution centers designed to deliver truckloads of merchandise to stores don't work for a single shirt going to a home. That means either building a new online fulfillment system or hiring someone else to do it. Here are the pros and cons of both:

Build it yourself

Pros:

Control is the key. You know exactly how much your fulfillment system can deliver and that it will be dedicated solely to handling your own products.

Cons:

A state-of-the-art warehouse and delivery system starts at about \$20 million. Most companies have spent so heavily on marketing that they can't afford to make the investment.

Hire someone else

Pros:

You don't have to invest millions building your own system, and you can save even more through volume discounts that an independent fulfillment company serving many clients can negotiate with carriers like Federal Express.

Cons:

It's difficult to predict demand, so if it spikes, the fulfiller may not be able to handle your orders. It's even worse when the fulfiller's clients have peak seasons during the same time of year—Christmas.



High Performance
Mission-Critical
Internet Site Operations

Nobody Is Better Equipped To Manage High Pressure Internet Infrastructure Operations

In case you haven't noticed, your web site is about to explode. Time-to-market issues, combined with the inability to hire scarce technical talent, have a way of putting serious pressure on existing resources. Take a deep breath and relax: SiteSmith has the tools, the people and the resources to take responsibility for your web site operations. We've taken the pressure off more dot-com customers and industry leaders, than anyone else. Say the word and we'll build your site infrastructure and run your site. You won't have to worry about scalability, load balancing, site monitoring or security — so, take the pressure off yourself. For fast relief, visit www.sitesmith.com/bw.



Diss My Web Site, Please



A credo of
minimalism—
and user-testing

Jakob Nielsen believes the best design critics are users

Jakob Nielsen is feeling anxious. He sips a soda and paces like an expectant father. A series of “users,” as he likes to call them, soon will troop into the room next to the one where we are waiting here in a Seattle testing lab, visible to us through one-way mirrored glass.

They will sit in front of a computer and be asked to do simple tasks on a Web site. We will look over their shoulders, watch where they click, and listen to their comments.

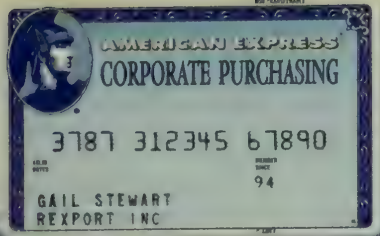
It's not exactly brain surgery. Yet this

rudimentary exercise, neglected by the majority of Web-site developers, can improve the effectiveness of a Web site 100% to 1,000%, argues Nielsen. The soft-spoken but intense Dane, 43, is considered one of the world's foremost experts in Web us-

ability. That's how well a Web site allows its users to navigate, transact business efficiently, with a minimum of sweat, scowling, and confusion. Nielsen's notion, in fact, that a Web site must be designed for Internet users who are “about as patient as a New York cabbie.”

Nielsen first became obsessed with usability at Sun Microsystems Inc., where he worked on interface design—an area he has written about widely and in which he holds 38 patents. What really stands out is that his curious mix of nerdy engineering and sensitive observer of human emotions and behavior around computers. He has turned that into a lucrative consulting business that has helped such startups as Amazon.com and Motley Fool, and large corporations, including General Electric and Hallmark Cards.

Nielsen preaches a gospel of minimalist design. Sites should be laid out simply, with clear headlines and labels, directories of links on the site, summaries of new information, and easy-to-spot search buttons. One pet peeve: Web links that straddle your browser window into opening a new window—something that you have to close to get back to the page where you started. He fumes in his new book, *Designing Web Usability: The Principles of Simplicity*, that such a technique “like the vacuum cleaner salesperson who starts a visit by emptying an ashtray on the customer's carpet.” Other design land mines: registration screens that force you to reveal personal information before you even know what



.com fort



It's knowing American Express can help you control your e-purchasing. The American Express® Corporate Purchasing Card: a secure e-purchasing tool with built-in cost controls. Establish spending limits. Designate preferred vendors. Track expenses online or off. Integrate purchasing data with e-commerce software. And cut process costs up to 95% along the way. Call 1-800-AXP-1200 or visit americanexpress.com.

do more



site has to offer, excessive use of text, and slow-loading graphics.

His design principles evolved from what we're about to do here: Test a Web design with real users. Nielsen urges Web site operators to begin by testing their early designs in this kind of structured environment, incorporate that feedback into the design, and then periodically retest to make sure the site keeps up with the fast-changing Web.

Even Nielsen's own company, the Nielsen Norman Group, doesn't always get

us. "Showtime," she says. "Oh good, good, good," Nielsen says, rubbing his hands together. A woman in her late thirties walks into the testing room and sits down. Nielsen explains that it's crucial not to ask leading questions or for users' opinions directly: "Don't ever ask anyone, 'What do you think of the navigation?' That's useless. Say, 'Here's the thing you want to do. Go try and do it.'"

The facilitator assigns tasks and asks the subject to think out loud as she moves through the site. "I find the layout a little

unlikely it will interfere with their experience." Sure enough, the next is a young man who remarks: "That is good."

This fellow's critique reminds Nielsen of one of his principles. "It's too long," the man says of a long block of text. "The 'summary' is as long as an article." Nielsen nods vigorously. "Users do not like to scroll," he says. When the design goes, summaries will be more compact.

The three users we watch over the course of several hours reinforce Nielsen's view that Web surfers are an impatient bunch. The third tester, herself a designer, gets frustrated looking for something on Nielsen's site and begins clicking away almost randomly. Frustrated, she mutters: "The way things are on the Web, I would never have waited that long to find it."

Why do so many sites fail to encourage user testing? Nielsen says hierarchy, bureaucracy, especially within large companies, are partly to blame. "The CEO says, 'I think there should be a spinning wheel' and everybody does a jackboot salute to the sir," says Nielsen. "This suck-up-to-the-boss behavior results in miserably bad Web sites." When he finally can get the brass into usability tests, "their jaws drop when they hear uncensored comments from users. Their first reaction is 'Where did you possibly find users that stupid?'" As the Net shakeout continues, one can afford to let bloated egos go away customers. ●

Design Web sites for people who are "about as patient as a New York cabbie"

design right on the first pass. That's why today we'll be trying out Nielsen's own new Web-site design. Several months prior he ran a new design by a test group, and it bombed. When given a list of tasks, users would get lost and click around, befuddled. With a self-deprecating grin, Nielsen recalls that when he first launched his site he had written on it: "The mission of the Nielsen Norman Group is simple," and then explained it in a long paragraph. "I still remember the guy [in a testing session] who said: 'If it's simple, it shouldn't take a whole paragraph to explain it.' He was absolutely right."

The door opens, and the facilitator for today's test warns us to keep our voices down so the users won't hear

bit boring," the woman says right off the bat, squinting at the screen. "Oh, this green is way too earthy, and this minty green is just yucky." When it comes to locating what she's asked to, however, she does so quickly and efficiently, and praises the organization. Nielsen is delighted: "They did not say that last time," he says.

Respecting impatience. One of the challenges of getting good design feedback is actually learning what not to pay attention to. Color is one example. "Some things vary so much by personal taste they really don't matter," explains Nielsen. "If you ask someone whether they like a color, they will instantly tell you. But it's really

Design Do's and Don'ts

Jakob Nielsen is a Web user's biggest advocate. He specializes in helping companies create sites that are simple, logical, and keep a user engaged long enough to complete a transaction.

DO's

- ▶ Good home pages make **crystal clear** what a site can do for a user. They should include a directory of the site's content, a summary of new information or promotions, and a search feature.
- ▶ Use **headlines** and **bullet points** instead of long blocks of text.
- ▶ Use as **few graphics** as possible, to speed loading.

DON'Ts

- ▶ Don't use **"splash" screens**—get users right to content.
- ▶ Don't use **pop-up windows**.
- ▶ Don't **force registration** just to see what's in your site.
- ▶ Don't use new technologies until they've been **widely adopted**.



19 out of 20 Web sites can't tell them apart.
Can yours?

Relationship Technology Solutions. They add intelligence to your Web site.

They allow you to personalize each customer interaction, not just process

Introducing Relationship Technology™ Solutions from NCR, the power to know.

data. And they help you ensure that your Web visitors get what they want,

when they want it and how they want it. That's the awesome power of a

TERADATA™ Active Data Warehouse from NCR. To customize Web

interactions based on what your customers want — not who they look like —

visit www.teradata.com today and get your TERADATA Knowledge Pack.

We give you the power to know.

DO YOU KNOW

DO YOU KNOW

DO YOU KNOW



Relationship Technology and Teradata are either trademarks or registered trademarks of NCR or its affiliated companies. ©2000 NCR Corporation. All rights reserved.



BY ROBERT D. HOF

rob_hof@ebiz.businessweek.com

Look, Ma, No Humans

More and more, e-commerce entails machines just dealing with machines

Just a few weeks ago, I argued that way too many Web site operators forget to need to forge solid relationships with people—flesh-and-blood customers and partners. But a few years from now, it's quite possible that the bulk of electronic commerce won't be conducted between people at all. Strange as it sounds, many transactions will be carried out completely by machines, from computers in

industrial sensors to software agents and household appliances.

Already, we're seeing the beginnings of a world in which computers, after just a nudge from people, have a merry old time doing business with one another. On auctioneer eBay Inc.'s Web site, for instance, you can enter a "proxy bid" that does battle automatically with other bidders up to your chosen high price, even while you sleep. Likewise, the Web exchange Arbinet Communications Inc. allows telecom companies to set loose automated buy or sell orders for excess calling time at set prices and quality.

As chip-size computers and cheap bandwidth spur constant Net connections to all manner of devices, machines could even become the prime customers online. "You have a situation where people don't have to be involved," says David Roddy, vice-president for Internet economics at the industrial trading site VerticalNet Inc. "My refrigerator can talk to my grocer about the lack of milk. My car can talk to my mechanic about a funny noise. The mailbox will tell FedEx whether it's empty or full."

I can see this going even further. Production equipment at a company's factories in various cities could have sensors connected to its resource-planning software and to its suppliers' inventory databases, as well as to e-tailers' Web sites. Once the customer clicks the "buy" button, machines could take over from there, handling purchase orders, replenishing raw materials, and ordering replacement parts for ailing factory-floor machines. Eventually, supply chains could shrink to seamless links, controlled directly by the ultimate buyer—even you and me.

In case you think this is all pie in the sky, consider what Eastman Chemical Co. is doing already. Using software from webMethods Inc., it's starting to allow purchase orders and quality reports to flow directly, with no human intervention, from its

pulp supplier, Rayonier Inc., to customer Albemarle Corp., a specialty chemicals firm. "We don't need to have human beings in the middle of routine transactions," says Fred Buehler, Eastman's director of e-business. He reckons Eastman ultimately could reduce its inventories, which totaled \$485 million last year, by as much as 15%. Eventually, he envisions telemetry devices on customer chemical-processing tanks that issue orders for needed materials directly to Eastman's computers, or to its suppliers' machines.

The reason Eastman can't go that far yet, though, points to a big obstacle to widespread machine-to-machine e-commerce: It's not the machines. It's bullheaded humans. They're still turning over key software standards such as XML, a universal language for computers to share information. And many adamantly resist

"My refrigerator can talk to my grocer"

ing down some of the walls they've built up to protect themselves from customers, suppliers, and potential competitors.

Of course, there are many jobs only people can do. We just have much more to do than the mundane tasks of making purchase orders. The roles will be at the edges of business processes, setting up the right rules, handling the occasional exception, and reaping the results, leaving the rest to the machines.

says Eastman Program Manager Bill Graham, "frees people up to do more creative things." And when you get down to it, isn't that really the point of e-commerce? ●



**WE ARE THE CHILDREN
OF THE INTERNET.
WANT TO COME OUT
AND PLAY?**

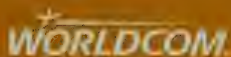
The Internet has given birth to a new generation. A generation that was born digital. A generation that's as comfortable with bits and bytes as their forefathers were with pen and paper. A generation that believes technology can change the world.

At WorldComSM, we understand those people because we *are* those people. We get a childlike thrill out of introducing companies to the wonders of global hosting, VPNs and web-enabled call centers. Which means we get to turn brick-and-mortar businesses into click-and-mortar ones.

It's a whole new playground out there. And if you ask us, the more, the merrier.

For more details, visit us at www.wcom.com/generationd.

generation d

**WORLD.COM.**



"I'll
never
lose a
customer
again."

He's either dreaming or working with CA's Intelligent CRM Suite

Customer Intelligence

Human Touch

Customer Service

Sales and Marketing**

There have never been so many ways to lose a customer. Thanks to the Internet, your customers' expectations have never been higher. Their sources of information have never been greater. And their access to your competitors has never been faster. What's more, research tells us that companies can boost profits by almost 100% just by retaining 5% more of their customers.* The first step to retaining those customers is gaining a better understanding of them.

Computer Associates' Intelligent CRM offers you a comprehensive suite of applications to understand and retain those demanding customers. From our predictive Customer Intelligence that mines the information in your database for decision-making analyses and insights to our predictive Sales and Marketing that provides you with a consolidated view of all customer activity across your business through personalized portals: CA's Intelligent CRM Suite is unique in the industry.

Furthermore, our 3-D visualization technologies bring information and analyses to life and give customers, staff, and suppliers the opportunity to perceive it in all its many dimensions rather than simply view it. Whether you begin with a single application or choose the entire solution, it's powered by Jasmine® ii, CA's eBusiness platform. So it seamlessly integrates with your existing systems and applications to leverage your investment, regardless of underlying technologies.

To find out more about how Computer Associates can help you get closer to your customer and empower your staff, visit www.ca.com/solutions/crm.htm or call 1-800-225-5224. Don't wait too long, your competitors are reading this too.

©2000 Computer Associates International, Inc., Islandia, NY 11749. All trademarks, trade names, service marks and logos referenced herein belong to their respective companies. *Harvard Business Review, Sept.-Oct. 1990, Frederick F. Reichheld & Earl Sasser, Jr., Zero Defections: Quality Comes to Services.

**Provided through a partnership with eWare.

eWare

**COMPUTER
ASSOCIATES**
Software superior by design.

COMMENTARY

By Jeff Green

HOW TO GET GREEN CARS ON THE ROAD

Dave and Linda Miller wouldn't own their \$21,500 natural gas-fueled Honda Civic if it wasn't for aggressive incentives in their home state of Arizona. The program cut the price to about \$7,000. Now that the Mesa couple has the vehicle in the garage, they're only paying about 63¢ a gallon for fuel. And Linda says her commute to Phoenix has shrunk from more than 60 minutes down to 40, thanks to rules that usher alternative-fuel vehicles into high-occupancy lanes regardless of the number of passengers.

Unfortunately, the Arizona law that introduced the Millers to the natural gas Civic was chock-full of loopholes. What was intended to be a \$3 million jump start for alternative vehicles turned into a \$420 million boondoggle. Opportunistic consumers took advantage of the incentives to purchase at a discount big sport-utility vehicles that burn either gasoline or alternative fuels. Then they continued to run their new SUVs on ordinary gasoline. On Oct. 20, the Arizona legislature put the program on hold.

Looking at Arizona's debacle, other states may choose to junk their own budding incentives for green cars. That would be a pity. If large numbers of urban drivers could fill their tanks with natural gas, propane, and other clean fuels, city dwellers could start filling their lungs with something other than gray grime. But nature-loving doesn't come naturally. Market research shows that drivers buy cars on price—and save their planetary concerns for the opinion polls.

FEW TAKERS. At present, more than 33 states and the federal government are trying to figure out ways to get people to switch to green vehicles, including cars using technology such as fuel cells that reduce gasoline consumption. But so far, the number of such vehicles comes to a pitiful 430,219, or about 0.21% of the 209 million vehicles on U.S. roads.

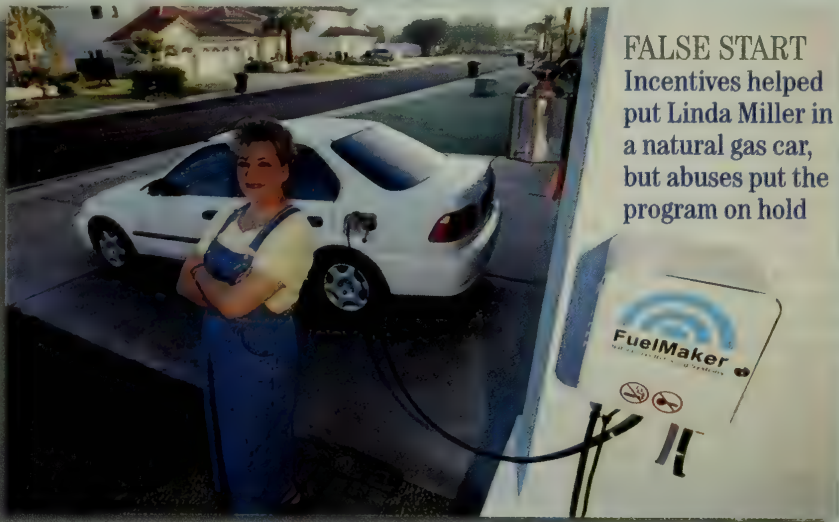
Price is part of what keeps those

numbers so low. Alternative-fuel cars cost \$3,000-\$5,000 more than gasoline burners. And unlike Arizona, most states with incentive programs cover just part of the cost of the new technology. So for now, most of the buyers are either government agencies or large private fleets that are required to buy the vehicles. Without lush incentives, it will take years to woo mass-market consumers, says Rich Kolodziej, president of the Natural Gas Vehicle Coalition.

Up until now, most of the legisla-

which attracted small numbers of consumers to alternative-fuel vehicles before any tax incentives were available, is now urging renewed government efforts. "The fastest way to make a real impact is to get more of these vehicles on the road. That takes incentives," says Laura Kaiser, environmental strategy manager for Toyota Motor Sales U.S.A. Inc.

HYBRIDS COMING. That next level remains a big leap. In Washington, a recent round of "alt fuel" incentive proposals died in committee. Lawmakers



tion has been designed to convert vehicles such as buses and delivery vans, which are driven far more miles than passenger cars and thus use more fuel. Many advocates of alternative fuel applaud this focus on so-called fleet vehicles. High concentrations of such vehicles encourage the spread of fueling stations more effectively than a smattering of consumers sprinkled through the suburbs, Kolodziej says. Also, fleet customers respond to incentives because fuel savings are a priority with them.

Nevertheless, fleet customers are unlikely to spark consumer trends. "We need ways to nudge people away from gas-guzzlers," says Michelle Robinson, transportation advocate for the Union of Concerned Scientists. Even Toyota Motor Corp.,

are expected to revisit the issue in the next session. Meanwhile, the pendulum clearly has shifted from promoting fleet vehicles to encouraging consumers, says one legislative staffer.

Auto makers hope to encourage incentives by taking action. Daimler-Chrysler says that starting in 2003, it may start producing, yearly, 30,000 "hybrid" Durango SUVs, which boost fuel efficiency by using a small electric motor to assist the gas-burning engine. Other auto makers have their own hybrids in the pipeline. That's great news for the planet. But if the number is going to grow, more people like the Millers must be given an excuse to take the first plunge.

Green covers the auto industry in Detroit.



GOOD-BYE TO PUMPED-UP PROFITS?

Companies will be hard-pressed to match even their third-quarter earnings performance

Is Corporate America's turbocharged profit machine running out of gas? Judging by the third-quarter performance of most companies, the question almost seems farcical: Thanks to strong showings by energy, semiconductor, and pharmaceutical companies, among others, the 900 on BUSINESS

WEEK's Corporate Scoreboard were able to post a collective 18% rise in third-quarter profits from the same period the year before. Sales for the period rose 17%.

But lurking behind those pumped-up profit reports are ominous warnings from giants such as IBM and WorldCom

Inc. about their continuing ability to sustain the double-digit gains to which investors have become accustomed. Already, the spike in energy costs, combined with higher borrowing costs slowing domestic economy, and a plunging euro, are creating new headwinds that are likely to buffet Corporate

Winners and Losers in Quarterly Profits

INDUSTRIES

LEADERS

PERCENTAGE CHANGE FROM
1999's THIRD QUARTER

FOOD RETAILING	206%
PETROLEUM SERVICES	139
DRUGS & RESEARCH	137
SEMICONDUCTORS	119
COAL, OIL & GAS	94
ALUMINUM	83
CHEMICALS	80
SPECIAL MACHINERY	78
GAS UTILITIES	60
ENTERTAINMENT	60
INSTRUMENTS	54
TELEPHONE COMPANIES	47
BANKS - WEST & SOUTHWEST	46
RAILROADS	44
COMPUTERS & PERIPHERALS	41

LAGGARDS

PERCENTAGE CHANGE FROM
1999's THIRD QUARTER

TEXTILES	LOSS
GLASS CONTAINERS	LOSS
DRUG DISTRIBUTION	LOSS
STEEL	LOSS
TIRE & RUBBER	-88%
ELECTRONICS	-76
FOREST PRODUCTS	-69
AUTO PARTS & EQUIPMENT	-50
MISCELLANEOUS SERVICES	-42
COMPUTER SOFTWARE & SVCS.	-34
AIRLINES	-27
PUBLISHING	-26
TRANSPORTATION SERVICES	-15
CARS & TRUCKS	-14
BANKS—SOUTH & SOUTHEAST	-14

ALL-INDUSTRY AVERAGE: +18%

COMPANIES

WHO MADE THE MOST

MILLIONS OF
DOLLARS

EXXON MOBIL	\$4,490
GENERAL ELECTRIC	3,180
CITIGROUP	3,088
SBC COMMUNICATIONS	2,999
VERIZON COMMUNICATIONS	2,644
MICROSOFT*	2,581
INTEL	2,509
PHILIP MORRIS	2,319
IBM	1,963
TYCO INTERNATIONAL***	1,910
MERCK	1,836
BANK OF AMERICA	1,829
WAL-MART STORES**	1,596
CHEVRON	1,531
AIG	1,386

WHO LOST THE MOST

MILLIONS OF
DOLLARS

JDS UNIPHASE*	-\$1,017
I2 TECHNOLOGIES	-756
LOCKHEED MARTIN	-704
PSINET	-685
CMGI***	-634
BERGEN BRUNSWIG***	-545
AVAYA***	-543
BURLINGTON INDUSTRIES***	-524
OWENS-ILLINOIS	-449
KMART**	-448
MARCHFIRST	-437
CONSECO	-427
RITE AID**	-425
SPRINT PCS GROUP	-390
LEVEL 3 COMMUNICATIONS	-351

* FISCAL FIRST QUARTER

** FISCAL SECOND QUARTER

*** FISCAL FOURTH QUARTER

DATA: COMPUSTAT; PROVIDED BY STANDARD & POOR'S INSTITUTIONAL MARKET SERVICES



merica's sales and earnings performance for quarters to come.

These new threats haven't been lost on Wall Street, where analysts have been feverishly marking down fourth-quarter estimates for the bellwether companies in the Standard & Poor's 500-stock index. The confident 15.6% growth projected for fourth-quarter earnings as of early October has given way today to a far more cautious 11.7%. That pales next to the 21% growth in the same period last year. Some of the biggest assessments have come in the technology sector, which led to October's asdaq stock swoon. "There's a deceleration going on in earnings expectations," notes Edward E. Yardeni, chief investment strategist for Deutsche Bank Securities.

The outlook for next year is even more sobering. Analysts expect that the S&P group's profit growth for all of 2001 will slow to 12.9%—and that could be revised later into the low single digits, predicts Charles L. Hill, director of research at First Call/Thomson Financial. That compares with full-year growth of 19% last year, and a projected 19% this year. "The risk we could have a hard landing has come up significantly in the last month or so," Hill says.

DOUBLE TEAM. Blame it on a double whammy of higher energy costs and the higher rate hikes by the Federal Reserve that are only now working their way through the economy. That combination is likely to slow U.S. growth from this year's 5%-plus rate to 3% in 2001, says Joshua Shapiro, chief U.S. economist at Schroder Investment Management. The deceleration will have an outsized effect on corporate profits—slashing the increase for all public and private companies to as little as 2.5% next year, by Shapiro's estimates. "It won't take much in the way of an economic slowdown to trigger a problem with profits," he says.

To be sure, Corporate America has

proven the naysayers wrong before. It was only two years ago that the 900 scoreboard corporations, whacked by the Asian economic collapse, turned in a mere 2% profit increase, and some experts were predicting sustained sluggishness. Thanks to strong investments in computers and other productivity enhancers, restrained wage growth, and a booming U.S. economy, corporations sprang right back. Now, though, economists believe that a similar performance will be tougher to pull off. Labor costs are climbing sharply as companies remain unable to raise prices yet continue to bid for workers in a tight labor market. "We're seeing a very dramatic acceleration in wage costs," says Kenneth J. Matheny, senior economist at St. Louis-based Macroeconomic Advisers LLC (chart, page 93).

To their credit, many sectors booked solid third-quarter performances in the face of these growing obstacles. Energy companies rode the OPEC-orchestrated hike in global oil prices to nearly double their profits. Exxon Mobil Corp. recorded the biggest overall profit figure of our 900 scoreboard companies and the biggest quarterly profit in U.S. history, \$4.5 billion, for a gain of 105%.

General Electric Co. produced the second-largest profit total of the group, \$3.2 billion, marking a steady 20% gain from the year-earlier period. That was off impressive double-digit profit growth in six of the company's seven industrial businesses, including its power-turbine and medical-equipment units. GE also bucked a weak market in plastics and reaped a bounty of Olympic and election-year advertising at NBC.

Shortages of key electronic components pushed up profits at semiconduc-

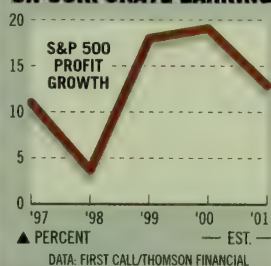
tor makers by 119%, as customers scrambled for chips used in everything from cell phones to the new Sony PlayStation 2 videogame machine. The industry's turnaround was illustrated by Micron Technology Inc., which reversed last year's \$17 million third-quarter loss with a \$727 million gain. Drugmakers' 137% earnings gain for the period was helped greatly by comparisons with the previous year, when American Home Products Corp. reported a huge \$2.6 billion loss because of a charge to settle lawsuits over the diet drug fenfluramine. Still, some of the biggest pharmaceutical houses racked up impressive gains off the strength of their blockbuster drugs: Merck & Co. reported income of \$1.8 billion, up 19%, partly on an 18% jump in sales of Zocor, its cholesterol-lowering

drug. And Pfizer Inc. said profits jumped 23%, to \$1.4 billion, as sales of its own cholesterol product, Lipitor, rose 22% in the quarter.

Even some companies buffeted by the collapsing euro were able to wring out higher profits. IBM, for instance, managed to hold down overall expenses, which fell to 18% of revenues during the first nine months

of 2000, from 19.5% the year before, for a savings of \$1 billion, according to Toni Sacconaghi, a Sanford C. Bernstein analyst. As a result, Big Blue was able to boost its profits by 11%, to \$2 billion in the third quarter, despite heavy exposure to the declining European currency that helped slow revenue growth nearly by half, from 5% to 3%. But for all the company's success at what Chief Financial Officer John Joyce calls "basic blocking and tackling," he is concerned that the euro's continued swoon could further erode IBM's bottom line: "The impact in the fourth may be larger due to

HITTING THE BRAKES ON CORPORATE EARNINGS



Hard times are at hand in the telecom industry, where new players have put pressure on price

the euro and the difficulty of hedging."

Whether the profits machine keeps humming along or screeches to a halt depends largely on the tech sector, which has generated as much as one-third of economic growth over the past several years. Despite an impressive surge in profits for the tech-sector companies in the S&P 500 during the July-to-September stretch, analysts are frantically lowering their outlooks for the traditionally strong fourth quarter: According to Hill, the consensus forecast for the group has dropped from the 29% increase expected in early October to 17%. And that's way off the 40% year-over-year profit growth that tech companies showed in the third quarter. Looking forward, profit gains at tech companies are now expected to slow to 19% in 2001, vs. the 32% increase forecast for this year.

What's darkening the profit outlook for tech? For PC makers, it's a fear that they've saturated the U.S. market, coupled with the dollar's rise against the euro, which is crimping demand in key

areas overseas. And as the froth evaporates from the Internet sector, and many struggling Web startups run out of cash, several analysts see a slowdown in demand for networking equipment, software, and other services.

FIERCE COMPETITION. Signs of a PC slowdown grow bigger by the day. On Nov. 2, analyst Eric Ross of brokerage Thomas Weisel Partners LLC issued a report projecting sales of 130 million units for this year, up 16%. That compares with his earlier estimate of 20% unit growth. Still, many analysts and tech executives remain optimistic about their prospects. Dell Computer Corp., after increasing its profits an average 68% in each of the past five years, still is expected to boost its bottom line 36% in the fiscal year ending this January, and another 27% the year after that. Over at Gateway Inc., one of Dell's leading PC rivals, Chief Executive Jeffrey Weitzen, believes that the computer market will still grow in the mid-teens and that Gateway will expand even faster by generating new busi-

ness from warranties and Internet services. "I don't believe this is a doom-and-gloom, going-nowhere market at all," says Weitzen, whose company reported a 35% surge in third-quarter earnings.

In telecom, it's harder to deny that hard times are at hand. Established players are wrestling with fierce competition from a bevy of new, unrelated entrants. The outlook for construction of networks and other equipment is mixed, but Merrill Lynch & Co. this month projected a 5% decline in 2001 capital expenditures. While the industry as a whole suffered a big drop in third-quarter profits, First Call is now predicting a 19% profit plunge in the fourth quarter. Among those warning of trouble ahead is WorldCom (page EB 30). The telecom giant reported a 12% drop in third-quarter profits, and it is increasingly challenged by consumers shifting to wireless technologies, a free fall in long-distance rates to as little as 5¢ a minute, and unfavorable exchange rates. "We're facing our share of industry challenges, including pricing pressures," sighs WorldCom's Bernard J. Ebbers. Goldman, Sachs & Co. analyst Frank Governali expects WorldCom's fourth-quarter profits to drop 43%. He predicts a further 9% drop in 2001.

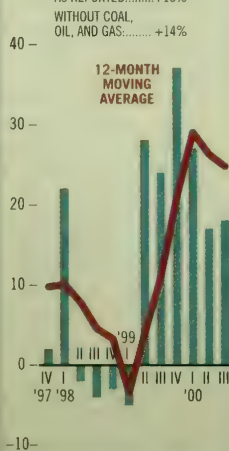
Any turmoil in the telecom industry is certain to ripple through other sectors. Already, analysts at Morgan Stanley Dean Witter are predicting a slowdown in the red-hot optical communications market, given that AT&T, WorldCom, and the other telecom behemoths are expected to trim their capital spending. Networking companies remain at least outwardly optimistic that any cutbacks by the major players will be more than offset by new orders from myriad new entrants. "We cannot see and do not find meaningful evidence of an industry slowdown," says JDS Uniphase Corp. President Jay Allen. His company chalked up the biggest single loss of the third quarter—\$111 million, compared with a \$114 million profit the previous year. But after excluding merger-related charges, payroll taxes on stock-option exercises, and some investment income, JDS said it would have reported net income of \$177 million, or nearly triple its year-earlier figure.

A Spotlight On Third-Quarter Profits

AFTERTAX PROFITS QUARTER BY QUARTER

PERCENT CHANGE FROM
SAME PERIOD OF PRECEDING
YEAR, ALL INDUSTRIES

**BREAKING DOWN
THE LATEST QUARTER**
AS REPORTED:.....+18%
WITHOUT COAL,
OIL, AND GAS:.....+14%

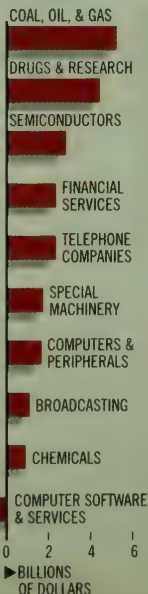


12-MONTH
MOVING
AVERAGE

INDUSTRIES WITH THE BIGGEST DOLLAR CHANGE IN THE QUARTER

After the jitters caused by earnings pre-announcements, the actual results come as a relief. Profits were up 18%, on a 17% revenue gain. That's the sixth straight quarter in which sales have increased by double digits. No surprise, the oil companies did a lot of the heavy lifting, with profits at Exxon Mobil, Chevron, and Texaco all at least 100% higher than a year before. The drug companies were helped by American Home Products and Genentech coming back from losses a year ago to make money this quarter. For semiconductor makers, strong results at Intel (+72%) and Texas Instruments (+69%) helped lead a 119% earnings jump, dampened somewhat by the billion-dollar loss at JDS Uniphase. But the drumbeats have already started for the fourth quarter. How about a dash of anxiety to go with that eggnog?

CHANGE IN AFTERTAX
PROFITS FROM 1999



DATA: COMPUSTAT, PROVIDED BY STANDARD & POOR'S INSTITUTIONAL MARKET SERVICES

the same basis. And it booked third-quarter revenues of \$786 million, compared with \$230 million in the same period last year.

Telecom's woes also have implications for Wall Street. With its booming capital programs, the industry accounts for nearly one-third of all securities in the issuing pipeline. Goldman, Sachs analyst Richard K. Strauss recently cut his fourth-quarter earnings estimates for several bellwether brokers—including Lehman Brothers, by 12%, to \$1.20 a share, Morgan Stanley Dean Witter, by 8%, to \$1.20 a share, and Merrill Lynch, by 7%, to 80¢ a share—after citing declines in investment banking and trading revenues that could lead to lower earnings. Stock and bond deals in the five weeks through Nov. 7, for instance, dropped about 14%



in dollar terms, to \$142.7 billion, according to Thomson Financial Securities Data. "It's clear there's not enough time to save the fourth quarter," says Strauss. "In the current environment, deals just aren't getting done." For 2001, Strauss maintains that the major brokerages and asset-management firms will record an 8% hike in earnings.

After a couple of years of heady profit growth, it's inevitable that the laws of gravity would take over eventually. Corporate America is almost certain to find the climb more difficult next year. Semiconductor companies, for instance, have responded to their prosperity by spending heavily on new factories, which has raised fears that a glut of new capacity will force companies to cut prices and lower their profits. And drugmakers face a number of key patent expirations in 2001. That doesn't mean the earnings party is over. But it may be time to check the medicine cabinet to make sure it's stocked with plenty of aspirin.

By Dean Foust in Atlanta, with David Rocks in New York, Andy Reinhardt in San Mateo, and bureau reports

BIGGER PAYROLL BILL: NOT AS SCARY AS IT SEEMS

Labor costs are by far the largest item on the typical corporate income statement. On average, compensation accounts for two-thirds of a company's expenses, and labor costs in the third quarter grew 4.6% from the previous year, the fastest pace in a decade. Looking out to 2001, will this behemoth start to beat up on profits?

On the surface, the data look scary. Even if economic growth in 2001 slows to 3%, from the expected 5% for this year, labor expenses should bulk up further in the coming year for three reasons. First, growth may not cool enough to loosen up the job markets, so skilled workers will still command big pay raises. Second, higher inflation this year, thanks to pricier oil, will bump up cost-of-living adjustments in 2001. Finally, fatter raises blow up the cost of many benefits such as paid vacations. Total wage, salary, and benefit compensation is expected to rise an additional 5% or so over the next year (chart). And with revenues slowing along with the economy, you'd think the higher payroll tab would squeeze corporate earnings like a vise next year.

TO THE RESCUE. Think again, say economists. Productivity should come to the rescue. As long as workers increase their output during each hour worked, companies can handle bigger wage gains without taking a hit on profits. In the third quarter, for instance, productivity was up 4.9%

from the year before. That kept unit labor costs—the cost of producing each unit of product—practically flat.

But slower output next year means that productivity will cool as well, probably to 3% or so, say many economists. If so, can unit costs remain so tame? Stuart Hoffman, chief economist at PNC Bank Corp., thinks so. He says productivity gains of 3%

service industries, such as retailing, entertainment, and food service.

In addition to better productivity, companies may get relief next year from nonlabor costs. A slowdown in Europe should curb demand for materials. And a cooler U.S. economy means the Federal Reserve won't raise short-term interest rates over the next few months. As a result,

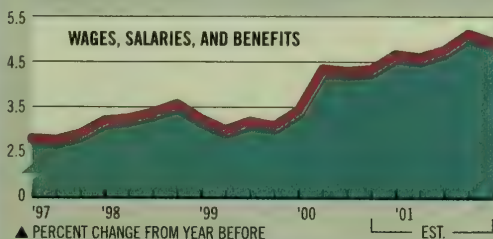
Hoffman says, "oil, commodities, interest, and maybe even rent could all grow more slowly next year. That will offset labor-cost gains."

The danger, from a corporate-cost standpoint, is that the U.S. economy will not maintain its current soft-landing pace. If growth picks up, the job markets will tighten further, lifting pay growth far above productivity. Conversely, if demand slows too much, revenues will plummet before companies can adjust their cost structures. Either way, profits could swoon.

Most economists, though, expect the economy to keep moving at a steady pace. And as long as productivity tools right along, labor costs may get brawnier, but they shouldn't pummel profits.

By Kathleen Madigan in New York

LABOR COSTS ARE HEADING EVER HIGHER



▲ PERCENT CHANGE FROM YEAR BEFORE
DATA: LABOR DEPT., STANDARD & POOR'S DRI

are still enough to offset most of the expected rise in labor costs. "Labor costs may cause a little squeeze, but not a bear hug," he says.

Of course, productivity is not surging across all industries. Efficiency gains are largest at manufacturers, especially those making computers and related equipment. Productivity increases are harder to come by at

Next year, "labor costs may cause a little squeeze, but not a bear hug," says one economist

Third Quarter 2000

CORPORATE SCOREBOARD

Glossary

SALES: Includes all sales and other operating revenues. For banks, includes all operating revenues.

PROFITS: Net income before extraordinary items. For banks,

profits are net income after security gains or losses.

MARGINS: Net income from continuing operations before extraordinary items as percent of sales.

RETURN ON COMMON EQUITY: Ratio of net income available

for common stockholders (most recent 12 months) to latest available common equity, which includes common stock, capital surplus, and retained earnings.

PRICE-EARNINGS RATIO: Based on Nov. 2, 2000, common-

stock price and corporate earnings from continuing operations before extraordinary items for most recent 12-month period
EARNINGS PER SHARE: For most recent 12-month period Includes all common-stock equivalents.

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 11-2	12 MONTH EARNINGS PER SHARE
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
ALL-INDUSTRY COMPOSITE	1943837.1	17	5562955.5	16	126179.7	18	375174.7	20	6.5	6.4	15.7	27	1.6
1 AEROSPACE & DEFENSE													
INDUSTRY COMPOSITE	35132.6	-2	107046.3	-3	1109.7	15	4291.8	-6	3.2	2.7	12.6	25	2.2
BOEING BA	11877.0	-11	36628.0	-14	609.0	28	1647.0	0	5.1	3.6	19.0	25	2.6
GENERAL DYNAMICS GD	2502.0	13	7665.0	22	294.0	60	682.0	0	11.8	8.3	26.5	16	4.3
GOODRICH (B.F.) GR	1378.2	3	4137.3	-2	79.9	NM	247.7	140	5.8	NM	27.1	14	2.9
LOCKHEED MARTIN LMT	5960.0	-3	17734.0	-4	-704.0	NM	-608.0	NM	NM	3.5	-4.9	NM	-0.7
NEWPORT NEWS SHIPBUILDING NNS	493.0	9	1494.0	13	21.0	5	66.0	-10	4.3	4.4	34.4	18	2.7
NORTHROP GRUMMAN NOC	1731.0	-4	5389.0	-1	150.0	29	481.0	44	8.7	6.4	16.3	9	8.8
PRECISION CASTPARTS PCP (9)	566.4	58	1668.0	52	30.8	32	86.1	17	5.4	6.5	12.4	20	1.9
RAYTHEON RTN.B	4160.0	1	12515.0	-4	133.0	NM	308.0	-28	3.2	NM	3.5	32	1.1
UNITED TECHNOLOGIES UTX	6465.0**	6	19816.0	13	496.0	451	1382.0	76	7.7	1.5	18.9	24	2.8
2 AUTOMOTIVE													
INDUSTRY COMPOSITE	115436.8	2	373830.0	7	2376.7	-27	12290.0	-9	2.1	2.9	21.6	7	4.3
(A) CARS & TRUCKS													
GROUP COMPOSITE	86716.3	3	279456.7	7	1920.7	-14	9380.9	-7	2.2	2.7	24.5	6	5.5
FORD MOTOR F	40064.0	7	127477.0	9	888.0	-7	4333.0	-10	2.2	2.6	33.5	7	3.9
GENERAL MOTORS GM	42606.0**	0	138207.0	6	829.0	-5	4363.0	-2	1.9	2.0	18.8	6	9.2
NAVISTAR INTERNATIONAL NAV (2)	1913.0	3	6445.0	7	96.0	-62	264.0	-36	5.0	13.7	28.4	5	6.3
OSHKOSH TRUCK OTRKB (3)	358.0	14	1080.2	15	14.6	44	41.8	53	4.1	3.2	16.1	14	3.0
PACCAR PCAR	1775.3	-22	6247.5	-7	93.1	-36	379.1	-6	5.2	6.4	24.8	6	7.1
(B) PARTS & EQUIPMENT													
GROUP COMPOSITE	24394.5	-3	81227.2	5	439.1	-50	2702.0	-15	1.8	3.5	17.5	7	2.7
AMERICAN AXLE & MFG. HOLDINGS AXL	675.5	-6	2331.1	5	24.2	-5	104.3	18	3.6	3.5	36.0	5	2.8
AUTOLIV ALV	954.8	9	3113.0	12	38.9	-10	149.2	8	4.1	4.9	11.1	11	2.0
BORGWARNER BWA	618.5	5	2049.6	15	5.3	-81	86.3	-10	0.9	4.6	11.2	8	4.6
DANA DCN	2855.0**	-9	9601.0	-3	29.0	-82	418.0	-19	1.0	5.2	14.6	8	2.7
DELPHI AUTOMOTIVE SYSTEMS DPH	6648.0	-2	22230.0	1	148.0	9	862.0	6	2.2	2.0	31.6	8	2.0
DURA AUTOMOTIVE SYSTEMS DRRA	587.1	1	1977.5	29	10.3	-9	38.2	-2	1.7	1.9	11.3	3	2.7
EATON ETN	2191.0	-2	6851.0	11	93.0	-49	369.0	-6	4.2	8.3	20.6	9	8.0
FEDERAL-MOGUL FMO	1427.9	-10	4664.8	-5	-7.6	NM	56.2	-74	NM	4.4	6.6	2	1.4
HAYES LEMMERZ INTERNATIONAL HAZ (11)	542.8	0	1703.2	9	6.5	-51	37.8	-5	1.2	2.4	23.4	6	1.8
LEAR LEA	3144.1	3	10710.6	19	38.6	-2	202.3	23	1.2	1.3	19.5	6	4.4
VISTEON VC	4404.0	-4	14938.0	3	48.0	-69	357.0	-44	1.1	3.4	12.7	5	3.4
WABASH NATIONAL WNC	345.8	-8	1057.4	-4	5.0	-52	21.6	-20	1.4	2.8	8.0	6	1.3
(C) TIRE & RUBBER													
GROUP COMPOSITE	4326.0	13	13146.1	21	16.8	-88	207.1	-32	0.4	3.8	6.3	14	1.2
COOPER TIRE & RUBBER CTB	843.6	59	2652.5	77	23.4	-32	90.4	-13	2.8	6.5	12.7	7	1.6
GOODYEAR TIRE & RUBBER GT	3482.4	6	10493.6	12	-6.6	NM	116.7	-42	NM	3.3	4.5	19	1.0

(1) Third quarter ended Aug. 31. (2) Third quarter ended July 31. (3) Fourth quarter and most recent nine months ended Sept. 30. (4) Fourth quarter and most recent nine months ended Aug. 31. (5) Fourth quarter and most recent nine months ended July 31. (6) First quarter and most recent nine months ended Sept. 30. (7) First quarter and most recent nine months ended Aug. 31. (8) First quarter and most recent nine months ended July 31. (9) Second quarter and most recent nine months ended Sept. 30. (10) Second quarter and most recent nine months ended Aug. 31. (11) Second quarter and most recent nine months ended July 31. *Sales include excise taxes. **Sales include other income. ***Sales include excise taxes and other income. †Revenues from major subsidiaries not included in consolidated sales. Earnings per share are for last 12 months, not necessarily for end of most recent fiscal year; they include all common-stock equivalents but exclude extraordinary items. NA = not available. NM = not meaningful.

DATA: COMPUSTAT, PROVIDED BY STANDARD & POOR'S INSTITUTIONAL MARKET SERVICE

COMPANY SYMBOL	SALES				PROFITS				MARGINS				RETURN ON COMMON EQUITY		PRICE-EARNINGS RATIO 11-2	12 MONTHS' EARNINGS PER SHARE
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %	12 MONTHS ENDING 9-30					
BANKS																
INDUSTRY COMPOSITE	92723.0	14	270687.9	13	11492.7	-8	31786.4	-15	12.4	15.4	15.6	17	2.43			
A) BANKS - EAST																
GROUP COMPOSITE	28830.9	12	86513.2	14	3571.5	-10	11553.0	1	12.4	15.5	18.6	16	3.31			
BANK OF NEW YORK BK	1892.0**	-20	5549.0	4	363.0	-53	1057.0	-25	19.2	32.7	23.4	31	1.85			
BANKNORTH GROUP BKNG	392.6**	8	1140.1	9	60.6	8	129.4	-6	15.4	15.4	13.3	14	1.33			
CHASE MANHATTAN CMB	9476.0	18	27964.0	15	884.0	-26	3335.0	-11	9.3	14.8	17.4	12	3.89			
FLEETBOSTON FINANCIAL FBFB	5534.0	7	17435.0	18	841.0	18	2645.0	28	15.2	13.8	17.2	14	2.79			
M&T BANK MTB	498.4	12	1450.1	11	74.4	10	214.2	7	14.9	15.2	15.1	15	3.53			
MELLON FINANCIAL MEL	1486.0**	3	4457.0	-2	252.0	9	752.0	0	17.0	16.1	25.7	24	1.98			
MORGAN (J.P.) JPM	5319.0**	23	16073.0	18	514.0	16	1684.0	9	9.7	10.2	19.2	14	11.67			
PNC FINANCIAL SERVICES GROUP PNC	1901.0	12	5698.0	8	299.0	0	900.0	-2	15.7	17.6	19.6	16	4.13			
STATE STREET STT	1494.0**	25	4349.0	24	150.0	19	448.0	21	10.0	10.5	22.5	30	4.25			
SUMMIT BANCORP. SBB	837.9	19	2398.0	18	133.5	43	388.5	17	15.9	13.3	16.5	13	2.85			
B) BANKS - MIDWEST																
GROUP COMPOSITE	27102.3	14	77318.1	9	3540.1	-3	9178.8	-21	13.1	15.4	14.3	20	1.79			
BANK ONE ONE	6919.0	8	18747.0	-5	581.0	-37	1.0	NM	8.4	14.4	2.1	NM	0.35			
AMERICA CMA	1040.2**	23	3023.0	23	191.8	13	555.1	12	18.4	20.2	19.8	12	4.51			
FIFTH THIRD BANCORP FITB	1096.6	19	3170.0	19	228.0	17	626.5	14	20.8	21.1	17.2	33	1.58			
WESTSTAR FSR	1780.5	10	5174.2	8	309.0	990	933.5	54	17.4	1.8	19.4	16	1.22			
HUNTINGTON BANCSHARES HBAN	646.1	2	1901.7	3	50.5	-52	252.2	-18	7.8	16.7	16.2	10	1.47			
KEYCORP KEY	2001.0	4	6311.0	8	121.0	-55	736.0	-13	6.0	14.0	15.3	11	2.27			
MARSHALL & ISLEY MI	691.1	13	2025.2	17	51.8	-43	232.6	-12	7.5	14.9	15.0	16	2.95			
NATIONAL CITY NCC	2270.2	13	6707.1	8	330.7	-7	994.4	-6	14.6	17.7	21.9	10	2.18			
NORTHERN TRUST NTRS	923.7**	30	2614.2	28	123.3	18	359.6	20	13.3	14.7	20.5	44	1.99			
O.D. KENT FINANCIAL OK	548.6**	4	1570.1	10	81.7	38	195.4	-5	14.9	11.2	17.6	14	1.94			
U.S. BANCORP USB	2547.3	18	7362.7	19	401.3	1	1173.4	3	15.8	18.3	19.4	12	2.07			
WELLS FARGO WFC	6638.0**	22	18712.0	17	1070.0	11	3119.0	12	16.1	17.7	16.3	19	2.47			
C) BANKS - SOUTH & SOUTHEAST																
GROUP COMPOSITE	33317.2	15	96800.2	13	3892.8	-14	9848.3	-24	11.7	15.7	14.2	14	2.51			
MSOUTH BANCORPORATION ASD	813.2	-16	2820.3	1	-36.3	NM	202.6	-50	NM	13.9	5.1	41	0.35			
BANK OF AMERICA BAC	14910.0	14	43379.0	14	1829.0	-15	6132.0	3	12.3	16.5	17.5	10	4.76			
U&T BBT	1193.4	0	3719.1	8	49.3	-72	401.0	-26	4.1	14.6	14.8	22	1.46			
COMPASS BANCSHARES CBSS	443.5**	16	1278.1	15	63.0	10	179.8	7	14.2	15.0	17.7	9	1.97			
FIRST TENNESSEE NATIONAL FTN	613.8**	4	1750.4	-1	65.9	-5	160.9	-12	10.7	11.8	17.3	14	1.70			
FIRST UNION FTU	6528.0	24	18503.0	15	852.0	6	-507.0	NM	13.1	15.3	2.4	NM	0.30			
HERNIA HIB	376.9	16	1081.5	15	53.1	7	153.2	21	14.1	15.2	14.2	10	1.25			
NATIONAL COMMERCE BANCORPORATION NCBC	389.4	21	1102.7	13	-2.5	NM	121.5	-38	NM	18.6	6.6	24	0.89			
POPULAR BPOP	681.9	21	1937.5	18	71.3	11	200.6	5	10.5	11.4	15.8	15	1.90			
REGIONS FINANCIAL RGBK	971.4	12	2848.7	14	127.9	-2	399.2	1	13.2	15.1	16.6	10	2.39			
SOUTHTRUST SOTR	1009.6	17	2899.3	18	121.6	8	359.6	10	12.0	13.1	15.5	11	2.82			
UNTRUST BANKS STI	2211.4	13	6375.1	11	326.8	2	963.7	7	14.8	16.5	15.7	12	3.91			
YNOVUS FINANCIAL SNV	487.9	18	1413.3	20	64.7	12	187.9	16	13.3	14.1	19.4	25	0.89			
NHON PLANTERS UPC	796.4	12	2290.2	9	101.6	-7	305.8	-2	12.8	15.4	14.5	12	2.93			
WACHOVIA WB	1890.3	18	5402.1	17	205.3	-20	587.6	-21	10.9	16.1	14.3	13	4.10			
D) BANKS - WEST & SOUTHWEST																
GROUP COMPOSITE	3472.6	22	10056.3	26	488.3	46	1206.3	13	14.1	11.7	16.6	17	2.70			
ANCWEST BWE	391.6	17	1125.5	14	56.8	54	160.2	29	14.5	11.0	11.0	13	1.67			
PACIFIC CENTURY FINANCIAL BOH	330.5	2	987.8	2	34.6	61	81.1	-15	10.5	6.6	9.5	9	1.48			
PROVIDENT FINANCIAL PVN	1441.2	32	4274.0	52	200.7	33	437.8	12	13.9	13.8	33.0	26	4.09			
NHONBANCAL UB	809.4	16	2358.7	16	131.6	84	431.5	42	16.3	10.2	18.1	6	3.47			
WELLS BANCORPORATION ZION	499.8	23	1310.3	10	64.6	20	95.7	-37	12.9	13.2	8.1	36	1.59			
CHEMICALS																
INDUSTRY COMPOSITE	26997.8	9	83682.1	15	1943.0	80	6257.4	27	7.2	4.4	10.8	24	1.33			
ROCHE PRODUCTS & CHEMICALS APD (3)	1449.1	16	4202.7	12	218.5	78	73.6	-77	15.1	9.8	4.7	64	0.57			
ROCHE TCBT (3)	374.0	10	1023.0	8	11.0	38	69.0	38	2.9	2.4	14.0	16	1.46			
ROCHEMPTON CK	738.5	48	2310.4	77	21.6	NM	92.8	NM	2.9	NM	2.2	50	0.17			
TEC INDUSTRIES CYT	368.1	7	1108.9	5	27.8	-21	100.6	10	7.6	10.2	24.1	12	3.03			
DOW CHEMICAL DOW	5514.0**	17	16525.0	20	328.0	2	1271.0	20	5.9	6.8	16.7	14	2.26			
DUPONT DD	6445.0**	0	21952.0	11	562.0	210	2053.0	24	8.7	2.8	4.7	78	0.56			
ELSTMAN CHEMICAL EMN	1387.0**	17	3920.0	18	97.0	194	251.0	151	7.0	2.8	11.2	16	2.60			
ELRO FOE	359.7	6	1086.1	8	18.2	1	56.7	4	5.1	5.3	31.7	11	1.97			
ELLER (H.B.) FULL (1)	323.1	-3	991.5	-2	7.4	-39	34.9	18	2.3	3.6	12.4	10	3.49			
ELORGIA GULF GGC	352.7	65	1169.8	104	7.5	-46	71.7	221	2.1	6.4	74.7	5	2.94			
ELACE (W.R.) GRA	394.7	6	1144.2	5	34.1	4	92.9	13	8.6	8.8	88.7	2	2.02			
ELHEAT LAKES CHEMICAL GLK	403.1	8	1220.0	13	34.5	1	103.1	-5	8.6	9.1	14.3	13	2.50			
ELHRCULES HPC	815.0	-2	2435.0	-1	75.0	32	127.0	-16	9.2	6.9	17.8	13	1.34			
ELIC GLOBAL IGL	483.4	-7	1610.0	-13	1.8	-88	78.3	-44	0.4	2.8	-61.1	NM	-5.85			

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 11-2	12 MONTH EARNINGS PER SHARE
	3RD QUARTER 2000 \$ MIL	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
INTERNATIONAL FLAVORS & FRAGRANCES IFF	339.6	7	1078.3	-2	28.9	-41	121.6	-3	8.5	13.5	21.6	11	1.5
LUBRIZOL LZ	425.0	-2	1301.7	-1	23.3	14	85.1	-5	5.5	4.7	15.9	10	2.1
LYONDELL CHEMICAL LYO	975.0	0	3087.0	15	133.0	NM	515.0	NM	13.6	NM	38.8	4	3.8
POLYONE POL	487.8	53	1194.5	27	0.5	-96	29.1	-68	0.1	4.0	4.9	6	1.1
PRAXAIR PX	1275.0	9	3770.0	10	122.0	9	358.0	9	9.6	9.6	19.6	12	2.9
ROHM & HAAS ROH	1677.0**	6	5170.0	41	84.0	45	284.0	79	5.0	3.7	10.2	17	1.7
SOLUTIA SOI	774.0	6	2454.0	17	78.0	28	133.0	-14	10.1	8.3	800.0	8	1.6
UNION CARBIDE UK	1637.0	9	4928.0	14	29.0	-62	256.0	18	1.8	5.1	12.7	17	2.5
5 CONGLOMERATES													
INDUSTRY COMPOSITE	50965.6	12	152511.9	16	3873.0	6	12146.6	18	7.6	8.0	21.9	39	1.3
ALLEGHENY TECHNOLOGIES ATI	612.0	9	1875.7	9	42.1	101	127.1	30	6.9	3.7	13.2	12	1.6
ANIXTER INTERNATIONAL AXE	955.9	35	2606.5	33	24.0	-37	62.8	8	2.5	5.4	14.3	12	1.9
GENERAL ELECTRIC GE	32014.0**	18	94872.0	20	3180.0	20	9150.0	20	9.9	9.8	25.6	44	1.2
HONEYWELL INTERNATIONAL HON	6216.0	3	18569.0	6	282.0	-49	1405.0	-8	4.5	9.2	14.9	30	1.7
IKON OFFICE SOLUTIONS IKO (3)	1373.4	2	4114.4	2	16.8	NM	81.6	NM	1.2	NM	1.8	18	0.1
PALL PLL (5)	344.2	8	957.0	7	46.1	-8	121.7	220	13.4	15.8	19.3	18	1.1
TENNECO AUTOMOTIVE TEN	870.0	7	2700.0	9	6.0	-78	22.0	-73	0.7	3.3	-33.3	NM	-3.6
TEXTRON TXT	3134.0**	16	9593.0	15	158.0	8	495.0	9	5.0	5.4	15.6	11	4.4
TRW TRW	4053.7	-9	13094.0	6	32.0	-76	440.8	80	0.8	3.0	24.1	E	5.3
VALHI VHI	308.1	2	929.8	10	13.0	59	58.5	-19	4.2	2.7	5.5	43	0.2
VIAD VVI	429.0	9	1313.8	11	44.0	9	112.4	27	10.3	10.3	19.3	13	1.6
WHITMAN WH	655.2	-4	1886.7	21	28.9	18	69.7	145	4.4	3.6	7.3	22	0.6
6 CONSUMER PRODUCTS													
INDUSTRY COMPOSITE	84770.5	4	248751.3	5	8392.8	14	21227.1	5	9.9	9.0	29.0	25	1.8
(A) APPAREL													
GROUP COMPOSITE	9031.6	5	24487.6	7	602.1	14	1355.6	27	6.7	6.1	16.8	15	2.2
BROWN SHOE BWS (11)	418.7**	2	1169.5	2	9.2	-13	19.7	1	2.2	2.6	13.2	5	1.9
JONES APPAREL GROUP JNY	1191.5	4	3180.5	42	112.3	50	238.4	48	9.4	6.5	19.1	14	2.1
KELLWOOD KWO (11)	469.3	0	1580.0	3	6.6	-31	41.0	NM	1.4	2.0	15.4	E	2.9
LIZ CLAIBORNE LIZ	879.0	7	2350.2	10	67.1	1	145.0	2	7.6	8.1	23.0	13	3.5
NIKE NKE (7)	2636.7	5	7071.0	3	210.2	5	481.6	15	8.0	8.0	17.8	20	2.1
PHILLIPS-VAN HEUSEN PVH (11)	327.8	3	935.1	0	6.0	68	6.7	NM	1.8	1.1	9.0	14	0.8
REEBOK INTERNATIONAL RBK	787.8	-1	2242.7	-2	32.3	890	74.7	190	4.1	0.4	10.3	22	1.0
RUSSELL RML	356.9	3	891.4	6	0.5	-97	3.5	-51	0.1	5.8	0.9	NM	0.0
TIMBERLAND TBL	375.2	21	760.9	19	57.5	64	83.2	83	15.3	11.3	38.2	21	2.6
VF VFC	1588.6	8	4306.4	3	100.4	-3	261.7	-3	6.3	7.1	15.8	9	3.0
(B) APPLIANCES & HOME FURNISHINGS													
GROUP COMPOSITE	15802.7	9	49067.4	12	615.8	-4	2045.0	6	3.9	4.4	19.7	20	1.5
ARMSTRONG HOLDINGS ACK	835.6	-1	2443.8	0	72.0	16	-3.2	NM	8.6	7.3	-26.5	NM	-4.5
BED BATH & BEYOND BBBY (10)	597.0	30	1634.3	32	43.6	31	115.3	35	7.3	7.3	22.7	51	0.8
BEST BUY BBY (10)	3169.2	18	10447.5	23	76.7	32	312.7	46	2.4	2.2	25.0	29	1.4
CIRCUIT CITY GROUP CC (10)	2506.2	3	8431.5	10	55.3	-25	272.6	16	2.2	3.0	14.7	9	1.4
FURNITURE BRANDS INTERNATIONAL FBN	499.7	-3	1596.8	2	23.4	-15	84.1	2	4.7	5.4	20.3	7	2.3
HARMAN INTERNATIONAL INDUSTRIES HAR (6)	395.0	11	1265.3	10	7.2	48	52.9	37	1.8	1.4	17.8	21	2.3
KIMBALL INTERNATIONAL KBALB (6)	312.9	12	941.2	12	10.8	-6	35.5	-19	3.5	4.2	10.1	13	1.2
LA-Z-BOY LZB (6)	498.3	55	1506.3	50	13.0	-2	64.1	19	2.6	4.1	13.2	10	1.5
LEGGETT & PLATT LEG	1129.6	14	3268.8	16	68.9	-11	219.0	1	6.1	7.8	16.4	11	1.4
LINENS 'N THINGS LIN	410.4	20	1077.0	22	18.4	26	30.4	30	4.5	4.3	14.0	22	1.4
MAYTAG MYG	1056.4	-1	3256.2	0	59.5	-27	211.1	-18	5.6	7.6	99.8	9	3.3
PIER 1 IMPORTS PIR (10)	338.0**	16	1017.6	15	17.7	49	68.6	30	5.2	4.1	17.6	16	0.8
RADIOSHACK RSH	1140.4	19	3211.0	17	77.1	29	222.2	25	6.8	6.2	51.1	37	1.1
WHIRLPOOL WHR	2570.0	-5	7746.0	-1	67.0	-37	301.0	29	2.6	3.9	24.8	E	5.0
WILLIAMS-SONOMA WSM (11)	344.0	30	1224.1	27	5.1	-27	58.6	8	1.5	2.6	18.1	20	1.1
(C) BEVERAGES													
GROUP COMPOSITE	21494.0	5	60583.2	2	2525.7	26	5602.1	-2	11.8	9.9	23.1	45	1.3
ANHEUSER-BUSCH BUD	3397.8	5	9475.2	5	514.5	11	1342.5	11	15.1	14.3	40.3	26	1.0
BROWN-FORMAN BF.B (8)	410.4**	7	1320.9	4	42.6	11	149.4	10	10.4	10.0	21.2	19	3.0
COCA-COLA KO	5543.0	8	15555.0	5	1067.0	36	1935.0	22	19.3	15.3	19.2	80	0.1
COCA-COLA ENTERPRISES CCE	3868.0	1	11189.0	3	131.0	26	221.0	187	3.4	2.7	7.3	40	0.4
CONSTELLATION BRANDS STZ (10)	637.5	3	1750.3	9	26.1	24	59.5	36	4.1	3.4	16.3	10	4.1
COORS (ADOLPH) RKY	603.3	11	1681.9	8	34.5	58	97.7	22	5.7	4.0	12.0	22	2.2
PEPSI BOTTLING GROUP PBG	2125.0	4	5583.0	5	123.0	34	225.0	106	5.8	4.5	14.2	23	1.1
PEPSICO PEP	4909.0	7	14028.0	-4	587.0	21	1572.0	1	12.0	10.5	29.9	34	1.1
(D) PERSONAL CARE													
GROUP COMPOSITE	19525.6	1	57329.5	3	2075.7	8	5011.7	6	10.6	9.9	35.9	30	1.4
AVON PRODUCTS AVP	1342.7	7	4045.7	9	93.0	5	292.3	82	6.9	7.1	NM	26	1.1
CLOROX CLX (6)	985.0**	5	3172.0	5	100.0	15	331.0	108	10.2	9.2	22.7	26	1.1
COLGATE-PALMOLIVE CL	2366.5	2	6945.0	3	275.3	15	777.1	15	11.6	10.4	62.5	35	1.1

CORPORATE SCOREBOARD

COMPANY SYMBOL

SALES

PROFITS

MARGINS

RETURN ON COMMON EQUITY

PRICE-EARNINGS RATIO

12 MONTHS' EARNINGS PER SHARE

	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %	12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 11-2	12 MONTHS' EARNINGS PER SHARE
DIAL DL	411.1	-6	1193.0	-6	-26.2	NM	-3.5	NM	NM	7.0	8.9	45	0.27
ECOLAB ECL	600.7	8	1697.6	9	60.3	10	151.4	13	10.0	9.9	26.0	27	1.46
ESTEE LAUDER EL (8)	1177.7	8	3215.7	8	94.6	15	212.2	14	8.0	7.6	26.1	36	1.25
GILLETTE G	2321.0	-1	6477.0	2	350.0	-1	906.0	-1	15.1	15.1	52.3	29	1.18
PROCTER & GAMBLE PG (8)	9969.0	1	29413.0	3	1155.0	1	2424.0	-7	11.6	11.6	27.7	27	2.48
REVLON REV	351.9	-22	1170.5	-19	-26.3	NM	-78.8	NM	NM	NM	NM	NM	-4.82

(E) TOBACCO

GROUP COMPOSITE	18916.6	1	57283.5	3	2573.5	14	7212.8	10	13.6	12.1	41.3	10	3.59
PHILIP MORRIS MO	15757.0	2	47770.0	3	2319.0	16	6499.0	12	14.7	12.9	56.1	10	3.64
R.J. REYNOLDS TOBACCO HOLDINGS RJR	2119.0	6	6126.0	10	117.0	6	304.0	7	5.5	5.5	5.9	9	3.98
UNIVERSAL UVV (8)	650.8**	-17	2237.3	-14	25.0	-15	83.1	-6	3.8	3.7	21.7	8	3.72
UST UST	389.9	2	1150.2	3	112.5	-6	326.7	-7	28.9	31.3	249.1	9	2.70

CONTAINERS & PACKAGING

INDUSTRY COMPOSITE	13678.1	6	39425.5	8	42.8	-92	916.0	-27	0.3	4.1	7.2	19	0.91
--------------------	---------	---	---------	---	------	-----	-------	-----	-----	-----	-----	----	------

A) GLASS, METAL & PLASTIC

GROUP COMPOSITE	4907.9	-4	13830.7	-3	-342.2	NM	-159.9	NM	NM	4.6	-0.5	NM	-0.62
BALL BLL	961.3	-3	2740.1	-2	44.5	20	49.1	-42	4.6	3.7	10.6	16	2.12
BROWN CORK & SEAL CCK	1954.0	-9	5470.0	-8	44.0	-63	63.0	-74	2.3	5.5	-0.3	NM	-0.05
ILLINOIS OI	1430.3	0	4225.1	2	-449.2	NM	-302.0	NM	NM	5.4	-14.8	NM	-1.93
ILGAN HOLDINGS SLGN	562.3	-2	1395.5	-1	18.5	208	30.0	30	3.3	1.1	NM	6	1.71

BI PAPER

GROUP COMPOSITE	8770.2	13	25594.8	15	385.0	35	1075.9	68	4.4	3.7	10.3	14	1.40
BEMIS BMS	529.3	8	1555.2	9	32.2	3	97.2	19	6.1	6.3	16.3	11	2.44
BAILEY-WELL MWL	615.6	25	1750.1	28	6.8	-61	33.2	-30	1.1	3.6	12.7	5	0.97
PACKAGING CORP. OF AMERICA PKG	468.2	6	1397.0	12	40.0	182	98.5	905	8.5	3.2	NA	16	0.92
ACTIV PTV	730.0	-3	2185.0	1	38.0	850	106.0	89	5.2	0.5	-4.1	NM	-0.35
OTLATCH PCH	416.8	-7	1284.3	1	-6.9	NM	-11.8	NM	NM	5.1	-0.4	NM	-0.12
OCK-TENN RKT (3)	376.0	5	1117.4	11	6.1	-50	-24.5	NM	1.6	3.4	-4.1	NM	-0.46
EALED AIR SEE	746.9	4	2195.0	5	54.7	2	163.5	8	7.3	7.5	24.4	26	1.86
MURFIT-STONE CONTAINER SSCC	2233.0	25	6290.0	20	79.0	NM	150.0	NM	3.5	NM	18.9	7	1.97
ONOCO PRODUCTS SON	677.5	9	2042.5	14	38.5	-15	129.9	-5	5.7	7.3	20.4	10	1.81
EMPLE-INLAND TIN	1049.0	10	3146.0	16	43.0	-28	160.0	19	4.1	6.3	11.8	10	4.14
VESTVACO W (2)	928.0	33	2632.3	30	53.6	53	173.9	99	5.8	5.0	8.6	14	1.97

DISCOUNT & FASHION RETAILING

INDUSTRY COMPOSITE	161647.1	13	493465.6	14	4204.8	-1	16111.7	9	2.6	2.9	16.3	28	1.20
LBERTO-CULVER ACV (3)	594.5	14	1721.4	14	28.1	13	76.4	13	4.7	4.8	16.2	18	1.83
AMAZON.COM AMZN	637.9	79	1789.6	86	-240.5	NM	-866.1	NM	NM	NM	NM	NM	-3.45
MES DEPARTMENT STORES AMES (11)	872.0**	1	2979.9	17	-22.1	NM	44.9	NM	NM	NM	2.9	8	0.54
NTAYLOR STORES ANN (11)	306.3**	15	880.4	13	13.4	0	40.6	2	4.4	5.0	11.4	17	1.98
UTOZONE AZO (4)	1492.6	7	3476.2	8	105.2	7	211.5	9	7.0	7.1	27.0	14	2.00
ARNES & NOBLE BKS (11)	924.3	27	3143.2	27	-8.6	NM	90.7	-29	NM	3.2	11.7	15	1.30
J'S WHOLESALE CLUB BJ (11)	1202.2	16	3523.5	19	31.2	21	97.0	25	2.6	2.5	20.5	21	1.60
ORDERS GROUP BGP (11)	699.7	11	2473.8	13	-1.6	NM	96.0	20	NM	NM	11.8	12	1.18
RADLEES BRAD (11)	364.2**	-2	1153.0	3	4.5	22	-1.2	NM	1.2	1.0	-32.0	NM	-0.88
URLINGTON COAT FACTORY BCF (7)	415.7	11	1628.6	17	-13.5	NM	28.2	38	NM	NM	9.7	12	1.26
DW COMPUTER CENTERS CDWC	1028.1	51	2835.4	56	44.9	72	120.3	76	4.4	3.8	25.8	37	1.66
HARMING SHOPPES CHRS (11)	428.2	37	1157.9	37	26.4	19	43.9	146	6.2	7.1	11.0	13	0.49
ONSOLIDATED STORES CNS (11)	708.5	10	3278.7	10	9.3	10	142.9	21	1.3	1.3	10.4	10	1.13
OSTCO WHOLESALE COST (4)	10589.2**	20	25220.8	18	200.2	31	502.1	22	1.9	1.7	15.4	27	1.35
SK AUTO CAO (11)	374.8	24	1059.6	29	-1.5	NM	-1.9	NM	NM	4.2	7.0	10	0.34
ILLARD'S DDS (11)	1843.4**	-2	6520.8	-1	9.4	-74	81.4	-54	0.5	1.9	4.2	9	1.17
DOLLAR GENERAL DG (11)	1017.4	11	3192.2	16	39.3	-6	174.3	12	3.9	4.5	23.8	23	0.68
DOLLAR TREE STORES DLTR	377.3	26	1088.9	29	21.9	37	57.3	27	5.8	5.3	24.9	38	1.05
IMLY DOLLAR STORES FDO (4)	789.8	14	2419.1	14	30.3	12	135.4	23	3.8	3.9	21.6	20	1.00
EDERATED DEPARTMENT STORES FD (11)	4065.0**	1	14070.0	11	63.0	-54	600.0	-5	1.6	3.4	11.5	10	3.32
JOTSTAR FTS	592.7	26	1621.8	17	24.6	37	42.8	-5	4.2	3.8	20.6	13	2.97
AP GPS (11)	2947.7	20	9538.6	23	183.9	-6	833.2	17	6.2	8.0	45.9	21	1.30
OME DEPOT HD (11)	12618.0	21	32905.0	24	838.0	23	2045.0	29	6.6	6.5	18.9	38	1.12
OMEBASE HBI (11)	407.1	-10	1100.0	-2	1.4	-86	-4.1	NM	0.4	2.2	-0.1	NM	-0.01
ISIGHT ENTERPRISES NSIT	540.3	36	1495.7	36	16.2	72	42.2	75	3.0	2.4	21.0	26	1.24
ITIMATE BRANDS IBI (11)	1149.8	13	3963.8	16	99.8	12	446.5	20	8.7	8.7	109.4	24	0.96
VIART KM (11)	8998.0	3	28297.0	4	-448.0	NM	-14.0	NM	NM	1.6	0.1	NM	-0.04
HL'S KSS (11)	1255.4	34	4091.5	30	64.3	42	237.5	33	5.1	4.8	15.4	64	0.87
MITED LTD (11)	2263.0	0	7658.0	0	77.6	35	457.0	29	3.4	2.5	23.7	25	1.09
JWE'S LOW (11)	5264.3	19	13520.6	19	279.6	21	615.7	36	5.3	5.2	15.2	23	2.03
AY DEPARTMENT STORES MAY (11)	3131.0**	2	10815.0	3	135.0	-12	768.0	2	4.3	5.0	26.2	11	2.59
ICHAELS STORES MIKE (11)	438.4	22	1582.8	23	5.7	NM	62.0	75	1.3	0.0	9.5	13	2.21
SEIMAN MARCUS GROUP NMGA (5)	592.4**	7	2177.0	13	10.1	353	96.6	37	1.7	0.4	16.2	14	2.75

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 11-2	12 MONTH EARN PER SHARE
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
NORDSTROM JWN ⁽¹¹⁾	1482.5**	1	4224.4	6	45.4	-36	144.7	-14	3.1	4.8	15.5	13	1.3
OFFICE DEPOT ODP	2820.7	9	8514.8	13	50.6	NM	217.6	25	1.8	NM	17.0	9	0.9
OFFICEMAX OMX ⁽¹¹⁾	1078.8	11	3814.0	12	-24.1	NM	-3.2	NM	NM	0.3	-3.8	NM	-0.3
PAYLESS CASHWAYS PCSH ⁽¹⁾	391.8	-20	1160.7	-16	2.4	37	-1.7	NM	0.6	0.3	-2.4	NM	-0.3
PAYLESS SHOESOURCE PSS ⁽¹¹⁾	816.9	6	2129.4	5	48.8	-5	93.2	-8	6.0	6.7	34.2	13	4.6
PC CONNECTION PCCC	397.1	41	1081.5	46	10.3	70	26.0	72	2.6	2.1	25.3	21	1.3
PENNEY (J.C.) JCP ⁽¹¹⁾	7425.0	2	24987.0	3	23.0	-41	-107.0	NM	0.3	0.5	0.0	NM	0.0
PEP BOYS-MANNY, MOE & JACK PBY ⁽¹¹⁾	633.9	0	1803.7	0	3.4	-83	-3.0	NM	0.5	3.2	1.1	30	0.1
PETSMART PETM ⁽¹¹⁾	538.6	-5	1642.6	-4	-3.0	NM	-8.1	NM	NM	0.4	-13.5	NM	-0.3
ROSS STORES ROST ⁽¹¹⁾	657.0	7	1985.0	11	35.9	-7	119.5	1	5.5	6.3	36.0	9	1.7
SAKS SKS ⁽¹¹⁾	1386.8**	1	4921.8	2	-5.8	NM	148.5	-3	NM	1.4	7.9	8	1.2
SEARS, ROEBUCK & CO. S	9627.0	5	28676.0	4	278.0	18	901.0	26	2.9	2.6	25.5	7	4.4
SHOPKO STORES SKO ⁽¹¹⁾	822.9	23	2834.3	33	5.2	-11	55.2	14	0.6	0.9	9.0	3	2.1
SPIEGEL SPGLA	757.6	7	2278.4	9	13.5	221	59.5	458	1.8	0.6	17.4	7	1.4
SPORTS AUTHORITY TSA ⁽¹¹⁾	389.6	1	1167.3	-3	6.7	198	-157.6	NM	1.7	0.6	NM	NM	-5.3
STAPLES SPLS ⁽¹¹⁾	2201.3	20	7387.9	23	42.6	-19	206.1	18	1.9	2.9	16.3	24	0.7
TALBOTS TLB ⁽¹¹⁾	356.6**	17	1089.9	17	14.6	289	62.6	100	4.1	1.2	17.4	33	2.4
TARGET TGT ⁽¹¹⁾	8251.0**	7	26927.0	8	257.0	13	1018.0	17	3.1	3.0	20.9	21	1.1
TIFFANY TIF ⁽¹¹⁾	372.0**	21	1275.0	25	39.2	70	154.2	67	10.5	7.5	21.7	37	1.1
TJX TJX ⁽¹¹⁾	2258.2	7	6893.2	9	114.0	-2	381.6	5	5.1	5.5	53.0	16	1.1
TOYS 'R' US TOY ⁽¹¹⁾	1994.0	-10	9340.0	0	3.0	-75	453.0	34	0.2	0.5	13.6	9	1.1
VALUE CITY DEPARTMENT STORES VCD ⁽¹¹⁾	532.1	42	1513.7	31	0.1	-98	20.4	-6	0.0	1.1	8.0	9	0.1
VENATOR GROUP Z ⁽¹¹⁾	1041.0	-2	3476.0	0	9.0	NM	84.0	NM	0.9	NM	8.0	21	0.1
WAL-MART STORES WMT ⁽¹¹⁾	46112.0	20	140491.0	23	1596.0	28	4839.0	23	3.5	3.3	21.8	35	1.1
ZALE ZLC ⁽⁵⁾	373.8	15	1471.0	25	11.6	36	106.1	35	3.1	2.6	14.3	10	3.1
9 ELECTRICAL & ELECTRONICS													
INDUSTRY COMPOSITE	65047.1	29	175628.7	28	6148.9	78	20279.1	113	9.5	6.9	13.0	41	1.1
(A) ELECTRICAL PRODUCTS													
GROUP COMPOSITE	5129.4	4	14893.2	6	411.5	-2	1208.8	4	8.0	8.6	20.4	13	2.1
AMERICAN POWER CONVERSION APCC	395.0	11	1070.1	13	45.0	-28	127.2	-9	11.4	17.5	18.5	14	0.1
COOPER INDUSTRIES CBE	1145.8	17	3352.9	17	91.4	8	268.2	8	8.0	8.6	19.6	10	3.1
HUBBELL HUB.B	360.8	-3	1078.0	-3	33.0	-8	109.9	-7	9.1	9.6	16.8	11	2.1
NATIONAL SERVICE INDUSTRIES NSI ⁽⁴⁾	695.7	12	1946.2	14	34.4	-21	75.5	-23	4.9	7.0	14.9	8	2.1
ROCKWELL INTERNATIONAL ROK ⁽³⁾	1887.0	-2	5478.0	2	145.0	-5	479.0	8	7.7	7.9	23.8	12	3.1
SPX SPW	645.1	-4	1968.0	-1	62.7	42	149.0	28	9.7	6.6	21.5	28	4.1
(B) ELECTRONICS													
GROUP COMPOSITE	16277.2	6	41819.2	14	81.4	-76	1568.2	107	0.5	2.2	2.4	NM	0.1
AVAYA AV ⁽³⁾	2016.0	-16	NA	NA	-543.0	NM	NA	NA	NM	5.4	NM	NM	-1.1
HARRIS HRS ⁽⁸⁾	460.4	15	1428.0	9	-34.8	NM	-32.7	NM	NM	2.3	-1.6	NM	-0.1
HUGHES ELECTRONICS GMH	1688.5	4	5228.6	35	-104.3	NM	-295.1	NM	NM	NM	-6.7	NM	-0.1
L-3 COMMUNICATIONS HOLDINGS LLL	514.4	35	1352.4	39	24.1	39	51.5	45	4.7	4.5	11.3	32	2.1
LITTON INDUSTRIES LIT ⁽⁵⁾	1469.4	19	4217.4	17	69.8	NM	168.4	130	4.7	NM	14.8	11	4.1
MOTOROLA MOT	9493.0	15	27516.0	15	531.0	366	1183.0	108	5.6	1.4	7.4	35	0.1
QUALCOMM QCOM ⁽³⁾	635.4	-40	2076.7	-31	138.7	2	493.1	224	21.8	12.8	12.2	74	0.1
(C) INSTRUMENTS													
GROUP COMPOSITE	7379.5	25	20889.1	25	588.6	54	1706.9	83	8.0	6.5	14.8	38	1.1
AGILENT TECHNOLOGIES A ⁽²⁾	2670.0	28	7401.0	26	155.0	15	452.0	23	5.8	6.5	12.2	35	1.1
ALPINE GROUP AGI	505.9	-3	1550.6	0	-3.0	NM	-0.3	NM	NM	0.9	NA	NA	NA
BECKMAN COULTER BEC	457.8	4	1361.6	5	29.1	19	82.5	23	6.4	5.5	39.7	17	3.1
DANAHER DHR	986.8	26	2745.4	17	83.6	35	236.4	26	8.5	7.9	16.8	29	2.1
KLA-TENCOR KLAC ⁽⁶⁾	534.6	96	1429.7	99	105.8	168	270.9	214	19.8	14.5	17.8	20	1.1
PE BIOSYSTEMS GROUP PEB ⁽⁶⁾	363.6	24	1123.5	16	49.1	65	161.8	25	13.5	10.2	22.0	NM	0.1
PERKINELMER PKI	431.9	11	1232.9	32	2.1	NM	49.4	NM	0.5	NM	11.6	75	1.1
TERADYNE TER	848.0	71	2255.1	82	153.5	145	400.2	244	18.1	12.6	27.5	12	8.1
THERMO ELECTRON TMO	581.0	-7	1789.4	-1	13.5	-57	54.0	NM	2.3	5.0	3.1	64	0.1
(D) SEMICONDUCTORS & OTHER COMPONENTS													
GROUP COMPOSITE	36261.0	49	98027.2	41	5067.3	119	15795.1	138	14.0	9.6	15.9	38	1.1
ACT MFG. ACTM	368.5	105	850.6	76	8.2	NM	21.4	NM	2.2	NM	13.0	20	1.1
ADVANCED MICRO DEVICES AMD	1206.5	82	3469.0	84	431.5	NM	828.0	NM	35.8	NM	30.8	9	2.1
ALTERA ALTR	395.4	84	1008.9	68	118.0	112	291.4	90	29.8	25.8	26.1	38	0.1
AMKOR TECHNOLOGY AMKR	648.6	29	1750.4	28	45.2	73	113.3	100	7.0	5.2	10.5	29	0.1
AMPHENOL APH	354.7	38	990.3	34	28.8	149	75.3	149	8.1	4.5	NM	31	2.1
ANALOG DEVICES ADI ⁽²⁾	700.7	85	1771.9	74	192.2	252	407.3	229	27.4	14.4	23.3	47	1.1
ATMEL ATML	530.4	56	1438.3	53	76.5	342	179.7	264	14.4	5.1	11.9	32	0.1
AVX AVX ⁽⁹⁾	695.3	87	1796.9	74	156.2	498	347.5	580	22.5	7.0	35.4	13	2.1
BENCHMARK ELECTRONICS BHE	459.5	100	1215.3	125	6.2	367	11.8	1	1.4	0.6	3.3	60	0.1
BROADCOM BRCM	319.2	129	755.9	110	-19.4	NM	75.2	90	NM	17.6	4.9	NM	0.1
CONEXANT SYSTEMS CNXT ⁽³⁾	561.4	24	1593.6	39	-57.1	NM	-242.8	NM	NM	8.4	-6.6	NM	0.1

LET MY PEOPLE GO!

PeopleSoft Professional Services Automation

Now, for the first time, you can manage every single part of your consulting business – from recruitment to retention, pipelines to resource scheduling, time and expense to client billing – all from a web browser. PeopleSoft 8 Professional Services Automation is a global enterprise solution that runs purely on the internet. Meaning you can manage worldwide operations from one location. And you can provide employees, customers and sub-contractors instant web access to critical information anytime, anywhere. Now your consultants can log in their hours right away from Buenos Aires – or any PC on earth, for that matter. To turn your people into profits with PeopleSoft PSA, call 1-888-773-8277.

Global • Comprehensive • Mobile

CUSTOMERS • EMPLOYEES • SUPPLIERS

People power the internet.™

PEOPLE
Soft

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 11-2	BOOK VALUE PER SHARE
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
CYPRESS SEMICONDUCTOR CY	356.2	83	921.1	75	97.2	318	207.1	479	27.3	11.9	26.0	20	1.3
FAIRCHILD SEMICONDUCTOR INTL. FCS	476.0	42	1314.4	NA	69.7	NM	179.4	NA	14.6	NM	NA	11	2.9
INTEL INTC	8731.0	19	25024.0	18	2509.0	72	8342.0	60	28.7	19.9	27.7	31	1.1
JABIL CIRCUIT JBL (4)	1065.1	77	2868.5	65	47.1	133	119.2	84	4.4	3.3	11.5	75	0.1
JDS UNIPHASE JDSU (6)	786.5	242	1705.1	335	-1016.6	NM	-1676.3	NM	NM	NM	-7.5	NM	-2.7
KEMET KEM (9)	364.0	96	951.3	93	96.3	947	214.6	NM	26.4	4.9	36.7	10	2.0
LSI LOGIC LSI	727.6	35	1987.1	32	18.1	-65	174.9	166	2.5	9.6	11.3	40	0.1
MANUFACTURERS SERVICES MSV	424.4	92	1119.7	73	2.6	88	-6.4	NM	0.6	0.6	-13.8	NM	-1.1
MICRON TECHNOLOGY MU (4)	2570.2	138	5751.9	94	726.7	NM	1162.9	NM	28.3	NM	23.4	14	2.1
MOLEX MOLX (6)	625.9	27	1808.1	33	64.5	42	187.4	33	10.3	9.3	14.0	45	1.1
NATIONAL SEMICONDUCTOR NSM (7)	640.8	33	1785.0	22	144.2	206	625.9	NM	22.5	9.8	39.2	7	3.1
ON SEMICONDUCTOR ONNN	543.2	NA	1580.5	NA	29.9	NA	70.9	NA	5.5	NA	NA	NA	NA
SANMINA SANM (3)	1272.0	91	3451.9	63	97.1	119	161.1	36	7.6	6.7	11.6	85	1.1
SCI SYSTEMS SCI (6)	2028.0	22	6551.2	29	50.5	24	157.2	36	2.5	2.4	14.5	32	1.1
SOLETRON SLR (4)	4736.2	75	11635.7	51	171.0	65	399.2	39	3.6	3.8	13.2	57	0.1
TEXAS INSTRUMENTS TXN	3160.0	26	8851.0	24	679.0	69	2425.0	141	21.5	16.0	22.9	29	1.1
VIASYSTEMS GROUP VG	406.5	28	1149.4	22	9.5	NM	-118.4	NM	2.3	NM	NM	NA	NA
VISHAY INTERTECHNOLOGY VSH	669.8	51	1821.4	41	171.1	565	377.2	707	25.5	5.8	25.3	10	3.1
XILINX XLNX (9)	437.4	83	1108.8	75	114.1	104	684.2	366	26.1	23.4	39.2	32	2.1
10 FOOD													
INDUSTRY COMPOSITE	103872.5	7	301437.5	7	2907.4	36	8460.3	17	2.8	2.2	20.2	22	1.1
(A) FOOD DISTRIBUTION													
GROUP COMPOSITE	16037.2	16	50348.2	15	178.3	16	556.8	21	1.1	1.1	15.1	28	1.1
FLEMING FLM	3279.8	1	11112.3	1	-45.6	NM	-84.8	NM	NM	NM	-16.9	NM	-2.1
INTERNATIONAL MULTIFOODS IMC (10)	585.4	3	1790.6	3	5.3	4	16.9	1	0.9	0.9	9.8	13	1.1
PERFORMANCE FOOD GROUP PFGC	693.1	30	1927.5	28	8.3	15	18.9	42	1.2	1.4	12.0	25	1.1
SPARTAN STORES SPTN (9)	784.9*	9	2333.9	15	9.0	75	16.3	71	1.1	0.7	9.5	4	1.1
SUPERVALU SVU (10)	5333.8	29	17829.1	31	57.3	26	199.3	20	1.1	1.1	13.8	8	1.1
SYSCO SYY (6)	5360.2	15	15354.9	13	144.0	36	390.0	32	2.7	2.3	27.9	34	1.1
(B) FOOD PROCESSING													
GROUP COMPOSITE	47386.5	5	126455.1	6	2005.2	15	5889.3	17	4.2	3.9	24.5	20	1.1
AGRI BRANDS INTERNATIONAL AGX (4)	302.9	-1	892.2	-4	10.7	-8	31.1	-5	3.5	3.8	11.4	10	4.1
ARCHER DANIELS MIDLAND ADM (6)	4634.8	1	NA	NA	109.4	201	272.0	201	2.4	0.8	6.1	19	0.1
CAMPBELL SOUP CPB (5)	1189.0	-8	4499.0	-3	59.0	-25	479.0	4	5.0	6.1	521.2	18	1.1
CHIKITA BRANDS INTERNATIONAL CQB	465.8	-18	1725.3	-11	-51.9	NM	-6.1	NM	NM	NM	-19.6	NM	-1.1
CONAGRA FOODS CAG (7)	6801.6	3	18990.9	4	146.1	44	270.0	105	2.1	1.5	11.8	23	0.1
CORN PRODUCTS INTERNATIONAL CPO	479.3	8	1397.5	9	12.6	-44	35.5	-41	2.6	5.1	5.3	18	1.1
DEAN FOODS DF (7)	1054.3	5	3051.6	2	26.4	-5	77.7	50	2.5	2.8	15.5	12	2.1
DEL MONTE FOODS DLM (6)	310.8	-7	983.8	-10	6.4	-7	109.7	173	2.1	2.1	774.9	2	2.1
DOLE FOOD DOL	1436.9	2	3894.1	-1	-7.4	NM	74.2	-4	NM	NM	7.7	15	0.1
DREYER'S GRAND ICE CREAM DRYR	345.0	7	909.3	6	11.0	26	26.2	92	3.2	2.7	22.8	39	0.1
EARTHGRAINS EGR (9)	603.2	29	1680.3	24	8.9	-43	27.4	-3	1.5	3.3	7.0	20	1.1
FLOWERS INDUSTRIES FLO	1023.0	4	3317.5	3	13.0	NM	35.2	NM	1.3	NM	10.0	29	0.1
GENERAL MILLS GIS (7)	1674.9	6	4984.3	7	158.9	0	421.1	4	9.5	10.1	NM	20	2.1
HEINZ (H.J.) HNZ (6)	2153.5	-1	7036.4	2	200.6	-3	469.0	99	9.3	9.5	55.4	17	2.1
HERSHEY FOODS HSY	1196.8	12	3026.1	6	107.4	23	218.6	-40	9.0	8.2	28.8	24	2.1
HORMEL FOODS HRL (2)	886.0	8	2669.0	11	29.1	-1	109.2	5	3.3	3.6	19.9	15	1.1
IBP IBP	4154.3	9	12201.8	15	83.9	-24	177.2	-25	2.0	2.9	13.5	8	2.1
INTERSTATE BAKERIES IBC (7)	819.7	1	2722.0	2	26.9	-19	55.1	-41	3.3	4.1	14.5	12	1.1
KEEBLER FOODS KBL	642.2	4	2111.6	3	41.0	27	121.9	181	6.4	5.2	32.2	21	1.1
KELLOGG K	1845.7	-1	5398.7	0	181.9	NM	494.5	108	9.9	NM	65.5	18	1.1
MCCORMICK MKC (1)	495.9	4	1444.0	4	31.3	23	79.9	62	6.3	5.3	38.5	17	1.1
NABISCO GROUP HOLDINGS NGH	2253.0	10	6580.0	11	78.0	-33	236.0	8	3.5	5.7	9.7	24	1.1
NABISCO HOLDINGS NA	2253.0	10	6580.0	11	78.0	-33	236.0	8	3.5	5.7	9.4	44	1.1
QUAKER OATS OAT	1475.1	7	4045.1	7	159.2	16	312.1	-21	10.8	9.9	132.8	31	2.1
RALSTON PURINA RAL (3)	675.9	-1	2035.0	1	83.5	-32	301.4	-1	12.4	17.9	112.6	17	1.1
SARA LEE SLE (6)	4455.0	5	13093.0	3	238.0	-1	780.0	5	5.3	5.7	111.4	17	1.1
SEABOARD SEB	364.5	14	1112.3	26	3.7	NM	19.0	NM	1.0	NM	3.1	16	1.1
SMITHFIELD FOODS SFD (6)	1421.3	24	4199.3	32	44.6	543	90.5	2	3.1	0.6	12.1	14	2.1
SUIZA FOODS SZA	1439.9	33	4268.4	27	31.2	2	85.3	2	2.2	2.8	19.6	12	3.1
WRIGLEY (WM.) JR. WYY	533.3	5	1606.8	6	83.8	8	250.6	7	15.7	15.3	28.9	28	2.1
(C) FOOD RETAILING													
GROUP COMPOSITE	40448.9	6	124634.2	5	723.9	206	2014.2	15	1.8	0.6	14.0	25	1.1
ALBERTSON'S ABS (11)	9213.0	-2	28126.0	1	194.0	NM	637.0	187	2.1	NM	13.2	13	1.1
DELHAIZE AMERICA DZA	3054.2	18	8185.7	9	-10.6	NM	114.0	-43	NM	2.8	9.0	13	1.1
GREAT ATLANTIC & PACIFIC TEA GAP (10)	2439.5	7	8060.5	3	-5.4	NM	7.2	NM	NM	0.2	3.4	13	0.1
KROGER KR (11)	11017.0	7	36587.0	5	218.1	293	570.0	8	2.0	0.5	25.5	28	0.1
PENN TRAFFIC PNFT (11)	629.7	NA	1848.0	NA	23.6	NA	74.5	NA	NM	NA	32.4	NM	0.1
RUDDICK RDK (3)	672.2	-3	2017.4	2	12.0	-8	37.6	-1	1.8	1.9	10.7	12	1.1

Deutsche Banc Alex. Brown

Fueling the success of our clients makes us a winning team

Deutsche Bank has again been voted the #1 Investment Bank for Capital Raising

EUROMONEY GLOBAL FINANCING POLL

2000

In this poll of treasurers and financial officers at corporations, financial institutions, state agencies and supranational organizations, respondents were asked to nominate banks providing the best service in capital raising and liability management.

#1 Overall Capital Raising

Capital Raising

- #1 International Equity Offerings
- #1 Euro-Straights
- #1 Euro Floating Rate Notes
- #1 Private Placements and Structured Notes
- #1 EMTN (Arrangers & Dealers)
- #1 ECP (Arrangers & Dealers)
- #1 Raising Capital in Europe
- #2 Using the Internet to Raise Capital
- #2 Raising Capital in the Emerging Markets

Liability Management

- #2 Overall Risk Management
- #1 Credit Derivatives - Service
- #1 Exotic Options - Euro
- #1 FX Spot & Forwards - Euro
- #1 Forward Rate Agreements - Euro
- #1 Short-term OTC Interest Rate Swaps (Euro & Yen)
- #1 Providing Fair Value on Instruments Previously Sold
- #2 Credit Derivatives - Pricing & Ideas
- #2 FX Spot & Forwards (USD & Yen)

When business needs capital, Deutsche Bank comes through.

Whether it's equities, fixed income or tools for managing risk, clients get the financing they need, in a package that grabs investors' attention.

That's why we've been voted the #1 Investment Bank for Capital Raising – for the second year in a row.

We've always believed that if we put our customers first, we would come out on top in global investment banking.

Global performance in raising capital – another reason why Deutsche Bank is leading to results.

GLOBAL PERFORMANCE

leading to results™

Deutsche Bank



CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE- EARNINGS RATIO 11-2	1 MON EARN PL SHA
	3RD QUARTER 2000 \$ MIL	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
SAFEWAY SWY	7457.2	15	21961.5	16	270.0	21	792.8	19	3.6	3.5	22.1	25	2.
7-ELEVEN SE	2539.3**	12	7133.3	16	40.9	9	94.1	38	1.6	1.7	388.7	11	1.
WEIS MARKETS WMK	485.9	-1	1514.6	2	19.1	0	58.6	-2	3.9	3.9	8.4	19	1.
WINN-DIXIE STORES WIN ⁽⁶⁾	2940.9	7	9200.2	-7	9.4	-57	-222.8	NM	0.3	0.7	-29.2	NM	-1.
11 FUEL													
INDUSTRY COMPOSITE	163402.4	33	455771.5	40	11347.0	96	29984.2	152	6.9	4.7	18.7	19	3.
(A) COAL, OIL & GAS													
GROUP COMPOSITE	153372.4	34	427500.1	43	10682.2	94	28629.6	156	7.0	4.8	21.1	16	3.
AMERADA HESS AHC	2833.0	57	8308.0	74	257.0	63	683.0	122	9.1	8.8	23.0	7	9.
ANADARKO PETROLEUM APC	956.1	430	1509.1	216	248.4	NM	367.9	NM	26.0	11.9	26.4	25	2.
APACHE APA	624.6	83	1559.8	108	206.2	183	467.8	353	33.0	21.4	21.1	12	4.
ARCH COAL ACI	355.8	-6	1048.4	-12	-5.2	NM	-22.4	NM	NM	NM	NM	NM	-9.
ASHLAND ASH ⁽³⁾	2167.0	14	6132.0	17	97.0	-16	252.0	-17	4.5	6.0	14.9	8	4.
BURLINGTON RESOURCES BR	696.0	27	1968.0	37	200.0	228	371.0	336	28.7	11.2	8.7	27	1.
CHEVRON CHV	12962.0*	30	37267.0	50	1531.0	163	3691.0	193	11.8	5.8	23.8	12	6.
COASTAL CGP	3156.3	53	9155.0	62	144.8	42	446.1	35	4.6	5.0	14.6	27	2.
CONOCO COC.B	10697.0**	43	28894.0	52	497.0	123	1352.0	222	4.6	3.0	34.3	11	2.
CONSOL ENERGY CNX ⁽⁶⁾	504.4**	-9	1558.9	-6	4.1	-62	63.9	26	0.8	1.9	42.5	14	1.
CROWN CENTRAL PETROLEUM CNP.B	478.9	33	1381.5	59	-5.5	NM	0.2	NM	NM	NM	3.0	NM	-0.
DEVON ENERGY DVN	714.8**	90	1903.2	154	164.9	226	423.4	NM	23.1	13.4	21.2	14	3.
EOG RESOURCES EOG	389.7	74	956.6	67	116.5	-77	235.5	-56	29.9	NM	23.4	19	2.
EXXON MOBIL XOM	58852.0**	20	168889.0	29	4490.0	105	12500.0	122	7.6	4.5	20.2	21	4.
KERR-McGEE KMG	1089.3	45	2959.6	56	264.6	171	559.7	NM	24.3	13.0	28.4	9	6.
MITCHELL ENERGY & DEVELOPMENT MND ^{(11)†}	402.8	77	999.1	78	55.4	107	132.4	NM	13.8	11.8	34.3	14	3.
MURPHY OIL MUR	933.6	47	2540.6	83	85.6	67	217.2	261	9.2	8.1	24.5	9	6.
OCCIDENTAL PETROLEUM OXY	3805.0	80	9441.0	85	402.0	219	1238.0	NM	10.6	6.0	41.1	4	4.
PENNZOIL-QUAKER STATE PZL	798.7	5	2437.3	10	6.9	NM	1.5	NM	0.9	NM	-34.6	NM	-4.
PHILLIPS PETROLEUM P	5200.0	37	15400.0	62	426.0	93	1118.0	211	8.2	5.8	26.9	11	5.
SUNOCO SUN	3741.0**	41	10562.0	52	-25.0	NM	257.0	336	NM	0.5	18.7	9	3.
TESORO PETROLEUM TSO	1394.4	56	3666.7	72	25.0	9	48.9	-12	1.8	2.6	2.9	30	0.
TEXACO TX	13359.0*	38	36699.0	46	798.0	106	1997.0	132	6.0	4.0	18.6	14	4.
TOSCO TOS	6876.5	78	17101.4	68	145.5	28	365.4	61	2.1	3.0	25.1	8	3.
ULTRAMAR DIAMOND SHAMROCK UDS	4516.7	18	12155.9	22	127.6	52	325.2	119	2.8	2.2	21.4	7	4.
UNOCAL UCL	2391.0**	57	6520.0	58	176.0	450	550.0	NM	7.4	2.1	25.5	14	2.
USX-MARATHON GROUP MRO	9228.0	43	25937.0	55	121.0	-47	742.0	54	1.3	3.6	17.3	9	2.
VALERO ENERGY VLO	4248.8	97	10549.9	98	127.4	464	245.8	NM	3.0	1.0	19.5	8	4.
(B) PETROLEUM SERVICES													
GROUP COMPOSITE	10030.0	19	28271.4	12	664.8	139	1354.6	91	6.6	3.3	5.1	85	0.
BAKER HUGHES BHI	1273.6	14	3605.3	5	66.7	302	146.0	9	5.2	1.5	2.1	NM	0.
BJ SERVICES BJS ⁽³⁾	438.5**	40	1200.6	43	42.3	777	97.5	NM	9.6	1.5	10.5	39	1.
COOPER CAMERON CAM	347.9	-7	1032.4	-10	8.3	-48	37.2	4	2.4	4.3	5.3	72	0.
HALLIBURTON HAL	3024.0**	2	8751.0	-6	130.0	242	209.0	43	4.3	1.3	6.2	59	0.
NABORS INDUSTRIES NBR	344.5	142	914.9	117	38.6	713	80.6	303	11.2	3.3	5.1	88	0.
NOBLE AFFILIATES NBL	357.4	48	928.0	46	57.2	107	121.0	333	16.0	11.4	19.9	15	2.
R&B FALCON FLC	301.7	41	721.1	5	27.3	NM	-41.1	NM	9.0	NM	-11.1	NM	-0.
SCHLUMBERGER SLB	2447.3	17	6923.0	11	204.6	85	496.7	83	8.4	5.3	6.8	82	0.
SMITH INTERNATIONAL SII	718.5	49	2001.1	58	20.5	-56	46.8	-7	2.9	9.7	6.9	69	1.
TRANSOCEAN SEDCO FOREX RIG	314.5	90	914.6	77	47.9	50	116.3	65	15.2	19.2	3.2	NM	0.
WEATHERFORD INTERNATIONAL WFT	462.2	43	1279.4	47	21.5	612	44.7	413	4.7	0.9	3.8	79	0.
12 HEALTH CARE													
INDUSTRY COMPOSITE	129225.2	13	380170.5	12	10312.2	71	29616.7	27	8.0	5.3	23.6	41	1.
(A) DRUG DISTRIBUTION													
GROUP COMPOSITE	46551.3	15	136580.2	16	-255.4	NM	-14.1	NM	NM	0.9	2.5	NM	0.
AMERISOURCE HEALTH AAS ⁽³⁾	3031.7	18	8805.6	19	28.0	154	77.4	46	0.9	0.4	35.1	21	1.
BERGEN BRUNSWIG BBC ⁽³⁾	5945.6	9	17013.9	12	-545.3	NM	-495.7	NM	NM	NM	-37.9	NM	-3.
BINDLEY WESTERN INDUSTRIES BDY	2305.3	7	7226.8	17	17.4	104	15.7	44	0.8	0.4	6.9	50	0.
CARDINAL HEALTH CAH ⁽⁶⁾	8734.6**	29	24422.0	23	173.2	42	557.4	52	2.0	1.8	17.3	36	2.
CAREMARK RX CMX	1089.4	34	3226.4	35	26.9	93	69.2	90	2.5	1.7	NM	31	0.
CVS CVS	4916.4	14	14598.7	13	158.7	31	536.5	20	3.2	2.8	18.6	30	1.
D&K HEALTHCARE RESOURCES DKWD ⁽⁶⁾	350.9	8	1148.5	51	1.5	-4	6.4	16	0.4	0.5	17.4	8	1.
LONGS DRUG STORES LDG ⁽¹¹⁾	991.1	12	2998.5	12	17.2	5	53.1	-5	1.7	1.9	9.8	13	1.
MECKESSON HBOC MCK ⁽⁶⁾	9874.8**	10	28908.4	12	61.9	26	37.3	-26	0.6	0.6	5.4	48	0.
OMNICARE OCR	491.3	4	1464.8	7	13.5	-3	38.6	-17	2.8	2.9	4.7	31	0.
RITE AID RAD ⁽¹⁰⁾	3439.5	7	10382.9	5	425.0	NM	1559.0	NM	NM	NM	NM	NM	7.
WALGREEN WAG ⁽⁴⁾	5380.8	18	16383.7	19	216.6	35	649.1	25	4.0	3.5	19.3	58	0.



— for call centers —

SURVIVAL MEANS ATTRACTING ATTENTION TO WHAT'S CRITICAL

In your call center, every second counts. And immediate access to time-sensitive information is crucial. BackWeb® is the answer. BackWeb not only delivers data, but gets it noticed— from product updates and promotions to the latest changes in market conditions. BackWeb's patented Polite™ Push seamlessly downloads even large files, while its Flash technology animates urgent



news on your reps' screens, without interrupting their crucial call center applications. Increase your call center's effectiveness and efficiency, and boost customer satisfaction with BackWeb. For a white paper detailing how BackWeb's e-Accelerator can raise your call center productivity, visit: www.backweb.com/accelerator3.html or call us at 1-800-863-0100.

What Pushes e-business

Among the many companies using BackWeb: VERIZON WIRELESS, COMPAQ, FIDELITY INVESTMENTS, HEWLETT-PACKARD, ROBERTSON STEPHENS

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS			RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 11-2	100% EARN PER SHARE	
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %					
(B) DRUGS & RESEARCH															
GROUP COMPOSITE	40588.3	14	118038.8	12	7567.2	137	21279.3	42	18.6	9.0	33.1	40	1.		
ABBOTT LABORATORIES ABT	3317.9	6	10041.2	3	654.4	40	2032.6	14	19.7	14.9	32.9	31	1.		
ALLERGAN AGN	396.7	11	1206.4	14	54.6	16	150.0	16	13.8	13.1	26.7	55	1.		
AMERICAN HOME PRODUCTS AHP	3677.3	15	10207.6	16	762.1	NM	2920.8	NM	20.7	NM	57.4	23	2.		
AMGEN AMGN	949.5	12	2678.0	11	358.9	20	927.7	14	37.8	35.4	30.6	55	1.		
BRISTOL-MYERS SQUIBB BMY	4563.0	9	13432.0	9	893.0	-10	3027.0	7	19.6	23.6	47.7	29	2.		
GENENTECH DNA	419.5**	31	1175.1	18	4.5	NM	-35.6	NM	1.1	NM	-3.7	NM	-0.		
LILLY (ELI) LLY	2811.9	9	7884.5	10	778.8	6	2290.5	30	27.7	28.3	55.8	32	2.		
MERCK MRK	10567.5	29	28895.9	22	1835.9	19	5057.3	17	17.4	18.8	52.1	32	2.		
PFIZER PFE	7205.0	7	21468.0	8	1361.0	23	2306.0	-34	18.9	16.4	21.8	70	0.		
PHARMACIA PHA	4286.0	15	13608.0	12	273.0	40	751.0	-28	6.4	5.2	6.8	85	0.		
SCHERING-PLOUGH SGP	2394.0	7	7442.0	8	591.0	14	1852.0	15	24.7	23.2	42.0	33	1.		
(C) HEALTH-CARE SERVICES															
GROUP COMPOSITE	28770.3	11	85052.1	9	935.5	32	2154.8	6	3.3	2.7	7.7	44	0.		
BEVERLY ENTERPRISES BEV	665.3	4	1966.6	3	-22.5	NM	-7.7	NM	NM	1.2	-6.4	NM	-0.		
COMMUNITY HEALTH SYSTEMS CYH	342.4	28	968.2	22	1.3	NM	2.4	NM	0.4	NM	-2.1	NM	-0.		
COVENTRY HEALTH CARE CVTY	647.6	22	1886.2	19	15.4	41	40.4	42	2.4	2.1	10.5	21	0.		
EXPRESS SCRIPTS ESRX	1736.5	60	4865.4	63	24.8	41	-28.0	NM	1.4	1.6	13.7	31	2.		
FOUNDATION HEALTH SYSTEMS FHS	2287.8	6	6716.8	3	44.6	27	117.4	6	2.0	1.6	15.3	16	1.		
HCA-THE HEALTHCARE CO. HCA	4093.0	5	12497.0	-2	174.0	26	198.0	-65	4.3	3.5	5.3	78	0.		
HEALTH MANAGEMENT ASSOCIATES HMA (3)	407.9	14	1207.7	15	39.1	20	133.4	12	9.6	9.1	16.3	28	0.		
HEALTHSOUTH HRC	1060.5	7	3118.1	2	71.0	NM	201.6	-8	6.7	NM	1.8	78	0.		
HUMANA HUM	2616.0	2	7954.0	6	23.0	5	63.0	85	0.9	0.9	-26.7	NM	-2.		
LABORATORY CORP. OF AMERICA HOLDINGS LH	488.1	14	1433.3	12	32.8	91	91.2	78	6.7	4.0	6.9	49	2.		
MANOR CARE HCR	604.5	13	1755.7	10	20.4	-39	16.2	-85	3.4	6.2	-15.1	NM	-1.		
OXFORD HEALTH PLANS OXHP	1038.1**	-1	3073.2	-3	88.2	122	178.0	241	8.5	3.8	126.3	7	4.		
QUEST DIAGNOSTICS DGX	850.2	38	2584.8	86	28.7	NM	76.7	481	3.4	NM	6.3	73	1.		
QUORUM HEALTH GROUP QHGI (6)	454.0	5	1352.6	3	-52.2	NM	-19.9	NM	NM	2.5	-1.2	NM	-0.		
TENET HEALTHCARE THC (7)	2893.0	1	8654.0	0	154.0	20	231.0	101	5.3	4.5	8.5	32	1.		
TRIAD HOSPITALS TRIH	301.3	-6	915.4	-11	-1.0	NM	8.1	NM	NM	0.6	-7.6	NM	-1.		
UNITEDHEALTH GROUP UNH	5369.0**	10	15688.0	8	182.0	26	526.0	28	3.4	2.9	18.7	26	4.		
UNIVERSAL HEALTH SERVICES UHS	561.8**	15	1627.6	7	22.3	107	74.3	16	4.0	2.2	12.8	28	2.		
WELLPOINT HEALTH NETWORKS WLP	2353.3**	24	6787.4	23	89.5	17	252.8	16	3.8	4.0	22.4	22	5.		
(D) MEDICAL PRODUCTS															
GROUP COMPOSITE	13315.3	5	40499.5	8	2065.0	17	6196.7	26	15.5	14.0	24.8	33	1.		
BAUSCH & LOMB BOL	440.9	-1	1300.6	1	14.7	-65	88.5	4	3.3	9.3	10.0	21	1.		
BAXTER INTERNATIONAL BAX	1687.0	6	4964.0	8	231.0	17	468.0	-15	13.7	12.4	24.3	34	2.		
BOSTON SCIENTIFIC BSX	652.0	-6	2026.0	-5	85.0	55	313.0	19	13.0	8.0	21.7	16	1.		
GUIDANT GDT	600.8	6	1899.9	7	122.8	16	365.9	47	20.4	18.6	45.9	36	1.		
JOHNSON & JOHNSON JNJ	7204.0	5	22031.0	7	1264.0	14	3909.0	15	17.5	16.1	25.2	27	3.		
MEDTRONIC MDT (8)	1309.9**	16	4001.0	20	289.0	15	874.5	131	22.1	22.3	24.0	60	0.		
OWENS & MINOR OMI	872.3	7	2600.0	12	8.5	19	23.3	22	1.0	0.9	15.8	16	0.		
STRYKER SYK	548.4	10	1677.0	9	50.0	NM	154.5	NM	9.1	0.0	25.0	49	0.		
13 HOUSING & REAL ESTATE															
INDUSTRY COMPOSITE	21529.7	7	61008.6	9	1367.6	3	3668.3	5	6.4	6.6	16.4	10	2.		
(A) BUILDING MATERIALS															
GROUP COMPOSITE	12649.5	3	36892.3	8	878.4	-5	2361.6	0	6.9	7.5	20.4	10	2.		
AMERICAN STANDARD ASD	1961.0	4	5829.0	7	89.0	14	257.0	16	4.5	4.2	NM	11	4.		
JOHNS MANVILLE JM	540.2	-5	1611.4	-1	46.3	-37	136.3	-29	8.6	12.9	21.9	7	1.		
LAFARGE LAF	892.3	2	2074.1	6	127.3	-8	198.5	0	14.3	15.9	15.6	5	3.		
LENNOX INTERNATIONAL LII	857.6	28	2468.1	41	12.4	-55	50.4	-12	1.4	4.1	8.9	8	1.		
MARTIN MARIETTA MATERIALS MLM	380.3	7	1018.9	10	42.1	-4	91.5	-2	11.1	12.4	14.6	15	2.		
PPG INDUSTRIES PPG	2078.0	6	6375.0	12	150.0	52	494.0	22	7.2	5.1	20.9	12	3.		
RPM RPM (7)	552.8	12	1511.0	12	28.9	297	42.2	-14	5.2	1.5	9.6	15	0.		
SHERWIN-WILLIAMS SHW	1411.9	5	4063.1	5	106.7	-4	263.5	6	7.6	8.3	18.0	11	1.		
SOUTHDOWN SDW	358.0**	-1	992.1	5	58.4	-13	153.8	-3	16.3	18.6	21.5	13	5.		
TECUMSEH PRODUCTS TECUA	348.8	-14	1291.4	-8	13.8	-55	51.3	-54	4.0	7.5	8.2	10	4.		
USG USG	895.0	-6	2772.0	4	65.0	-44	264.0	-14	7.3	12.2	38.2	2	7.		
VALSPAR VAL (2)	385.1	-3	1101.5	8	25.5	-1	62.3	7	6.6	6.5	20.6	14	1.		
VULCAN MATERIALS VMC	681.2	4	1861.3	6	86.0	0	185.3	6	12.6	13.1	17.2	17	2.		
WATSCO WSO	360.6	3	1017.8	6	11.9	1	27.6	7	3.3	3.4	9.9	9	1.		
YORK INTERNATIONAL YRK	946.7	-2	2905.6	5	15.3	304	84.0	34	1.6	0.4	12.7	10	2.		
(B) CONSTRUCTION & REAL ESTATE															
GROUP COMPOSITE	8880.2	13	24116.3	11	489.2	22	1306.6	15	5.5	5.1	12.2	11	2.		
CB RICHARD ELLIS SERVICES CBG	326.5	6	905.3	11	7.0	50	12.5	100	2.1	1.5	14.1	9	1.		
CENTEX CTX (9)	1600.7**	12	4748.1	9	59.1	-10	177.3	-8	3.7	4.6	16.4	9	4.		
CHAMPION ENTERPRISES CHB	452.7	-28	1489.4	-22	-4.0	NM	0.2	NM	NM	NM	1.3	25	0.		



breakthrough

A CEO Retreat

presented by

BusinessWeek

and

Jim Taylor, Ph.D.

in partnership with

IBM Corporation

**FEBRUARY 7-9, 2001
RANCHO BERNARDO INN
SAN DIEGO, CALIFORNIA**

Define the Future

The technological advances of the past few decades have fundamentally transformed business and, with it, the qualities necessary for effective leadership. **Breakthrough: A CEO Retreat** will examine the changing face of leadership through themed discussions between top executives and an all-star faculty of renowned technologists, scientists, and creative thinkers.

Presented by BusinessWeek and Jim Taylor, Ph.D. in partnership with IBM Corporation, **Breakthrough** will be held February 7-9, 2001, at the Rancho Bernardo Inn just outside of San Diego, California. Featuring an intensive, intimate environment designed to encourage attendee participation, this invitation-only event is designed to challenge long-held assumptions and define the new rules of the leadership game.

Please consider joining the elite group of forward-thinking CEOs that assists us in this effort.

If you have already received your exclusive invitation, please return your reservation as soon as possible. If you have not received an invitation but believe you should be included, please contact Ms. Marsha Green, BusinessWeek, at 212-512-3113.

FOR MORE INFORMATION ABOUT SPONSORSHIP OPPORTUNITIES

contact Ms. Kim Harrell, Manager, Sponsorship Sales
TELEPHONE: 212-512-2358
E-MAIL: kim_harrell@businessweek.com

HOST



TAYLOR, Ph.D.

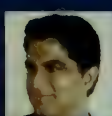
Co-author,
*500-Year Delta and
Visionary's Handbook*

PROGRAM FACULTY

**CANDICE
CARPENTER**
Founder and
Chairperson,
Village Inc.



**DEEPAK
DIPRA, M.D.**
Founder,
Dipra Center
for Well Being



**SCOTT
CONNER**
Four-time
America's Cup
Champion



**DR. RONALD
A. HEIFETZ**
Co-director,
Center for Public
Leadership, John F.
Kennedy School
of Government,
Harvard University



PROGRAM FACULTY



**DR. DONALD
C. JOHANSON**
Director, Institute
of Human Origins;
Professor, Arizona State
University



**SUSANNE
D. LYONS**
Chief Marketing
Officer, Charles Schwab
& Co., Inc.



**JONATHAN
NELSON**
CEO and Chairman
of the Board,
Organic, Inc.



WILL RODGERS
Principal,
SHR Perceptual
Management



GINNI ROMETTY
General Manager,
Strategy, IBM
Global Services,
IBM Corporation



**GEOFFREY
S.L. SHAW**
President, CEO,
Chairman, and
Co-founder,
Global Commerce
Systems



STEPHEN G. VETTER
President,
Eureka
Communities

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 11-2	MONTHLY EARNINGS PER SHARE
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
EQUITY OFFICE PROPERTIES TRUST EOP	658.2	33	1648.7	13	115.0	18	355.4	20	17.5	19.7	6.1	18	1
KAUFMAN & BROAD HOME KBH ⁽¹⁾	981.0	-7	2686.8	3	44.6	17	136.6	65	4.6	3.6	29.3	7	4
LENNAR LEN ⁽¹⁾	1376.2**	68	2984.8	39	61.0	34	119.7	6	4.4	5.5	16.1	11	2
NVR NVR	617.7**	14	1687.2	12	43.9	45	111.7	32	7.1	5.6	51.2	8	12
PULTE PHM	1053.9**	8	2812.3	13	60.9	28	132.8	22	5.8	4.9	17.8	7	4
RYLAND GROUP RYL	628.3	24	1582.1	12	22.8	26	50.7	11	3.6	3.6	16.8	7	5
STANDARD PACIFIC SPF	302.8	2	819.6	0	25.2	56	59.1	28	8.3	5.4	19.8	7	2
TOLL BROTHERS TOL ⁽²⁾	464.5**	15	1199.6	17	37.2	24	87.6	26	8.0	7.4	17.5	10	3
WEBB (DEL) WBB ⁽⁶⁾	417.7**	2	1552.5	24	16.5	20	63.2	26	3.9	3.4	17.0	6	4

14 LEISURE TIME INDUSTRIES

INDUSTRY COMPOSITE	39953.1	16	110432.8	13	2591.1	-1	6233.8	7	6.5	7.5	7.8	26	1
(A) EATING PLACES													
GROUP COMPOSITE	10029.3	5	29614.7	5	793.8	-13	2319.0	-7	7.9	9.5	23.9	20	1
BRINKER INTERNATIONAL EAT ⁽⁶⁾	589.3	15	1717.2	14	35.2	30	100.5	35	6.0	5.3	16.5	21	1
CBRL GROUP CBRL ⁽⁵⁾	470.9	10	1350.1	14	23.7	93	44.5	1	5.0	2.9	7.1	18	1
CKE RESTAURANTS CKR ⁽¹¹⁾	438.5	-6	1498.3	0	-13.9	NM	-78.2	NM	NM	2.2	-14.3	NM	
DARDEN RESTAURANTS DRI ⁽⁷⁾	1018.2	10	2941.8	9	56.9	20	161.9	18	5.6	5.1	19.2	15	1
MCDONALD'S MCD	3749.0	9	10653.4	8	548.5	1	1525.3	4	14.6	15.7	22.4	22	1
OUTBACK STEAKHOUSE OSI	485.1	18	1431.5	17	35.4	10	109.4	17	7.3	7.9	17.9	16	1
SODEXHO MARRIOTT SERVICES SDH ⁽⁴⁾	1042.7	0	3446.7	5	0.4	NM	35.4	33	0.0	NM	NM	19	1
TRICON GLOBAL RESTAURANTS YUM	1658.0	-8	4911.0	-11	59.0	-70	285.0	-41	3.6	10.9	NM	11	2
WENDY'S INTERNATIONAL WEN	577.6	9	1664.6	8	48.6	9	135.2	7	8.4	8.4	16.8	16	1

(B) ENTERTAINMENT

GROUP COMPOSITE	12154.8	51	30732.0	39	287.8	60	-1.5	NM	2.4	2.2	0.4	NM	0
AMC ENTERTAINMENT AEN ⁽⁹⁾	333.3	0	883.1	3	-10.4	NM	-52.4	NM	NM	NM	NM	NM	-2
BLOCKBUSTER BBI	1193.8	7	3619.3	11	-19.3	NM	-51.3	NM	NM	NM	-1.0	NM	-0
HARRAH'S ENTERTAINMENT HET	953.4	17	2616.2	15	72.0	-4	149.9	-6	7.6	9.2	14.9	16	1
MANDALAY RESORT GROUP MBG ^{(11)†}	647.4	25	1805.3	34	38.1	61	81.5	47	5.9	4.6	10.7	15	1
METRO-GOLDWYN-MAYER MGM	315.4	5	955.5	24	27.1	162	38.6	NM	8.6	3.5	2.3	75	0
MGM MIRAGE MGG	1081.7	170	2149.1	123	72.1	472	98.2	78	6.7	3.1	5.9	33	1
PARK PLACE ENTERTAINMENT PPE	1279.0	52	3758.0	62	67.0	97	150.0	24	5.2	4.1	4.4	24	0
TRUMP HOTELS & CASINO RESORTS DJT	388.9	1	1045.1	-2	7.8	NM	-21.8	NM	2.0	NM	-43.0	NM	-2
VIACOM VIA.B	5962.0	79	13900.3	50	33.4	-70	-394.2	NM	0.6	3.3	-0.5	NM	-0

(C) HOTEL & MOTEL

GROUP COMPOSITE	5356.4	23	15965.4	12	283.3	1	837.4	7	5.3	5.2	12.4	18	1
CRESTLINE CAPITAL CLJ	1072.4	11	3255.4	8	8.3	-21	29.4	-1	0.8	1.1	9.8	9	2
HILTON HOTELS HLT	867.0	74	2576.0	10	62.0	-14	208.0	9	7.2	14.5	16.5	13	0
MARRIOTT INTERNATIONAL MAR	2303.0	15	6861.0	16	110.0	15	330.0	6	4.8	4.8	13.9	24	1
STARWOOD HOTELS & RESORTS WWIDE. HOT	1114.0	NA	3273.0	NA	103.0	NA	270.0	NA	9.2	NA	9.8	16	1

(D) OTHER LEISURE

GROUP COMPOSITE	12412.5	1	34120.7	4	1226.2	-1	3078.8	16	9.9	10.0	19.3	15	1
AMERICAN GREETINGS AM ⁽¹⁰⁾	493.7	3	1704.8	11	-35.5	NM	54.6	29	NM	NM	9.4	11	1
BRUNSWICK BC	939.1	9	2935.3	10	17.7	-15	159.9	15	1.9	2.4	3.8	40	0
CARNIVAL COL ⁽¹⁾	1228.2	6	2928.2	8	396.2	-5	771.7	-1	32.3	35.7	17.7	14	1
EASTMAN KODAK EK	3590.0	0	10434.0	1	418.0	78	1213.0	32	11.6	6.6	41.2	9	5
FLEETWOOD ENTERPRISES FLE ⁽⁸⁾	711.2	-26	2457.3	-9	-19.9	NM	7.4	-90	NM	2.8	6.8	12	1
HARLEY-DAVIDSON HDI	714.1**	15	2150.2	20	83.0	27	253.9	32	11.6	10.5	24.3	45	1
HASBRO HAS	1072.6	-2	2624.5	-1	13.8	-84	35.5	-73	1.3	7.8	6.2	23	0
MATTEL MAT	1583.8	0	3094.8	1	103.7	-53	65.1	NM	6.5	14.0	3.6	NM	0
MUSICLAND STORES MLG	389.4	1	1207.7	3	0.1	-91	3.8	6	0.0	0.2	61.8	4	1
POLARIS INDUSTRIES PII	397.0	2	1010.7	6	29.3	7	55.2	7	7.4	7.0	47.3	11	3
POLAROID PRD	458.2	-1	1349.4	2	18.4	NM	43.6	NM	4.0	NM	18.8	6	1
ROYAL CARIBBEAN CRUISES RCL	835.2	14	2223.7	13	201.5	19	415.3	20	24.1	23.1	13.1	9	2

15 MANUFACTURING

INDUSTRY COMPOSITE	61926.7	11	182370.5	12	5045.4	36	13283.2	74	8.1	6.7	18.9	21	2
(A) GENERAL MANUFACTURING													
GROUP COMPOSITE	19580.1	9	57979.8	10	1425.5	21	3796.5	101	7.3	6.5	17.2	27	2
AVERY DENNISON AVY	1001.7	4	2960.4	5	73.0	11	216.0	46	7.3	6.9	35.7	18	2
CARLISLE CSL	444.4	11	1357.8	12	28.2	14	85.6	15	6.3	6.2	19.8	12	3
CORNING GLW	1944.0**	55	5121.4	51	253.6	79	479.7	31	13.0	11.3	8.0	99	0
ENERGIZER HOLDINGS ENR ⁽³⁾	478.0	-1	1240.7	-4	36.6	-40	75.5	-28	7.7	12.6	25.5	13	1
EXIDE EX ⁽⁹⁾	494.2	-11	1460.7	-10	-14.5	NM	151.2	NM	NM	0.8	NM	NM	
FLOWSERVE FLS	412.1	62	996.6	25	-10.9	NM	13.6	-43	NM	1.9	0.7	NM	0
FORTUNE BRANDS FO	1319.6	6	4013.4	7	73.3	52	235.0	NM	5.6	3.9	12.7	14	3
HARSCO HSC	532.8**	26	1439.0	14	22.3	-15	70.7	11	4.2	6.2	14.8	8	2
HILLENBRAND INDUSTRIES HB ⁽¹⁾	492.0	2	1509.0	-1	34.0	48	106.0	3	6.9	4.8	15.4	23	1
JOHNSON CONTROLS JCI ⁽³⁾	4088.7	-3	12836.3	5	151.2	16	373.4	10	3.7	3.1	20.7	12	5
MINNESOTA MINING & MFG. MMM	4252.0	6	12528.0	8	499.0	9	1456.0	10	11.7	11.5	29.5	20	4

One day you wake up and realize that your e-commerce site is, well, all your commerce.

Have you heard of Kintana?

Cisco has.

Ninety percent of Cisco orders are processed through a critical e-commerce application called Cisco Connection Online. It brings together over 400 content developers, 700,000 data files, and 175 applications to generate \$55 million in revenue every day. Needless to say, as CCO goes, so goes Cisco.

Cisco asked Kintana for help in technology chain automation for this commerce side of their business. By providing secure, systemized processes with increased visibility, self-service reviews and approvals, and automated deployment of new site features, we have delivered in spades. Revenues through CCO have quadrupled from \$4 billion to \$17 billion a year, while the team required to manage the site has decreased by 25%.

Believe it or not, results like these can be achieved almost overnight. We can dramatically accelerate the speed at which your business can evolve. Do it in Kintana time.

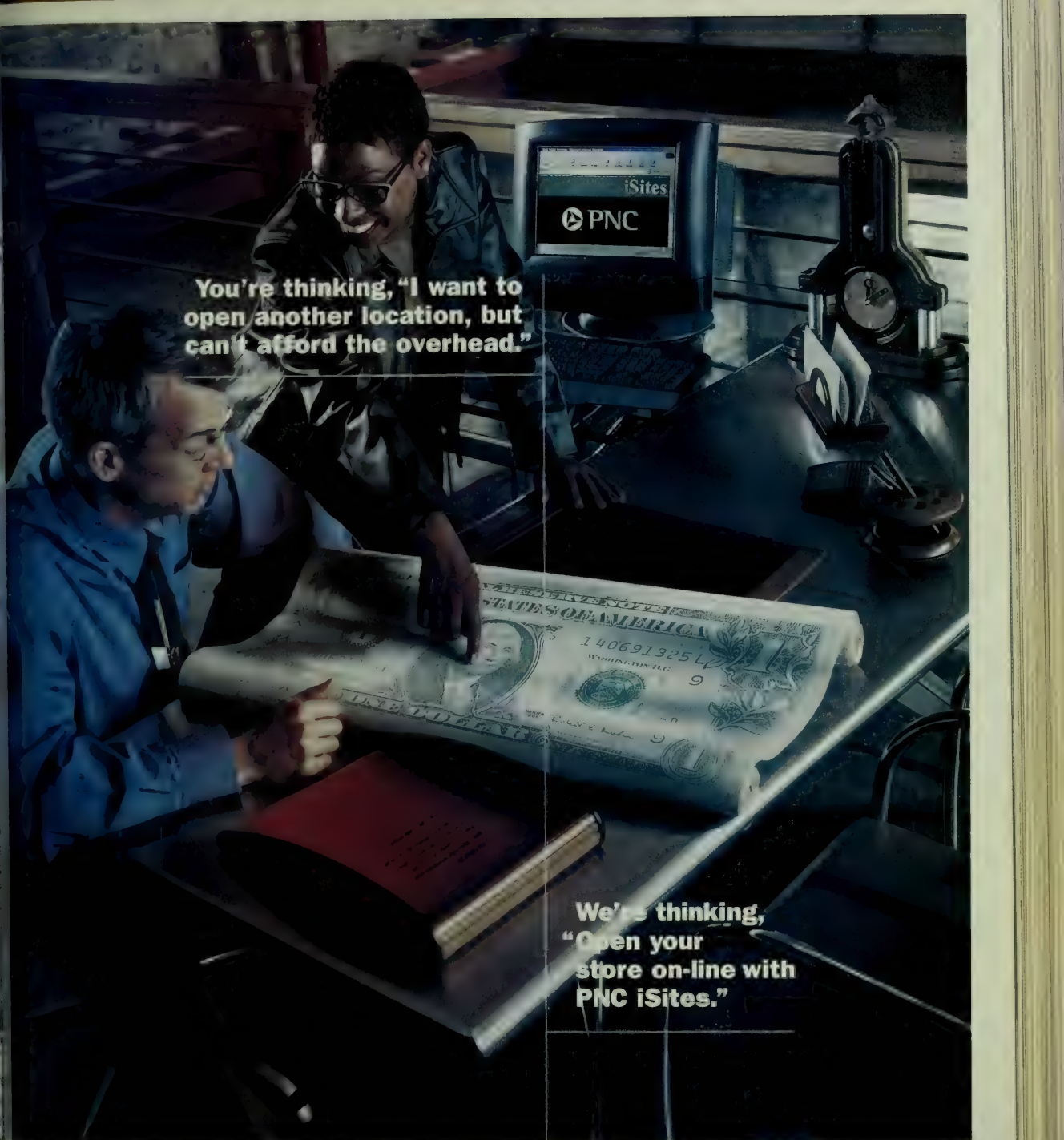
Visit www.kintana.com or call 1-877-KINTANA to find out how.



Mark Tonnesen, Vice President Information Technology
Cisco Systems

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 11-2	12 MONTH EARNINGS PER SHARE
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
NEWELL RUBBERMAID NWL	1686.7	5	4949.1	5	123.0	69	327.2	NM	7.3	4.5	17.0	13	1.4
PARKER HANNIFIN PH (6)	1477.4	19	4351.2	15	125.0	70	344.7	42	8.5	5.9	17.5	11	3.7
TELEFLEX TFX	420.4	11	1313.5	10	21.7	14	77.9	15	5.2	5.0	16.0	13	2.7
TOWER AUTOMOTIVE TWR	536.2	0	1902.6	22	10.0	-58	86.4	2	1.9	4.4	14.4	5	2.1
(B) MACHINE & HAND TOOLS													
GROUP COMPOSITE	3955.6	4	12121.7	7	230.4	7	652.9	21	5.8	5.6	23.3	9	3.1
BLACK & DECKER BDK	1133.2	2	3297.2	4	86.3	15	229.5	24	7.6	6.8	44.8	10	4.0
KENAMETAL KMT (6)	450.7	2	1407.5	2	9.9	0	43.5	58	2.2	2.2	6.7	17	1.7
NACCO INDUSTRIES NC	691.9	13	2062.4	10	8.9	27	31.7	-12	1.3	1.1	8.7	6	6.0
SNAP-ON SNA	520.3**	12	1650.0	16	26.9	-37	104.9	5	5.2	9.1	16.1	11	2.2
STANLEY WORKS SWK	684.4	-1	2082.6	1	48.7	-3	147.5	39	7.1	7.3	27.3	13	2.1
TEREX TEX	475.1	-4	1622.1	19	49.7	66	95.8	11	10.5	6.0	40.9	2	6.4
(C) SPECIAL MACHINERY													
GROUP COMPOSITE	33594.5	16	97896.4	15	3839.8	78	9127.6	90	11.4	7.4	20.8	19	2.1
AGCO AG	513.5	-10	1677.0	-8	2.4	-68	-4.2	NM	0.5	1.3	-4.1	NM	-0.5
APPLIED MATERIALS AMAT (2)	2732.0	83	6644.2	91	603.8	143	1399.8	207	22.1	16.6	27.3	26	1.9
CATERPILLAR CAT	4779.0	1	15061.0	3	216.0	-1	789.0	12	4.5	4.6	18.5	12	2.8
CUMMINS ENGINE CUM	1572.0	-4	4989.0	4	25.0	-53	128.0	-5	1.6	3.3	10.5	9	4.0
DEERE DE (2)	3632.1**	20	9761.1	9	172.4	150	414.4	54	4.7	2.3	8.8	23	1.6
DONALDSON DCI (5)	301.2	18	845.7	18	18.4	-1	53.2	8	6.1	7.3	25.1	15	1.4
DOVER DOV	1390.5	21	4021.0	26	144.5	19	398.5	40	10.4	10.6	22.4	17	2.4
FMC FMC	919.2	-11	2845.7	-8	56.5	-12	127.3	-22	6.1	6.2	23.5	13	5.1
ILLINOIS TOOL WORKS ITW	2472.3	6	7454.7	9	264.1	13	756.5	14	10.7	10.0	17.7	18	3.0
INGERSOLL-RAND IR	2255.9	22	6418.4	11	130.7	-2	440.1	7	5.8	7.2	18.4	10	3.6
ITT INDUSTRIES ITT	1172.7	6	3602.2	6	64.9	19	186.4	16	5.5	4.9	22.6	11	2.8
JLG INDUSTRIES JLG (5)	339.7	32	838.2	42	26.0	16	47.3	-7	7.7	8.7	18.7	10	1.8
LAM RESEARCH LRCX (6)	432.0	79	1132.6	87	66.1	168	209.5	883	15.3	10.2	34.8	11	1.1
MCDERMOTT INTERNATIONAL MDR	391.0	-34	1470.0	-26	5.6	55	3.4	NM	1.4	0.6	-2.5	NM	-0.1
MILACRON MZ	394.0	0	1195.4	1	18.5	7	50.3	5	4.7	4.4	15.3	8	2.4
NOVELLUS SYSTEMS NVLS	359.1	132	959.2	139	85.3	292	218.5	401	23.7	14.1	15.9	21	1.1
PENTAIR PNR	715.9	18	2204.8	39	12.7	-57	83.2	38	1.8	4.9	12.1	11	2.1
TIMKEN TKR	632.2	5	2011.3	8	7.7	-38	45.0	9	1.2	2.1	6.5	13	1.1
TORO TTC (2)	345.2**	6	1067.2	6	16.4	59	44.3	26	4.8	3.2	13.6	10	3.1
TYCO INTERNATIONAL TYC (3)	7805.4	25	22293.1	29	1910.1	145	3728.7	217	24.5	12.5	29.4	22	2.1
UNOVA UNA	439.5	-13	1404.5	-6	-7.3	NM	8.5	-48	NM	1.9	3.0	12	0.1
(D) TEXTILES													
GROUP COMPOSITE	4796.5	0	14372.6	2	-450.2	NM	-293.8	NM	NM	3.5	-6.3	NM	-0.1
BURLINGTON INDUSTRIES BUR (3)	427.2	5	1249.2	0	-523.7	NM	-521.7	NM	NM	0.9	NM	NM	-10.1
COLLINS & AIKMAN CKC	423.0	-1	1465.0	5	-3.7	NM	14.4	NM	NM	NM	NM	24	0.1
INTERFACE IFSIA	336.7	11	953.6	4	9.8	86	8.0	-53	2.9	1.7	3.9	32	0.1
MOHAWK INDUSTRIES MHK	838.5	4	2456.4	6	42.1	-7	123.3	5	5.0	5.6	22.4	7	2.1
PILLOWTEX PTX	357.4	-14	1044.5	-9	-16.3	NM	-32.1	NM	NM	NM	-35.6	NM	-4.1
SHAW INDUSTRIES SHX	1035.9	-4	3091.8	0	0.7	NM	83.5	-54	0.1	6.6	16.4	19	1.1
SPRINGS INDUSTRIES SMI	574.8	2	1741.1	3	18.1	1	57.6	24	3.1	3.2	9.8	5	4.1
UNIFI UFI (6)	315.2	3	973.3	7	2.9	-13	27.4	46	0.9	1.1	6.3	14	0.1
WESTPOINT STEVENS WXS	487.8	-3	1397.7	0	19.8	-48	-54.4	NM	4.1	7.6	NM	NM	-0.1
16 METALS & MINING													
INDUSTRY COMPOSITE	21489.1	22	62889.5	23	417.9	72	1405.1	33	1.9	1.4	6.0	25	0.1
(A) ALUMINUM													
GROUP COMPOSITE	7445.3	44	19897.9	30	333.9	83	1102.4	61	4.5	3.5	13.5	15	1.1
ALCOA AA	6298.0	55	16398.0	36	368.0	42	1100.0	53	5.8	6.4	13.1	15	1.1
KAISER ALUMINUM KLU	537.1	3	1645.3	5	-16.8	NM	5.9	NM	NM	NM	50.6	9	0.1
MAXXAM MXM	610.2	4	1854.6	8	-17.3	NM	-3.5	NM	NM	NM	41.0	11	1.1
(B) STEEL													
GROUP COMPOSITE	9274.4	8	29114.3	15	-2.0	NM	66.2	-48	NM	NM	0.7	NM	0.1
AK STEEL HOLDING AKS	1116.1	6	3482.0	9	41.3	NM	116.9	51	3.7	0.2	8.4	10	0.1
BETHLEHEM STEEL BS	960.6	0	3126.7	11	-34.8	NM	-0.2	NM	NM	NM	-6.4	NM	-0.1
COMMERCIAL METALS CMC (4)	710.2	25	2049.0	20	12.7	-24	36.0	0	1.8	2.9	11.0	8	0.1
LTV LTV	1169.0	19	3773.0	26	-80.0	NM	-368.0	NM	NM	NM	-37.5	NM	-4.1
NATIONAL STEEL NS	666.7	-8	2246.9	11	-62.5	NM	-62.2	NM	NM	NM	-9.1	NM	1.1
NUCOR NUE	1163.1	13	3576.7	23	67.8	-1	231.1	57	5.8	6.6	15.4	9	3.1
RYERSON TULL RT	695.6	1	2242.7	7	-3.6	NM	-6.2	NM	NM	1.4	0.3	NM	0.1
TEXAS INDUSTRIES TXI (7)	365.2**	17	1042.4	21	25.7	57	68.4	24	7.0	5.3	11.0	7	0.1
USX-U.S. STEEL GROUP X	1430.0	7	4588.0	19	19.0	NM	118.0	594	1.3	NM	7.0	11	1.1
WALTER INDUSTRIES WLT (7)	513.8	12	1476.3	11	0.0	NM	-125.2	NM	0.0	2.6	-59.8	NM	-2.1
WORTHINGTON INDUSTRIES WOR (7)	484.2	5	1510.6	11	12.5	-49	57.6	-20	2.6	5.2	12.3	10	0.1



**You're thinking, "I want to
open another location, but
can't afford the overhead."**

**We're thinking,
"Open your
store on-line with
PNC iSites."**

BlackRock

PNC
Mortgage

PNC
Real Estate
Finance

PNC
Bank

PNC
Business
Credit

PFPC

Venture
Bank@
PNC

If you're not on the Internet, you're not doing all the business you can. PNC iSites makes it easy, with automatic search engine registration, online credit card processing, and round-the-clock hosting. For more information about PNC iSites, call 1-888-PNC-7030, or visit www.pnc.com.



The Thinking Behind The Money

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE- EARNINGS RATIO 11-2	12 MONTHS EARNING PER SHARE
	3RD QUARTER 2000 \$ MIL	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
(C) OTHER METALS													
GROUP COMPOSITE	4769.3	25	13877.3	31	86.0	-10	236.5	-4	1.8	2.5	2.4	85	0.21
BELDEN BWC	306.3	31	825.5	47	14.8	28	36.6	36	4.8	4.9	18.5	13	2.05
ENGELHARD EC	1374.4**	35	3937.3	20	51.3	1	169.2	15	3.7	5.0	24.3	12	1.71
FREEPORT-McMORAN COPPER & GOLD FCX	473.8	0	1338.8	2	0.2	NM	9.7	-89	0.0	7.5	NM	69	0.11
GENERAL CABLE BGC	666.7	-2	2140.5	55	-24.3	NM	-37.6	NM	NM	2.6	-35.6	NM	-1.23
NEWMONT MINING NEM	362.0	10	1075.9	11	-18.7	NM	-28.4	NM	NM	NM	1.3	NM	0.11
OLIN OLN	392.8	11	1133.3	16	23.4	800	66.0	843	6.0	0.7	21.9	11	1.66
PHELPS DODGE PD	1193.4	61	3426.0	63	39.3	155	20.9	NM	3.3	2.1	-6.1	NM	-2.64
17 NONBANK FINANCIAL													
INDUSTRY COMPOSITE	184623.1	21	541621.2	20	16790.9	18	51730.2	13	9.1	9.3	17.9	21	2.63
(A) FINANCIAL SERVICES													
GROUP COMPOSITE	116936.7	27	341339.1	25	11928.9	24	37168.2	27	10.2	10.5	22.8	20	2.78
AMERICAN EXPRESS AXP	5981.0	13	17608.0	13	737.0	14	2133.0	14	12.3	12.2	26.1	29	2.01
ASSOCIATES FIRST CAPITAL AFS	3519.6	16	9962.0	11	442.4	14	1222.1	13	12.6	12.7	14.7	17	2.24
BEAR STEARNS BSC (1)	2416.0	1	7607.7	22	181.4	-6	578.0	-7	7.5	8.0	NA	NA	NA
BLOCK (H&R) HRB (6)	320.6	164	2441.1	52	-51.7	NM	282.0	9	NM	NM	25.5	15	2.37
CAPITAL ONE FINANCIAL COF	1428.2	38	3846.0	34	122.1	28	341.4	29	8.6	9.2	24.7	30	2.10
CIT GROUP CIT	1550.8	133	4551.9	139	156.2	61	451.5	58	10.1	14.6	9.5	11	2.21
CITIGROUP C	25074.0	25	72477.0	19	3088.0	27	9683.0	31	12.3	12.1	24.5	20	2.69
CONCORD EFS CEFT	318.7	38	876.1	41	44.1	17	128.4	90	13.8	16.2	21.1	56	0.75
COUNTRYWIDE CREDIT INDUSTRIES CCR (10)	991.8	26	2605.6	28	91.0	-15	274.3	-12	9.2	13.5	12.0	12	3.23
DUN & BRADSTREET DNB	334.9	0	1039.2	0	7.1	-67	55.2	-9	2.1	6.4	NM	NA	NA
E*TRADE GROUP EGRP (3)	536.6	103	1610.7	120	47.7	NM	23.9	NM	8.9	NM	1.0	NM	0.06
EDWARDS (A.G.) AGE (10)	709.9	12	2337.5	24	77.0	-6	285.1	17	10.9	12.9	24.7	11	4.51
EQUIFAX EFX	517.9	17	1467.2	12	64.3	11	159.6	4	12.4	13.1	83.4	22	1.62
FANNIE MAE FNM	11204.0	19	32167.8	19	1122.8	13	3249.4	13	10.0	10.5	24.9	18	4.12
FIDELITY NATIONAL FINANCIAL FNF	790.1	131	1925.4	84	37.6	102	70.8	14	4.8	5.4	7.7	16	1.53
FIRST AMERICAN FAF	750.3**	-3	2172.4	-5	24.4	-13	50.4	-45	3.3	3.6	6.1	29	0.74
FRANKLIN RESOURCES BEN (3)	593.1**	3	1774.5	5	140.8	6	424.6	19	23.7	23.1	19.0	18	2.28
FREDDIE MAC FRE	7652.0	22	21905.0	24	642.0	16	1876.0	15	8.4	8.9	22.9	17	3.28
GOLDMAN SACHS GROUP GS (1)	8851.0	37	25011.0	34	824.0	29	2466.0	24	9.3	9.9	25.1	16	6.31
HELLER FINANCIAL HF	517.0	27	1485.0	30	72.0	22	218.0	25	13.9	14.5	14.0	10	3.09
HOUSEHOLD INTERNATIONAL HI	3087.2	27	8688.0	25	451.2	13	1208.0	15	14.6	16.5	21.7	15	3.44
LANDAMERICA FINANCIAL GROUP LFG	452.4	-12	1325.6	-14	7.8	-15	23.5	-43	1.7	1.8	5.1	15	1.98
LEGG MASON LM (9)	375.8	22	987.6	20	37.2	23	110.4	24	9.9	9.8	19.6	24	2.16
LEHMAN BROTHERS HOLDINGS LEH (1)	7359.0	54	20034.0	40	457.0	58	1376.0	66	6.2	6.1	23.7	10	6.05
MARSH & MCLENNAN MMC	2535.0	14	7681.0	13	282.0	26	895.0	32	11.1	10.0	20.3	40	3.28
MERRILL LYNCH MER	10853.0	28	33209.0	28	885.0	53	2907.0	53	8.2	6.8	23.7	17	4.08
METRIS MXT	374.5	56	1067.5	78	48.4	55	150.0	84	12.9	13.0	31.9	17	2.02
MORGAN STANLEY DEAN WITTER MWD (1)	11711.0	36	34969.0	34	1246.0	28	4248.0	35	10.6	11.2	32.2	16	5.11
PAINEWEBBER GROUP PWJ	2445.2**	31	7166.8	25	135.8	-2	439.6	-5	5.6	7.4	18.8	20	3.50
PRICE (T. ROWE) ASSOCIATES TROW	303.7**	17	920.7	23	69.2	11	213.6	26	22.8	23.9	29.5	21	2.20
SCHWAB (CHARLES) SCH	1322.5**	30	4452.7	39	142.3	-1	579.4	22	10.8	14.2	19.7	66	0.53
STILWELL FINANCIAL SV †	609.5	96	1717.6	108	170.1	106	510.5	138	27.9	26.6	58.5	18	2.59
TD WATERHOUSE GROUP TWE (2)	345.6**	42	1215.9	72	34.5	31	168.1	120	10.0	10.9	8.6	36	0.50
USA EDUCATION SLM	1104.9	35	3032.6	31	92.2	-24	366.4	2	8.3	14.8	42.6	18	3.08
(B) INSURANCE													
GROUP COMPOSITE	58446.7	10	173830.6	11	3949.2	11	11677.0	-13	6.8	6.7	10.9	28	2.30
AETNA AET	8132.0**	15	24168.9	29	177.4	-9	533.2	-8	2.2	2.8	5.9	14	4.65
AFLAC AFL	2475.0	13	7232.0	15	163.0	13	521.0	11	6.6	6.6	15.0	31	2.28
ALLSTATE ALL	7445.0	14	21914.0	10	644.0	31	1664.0	-27	8.7	7.5	13.0	14	2.75
AMERICAN GENERAL AGC	2793.0**	4	8265.0	3	319.0	9	698.0	-20	11.4	11.0	13.7	21	3.77
AMERICAN INTERNATIONAL GROUP AIG	11141.0	16	33456.7	13	1385.6	9	4138.8	11	12.4	13.2	15.7	41	2.33
AMERICAN NATIONAL INSURANCE ANAT	473.6	10	1407.3	0	38.4	-16	142.2	-28	8.1	10.7	6.9	8	7.97
AON AOC	1785.0	1	5414.0	4	139.0	1	391.0	15	7.8	7.8	13.0	22	1.54
BERKLEY (W.R.) BKLY	446.0	4	1301.2	4	7.1	NM	18.1	168	1.6	NM	-3.7	NM	-0.89
CIGNA CI	5026.0**	7	14888.0	7	278.0	NM	710.0	74	5.5	NM	18.3	19	5.96
CINCINNATI FINANCIAL CINF	599.8	11	1749.9	8	5.6	-90	159.6	-23	0.9	10.6	4.2	30	1.26
CONSECO CNC	1955.3	3	6126.4	4	-427.1	NM	-754.3	NM	NM	8.2	-20.3	NM	-2.53
EVEREST RE GROUP RE	370.6	11	1062.1	10	47.7	22	135.0	14	12.9	11.5	11.9	15	3.77
HARTFORD FINANCIAL SERVICES GROUP HIG	3791.0	10	10804.0	7	250.0	34	701.0	10	6.6	5.4	14.7	18	4.16
JEFFERSON-PILOT JP	806.9**	27	2430.3	25	129.2	11	398.3	10	16.0	18.2	18.0	14	4.81
JOHN HANCOCK FINANCIAL SERVICES JHF	1696.4**	-5	5481.4	-3	184.3	310	618.4	30	10.9	2.5	7.1	22	1.39
LIBERTY FINANCIAL L	314.3**	5	960.2	5	12.0	-51	65.8	-13	3.8	8.2	6.9	21	1.81
LINCOLN NATIONAL LNC	1714.5**	4	5078.0	2	138.6	5	472.5	11	8.1	8.1	11.2	19	2.61
MERCURY GENERAL MGY	342.0	7	1016.5	6	27.4	-1	83.4	-17	8.0	8.7	12.3	17	2.14
NATIONWIDE FINANCIAL SERVICES NFS	801.3**	12	2374.7	16	116.7	13	325.7	15	14.6	14.4	15.1	15	3.29
OHIO CASUALTY OCAS	445.1	3	1294.5	-10	14.6	NM	-68.7	NM	3.3	NM	-6.3	NM	-1.00

10/15/99 One staff developer starts project

2/19/00 Go live—Take 10 changes

1/31/00 Pilot begins

2/21/00 Shipping industry's first Internet booking

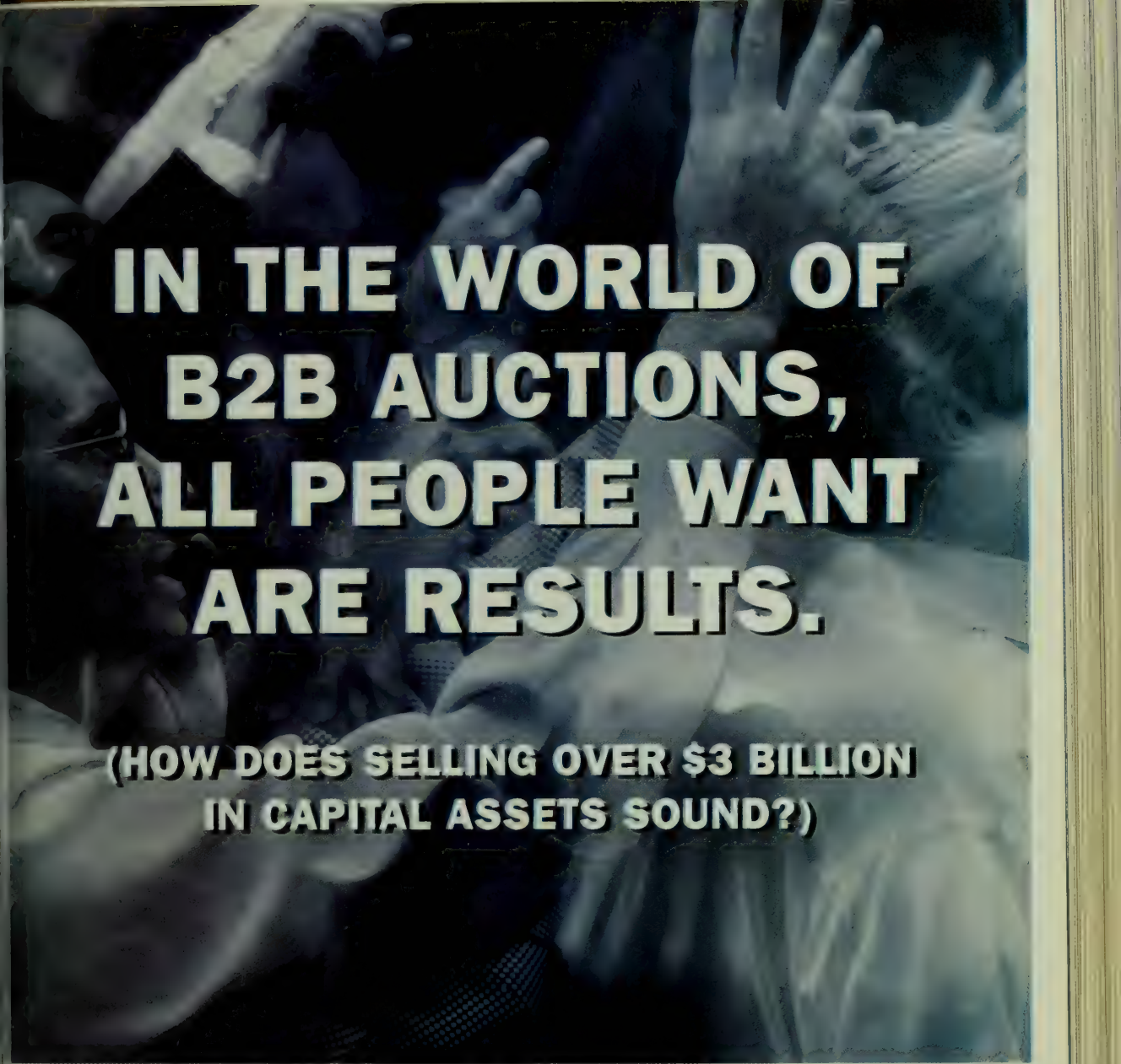


"When you move over 170,000 shipments every year, you'd better know how to move information fast. That's why we chose Versata e-business automation software to help us build myanzdl.com. Implemented in record time, this global site allows shipping customers around the world to book cargo, get confirmation instantly, and track shipments. And, with Versata's rules-based approach, **we can make fundamental changes in hours rather than weeks.** If you need to deliver a 125-foot yacht or a container of Australian Shiraz, count on us. But if you're moving your business to the Web, visit www.versata.com."

Marc Boyer-Chammond
V.P., Information Systems,
ANZDL

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 11-2	12 MONTHS' EARNINGS PER SHARE
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	# MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
OLD REPUBLIC INTERNATIONAL ORI	517.8	0	1513.2	-5	80.0	101	204.8	15	15.5	7.7	11.4	12	2.11
PROGRESSIVE PGR	1752.0	11	5006.3	11	58.8	-21	-1.9	NM	3.4	4.7	0.1	NM	0.03
PROTECTIVE LIFE PL	431.2	13	1313.5	14	34.0	-9	116.3	4	7.9	9.8	17.1	10	2.41
REINSURANCE GROUP OF AMERICA RGA	402.4	23	1223.8	4	31.4	NM	76.7	128	7.8	NM	12.3	19	1.95
SAFECO SAFC	1797.8**	2	5434.3	5	45.5	183	104.4	-50	2.5	0.9	3.5	21	1.17
TRANSATLANTIC HOLDINGS TRH	495.8	10	1426.0	8	53.4	48	160.7	-5	10.8	8.0	9.9	18	5.11
UNITRIN UNIT	496.1	0	1488.4	10	-4.3	NM	63.1	-55	NM	10.4	7.4	18	1.74
(C) SAVINGS & LOAN GROUP COMPOSITE	9239.6	17	26451.5	16	912.8	-13	2885.0	-5	9.9	13.4	15.3	14	2.41
ASTORIA FINANCIAL ASFC	396.3**	0	1183.6	1	53.7	-20	165.0	-6	13.5	17.0	16.0	9	4.41
BANK UNITED BNKU (3)	389.1**	4	1109.1	29	36.6	8	103.1	25	9.4	9.0	14.6	15	3.80
CHARTER ONE FINANCIAL CF	677.3**	11	1938.5	7	109.6	5	324.6	3	16.2	17.1	14.8	14	1.57
DIME BANCORP DME	496.6**	1	1576.6	7	-16.5	NM	83.2	-54	NM	12.5	9.2	19	1.30
GOLDEN STATE BANCORP GSB	1170.5**	15	3376.6	11	88.5	8	258.2	9	7.6	8.0	17.8	11	2.43
GOLDEN WEST FINANCIAL GDW	1055.8**	44	2814.2	28	137.4	16	396.6	10	13.0	16.1	15.6	16	3.21
GREENPOINT FINANCIAL GPT	408.8**	10	1179.8	8	67.0	9	190.2	21	16.4	16.6	12.0	11	2.70
SOVEREIGN BANCORP SVRN	649.3**	44	1688.3	34	-15.9	NM	-37.7	NM	NM	12.4	-0.4	NM	0.02
WASHINGTON MUTUAL WM	3995.9**	17	11584.8	16	452.5	-4	1401.7	3	11.3	13.7	19.9	13	3.39
18 OFFICE EQUIPMENT & COMPUTERS													
INDUSTRY COMPOSITE	132506.6	15	385015.5	12	9046.2	0	33631.3	19	6.8	7.8	17.2	55	0.98
(A) BUSINESS MACHINES & SERVICES													
GROUP COMPOSITE	11219.8	14	32738.4	15	483.2	-1	1283.5	-3	4.3	4.9	22.0	13	2.13
DELUXE DLX	404.9	-3	1216.1	-2	49.4	1	128.6	-11	12.2	11.8	50.7	9	2.57
DIEBOLD DBD	480.0	53	1266.6	42	34.9	7	102.0	9	7.3	10.4	15.4	14	1.93
HON INDUSTRIES HNI	532.1	12	1517.2	15	34.2	19	82.2	31	6.4	6.0	18.9	14	1.78
MILLER (HERMAN) MLHR (7)	526.5	11	1527.6	15	36.0	2	107.5	3	6.8	7.4	48.7	15	1.77
NCR NCR	1464.0	-4	4167.0	-6	54.0	2	88.0	-14	3.7	3.5	19.2	13	3.33
PITNEY BOWES PBI	1121.3	3	3384.3	4	161.4	-13	478.9	-1	14.4	17.1	48.7	12	2.50
STANDARD REGISTER SR	303.9	-7	939.2	-5	8.4	-44	16.8	-61	2.8	4.6	5.3	12	1.06
STEELCASE SCS (10)	985.5	18	2841.6	29	53.7	41	160.3	13	5.4	4.6	12.8	13	1.36
TECH DATA TECD (11)	4997.0	24	14701.0	25	40.8	39	115.1	23	0.8	0.7	13.5	16	2.67
WALLACE COMPUTER SERVICES WCS (5)	404.7	5	1177.6	3	10.4	-46	4.0	-93	2.6	5.1	4.1	25	0.55
(B) COMPUTERS & PERIPHERALS													
GROUP COMPOSITE	77777.2	13	224280.4	9	5523.1	41	15137.6	6	7.1	5.7	21.6	47	1.22
APPLE COMPUTER AAPL (3)	1870.0	40	5640.0	27	170.0	53	603.0	34	9.1	8.3	19.5	10	2.18
COMPAQ COMPUTER CPQ	11200.0	22	30840.0	10	550.0	293	1262.0	432	4.9	1.5	12.2	35	0.91
DELL COMPUTER DELL (11)	7670.0	25	21751.0	29	603.0	19	1564.0	14	7.9	8.3	28.7	47	0.68
EMC EMC	2283.0	34	6251.5	29	458.2	55	1219.2	52	20.1	17.3	19.0	NM	0.64
GATEWAY GTW	2530.1	16	7009.9	13	152.6	35	410.3	36	6.0	5.2	21.0	31	1.62
HEWLETT-PACKARD HWP (2)	11818.0	15	35519.0	15	1029.0	48	2639.0	13	8.7	6.7	23.3	27	1.64
INTERNATIONAL BUSINESS MACHINES IBM	21781.0	3	62780.0	-1	1963.0	11	5423.0	-4	9.0	8.3	39.6	25	4.09
IOMEGA IOM	320.5	-10	969.0	-11	55.4	NM	147.6	NM	17.3	NM	35.9	8	0.62
LEXMARK INTERNATIONAL GROUP LXX	926.6	10	2711.3	11	66.1	-14	230.4	5	7.1	9.1	44.3	19	2.44
MAXTOR MXTR	619.3	5	1977.7	10	-14.0	NM	26.8	NM	NM	NM	10.3	33	0.27
MICRON ELECTRONICS MUEI (4)	500.0	50	1203.3	16	23.1	68	26.9	8	4.6	4.1	8.2	19	0.43
PALM PALM (7)	401.0	127	1023.5	115	17.3	79	40.7	76	4.3	5.5	5.1	NM	0.09
QUANTUM DLT & STORAGE SYSTEMS DSS (9)	361.8	1	1093.2	1	44.3	110	110.5	-15	12.2	5.9	29.0	15	1.01
QUANTUM HARD DISK DRIVE GROUP HDD (8)	823.7	7	2589.2	6	-8.7	NM	24.8	NM	NM	NM	4.8	36	0.36
SEAGATE TECHNOLOGY SEG (6)	1748.0	4	4869.0	-5	75.0	NM	441.0	-60	4.3	0.1	10.0	47	1.58
SILICON GRAPHICS SGI (6)	426.3	-27	1524.1	-25	-49.0	NM	-674.7	NM	NM	NM	NM	NM	-3.58
STORAGE TECHNOLOGY STK	486.6	-15	1458.8	-16	6.3	NM	-32.6	NM	1.3	NM	-6.5	NM	-0.58
SUN MICROSYSTEMS SUNW (6)	5045.0	60	14067.0	46	510.0	88	1738.0	87	10.1	8.6	25.2	89	1.23
SYMBOL TECHNOLOGIES SBL	373.2	27	1034.7	25	40.5	31	108.4	31	10.8	10.5	16.4	45	0.98
UNISYS UIS	1690.9	-9	4956.7	-11	42.9	-71	205.7	-46	2.5	8.1	16.1	12	1.12
WESTERN DIGITAL WDC (6)	440.2	8	1430.7	-20	-44.8	NM	-111.3	NM	NM	NM	NM	NM	-1.56
XEROX XRX	4462.0	-4	13581.0	-2	-167.0	NM	-265.0	NM	NM	7.3	-0.1	NM	-0.03
(C) COMPUTER SOFTWARE & SERVICES													
GROUP COMPOSITE	43509.7	17	127996.7	17	3039.8	-34	17210.2	35	7.0	12.5	14.2	66	0.79
ADOBE SYSTEMS ADBE (1)	328.9	26	911.2	24	78.3	37	208.6	49	23.8	21.9	45.4	33	2.43
AFFILIATED COMPUTER SERVICES ACS (5)	478.6	7	1517.5	14	30.6	22	88.4	23	6.4	5.6	15.4	26	2.17
AMERICA ONLINE AOL (6)	1975.0	34	5751.0	40	345.0	91	1116.0	49	17.5	12.3	21.2	NM	0.54
AMERICAN MANAGEMENT SYSTEMS AMSY	322.8	0	951.9	4	-4.2	NM	27.2	-29	NM	5.6	13.6	20	1.09
AUTOMATIC DATA PROCESSING AUD (5)	1586.5**	17	5030.5	16	173.4	19	668.5	19	10.9	10.8	18.9	49	1.35
BMC SOFTWARE BMCS (9)	323.0	-22	1172.1	-3	-12.5	NM	95.5	-46	NM	14.2	9.1	33	0.65
CADENCE DESIGN SYSTEMS CDN	332.5	47	888.6	8	13.7	NM	7.5	-11	4.1	NM	-1.6	NM	-0.07
CISCO SYSTEMS CSCO (5)	5720.0	61	15010.0	57	796.0	32	2253.0	49	13.9	17.0	10.1	NM	0.36
CMGI CMGI (5)	377.2	568	768.9	428	-633.7	NM	-1247.3	NM	NM	NM	-23.8	NM	-5.26
COMPUTER ASSOCIATES INTERNATIONAL CA (9)	1545.0	5	4589.0	15	138.0	-59	553.0	53	8.9	22.8	14.2	20	1.69



IN THE WORLD OF B2B AUCTIONS, ALL PEOPLE WANT ARE RESULTS.

**(HOW DOES SELLING OVER \$3 BILLION
IN CAPITAL ASSETS SOUND?)**

These days the only thing anyone wants to hear about is results. Well, that's perfectly fine with us, because we've got plenty of them. DoveBid has sold well over \$3 billion worth of capital assets for hundreds of the world's leading companies including Packard Bell, Harris, Ajitsu, Boeing, Lockheed-Martin and DaimlerChrysler.

DoveBid has 63 years of auction experience, and has successfully conducted over 5,000 auctions worldwide. Plus, with our live webcasts, we can now reach more buyers than ever before. So whatever capital assets you want to buy or sell, come to www.dovebid.com. Because if it's results you want, it's results you'll get.

Check website for upcoming webcast auctions.

www.dovebid.com

DOVEBIDTM
Business Auctions Worldwide

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE- EARNINGS RATIO 11-2	MO EAF
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
COMPUTER SCIENCES CSC (8)	2498.9	12	7537.4	13	109.0	17	347.8	16	4.4	4.2	13.7	26	2
COMPUWARE CPWR (9)	486.3	-14	1582.3	5	12.9	-86	83.1	-73	2.7	16.2	16.2	15	0
DST SYSTEMS DST	335.5	10	1012.9	12	44.8	32	148.2	47	13.4	11.1	12.0	42	1
ELECTRONIC DATA SYSTEMS EDS	4749.8	1	13896.4	2	278.7	76	821.9	117	5.9	3.4	17.3	27	1
FIRST DATA FDC	1440.3**	4	4197.4	4	308.3	49	689.7	27	21.4	15.0	35.3	16	3
FISERV FISV	406.2	15	1219.0	18	44.7	27	132.9	29	11.0	10.0	13.6	39	2
GALILEO INTERNATIONAL GLC	405.9	6	1272.0	7	37.9	-30	128.5	-34	9.3	14.1	32.8	12	1
GENUITY GENU	308.1	70	823.9	63	-228.9	NM	-663.4	NM	NM	NM	-20.1	NA	1
I2 TECHNOLOGIES ITWO	319.5	118	748.4	89	-755.7	NM	-1024.8	NM	NM	3.9	-11.4	NM	-1
INGRAM MICRO IM	7558.7	13	22650.1	12	38.8	145	165.9	59	0.5	0.2	13.0	11	1
MICROSOFT MSFT (6)	5800.0	8	17260.0	10	2581.0	18	7375.0	17	44.5	40.7	21.6	40	1
ORACLE ORCL (7)	2261.9	14	8085.6	15	500.7	111	6176.3	484	22.1	11.9	122.2	27	1
PEOPLESOFT PSFT	443.1	28	1238.7	17	68.7	NM	101.5	NM	15.5	NM	11.0	NM	0
PRICELINE.COM PCLN	341.3	124	1007.2	222	-199.1	NM	-224.4	NM	NM	NM	NM	NM	-1
PSINET PSIX	352.5	151	843.2	128	-685.1	NM	-1072.0	NM	NM	NM	-78.2	NM	-1
SABRE HOLDINGS TSG	667.0**	8	1974.0	4	44.0	-44	173.0	-26	6.6	12.6	39.1	17	2
SIEBEL SYSTEMS SEBL	480.9	131	1180.9	124	71.0	161	157.9	118	14.8	13.1	10.4	NM	1
SUNGARD DATA SYSTEMS SDS	413.2	17	1199.0	14	55.3	59	150.5	498	13.4	9.9	14.4	32	1
3COM COMS (7)	933.8	-23	2840.4	-24	-63.7	NM	267.1	-5	NM	10.6	10.3	15	1
VERITAS SOFTWARE VRTS	317.2	73	837.2	126	-148.1	NM	-494.8	NM	NM	NM	-21.5	NM	-1
19 PAPER & FOREST PRODUCTS													
INDUSTRY COMPOSITE	27965.4	10	81621.6	16	1292.8	-7	4337.0	26	4.6	5.5	13.6	15	2
(A) FOREST PRODUCTS													
GROUP COMPOSITE	6333.4	-5	19458.1	22	97.2	-69	594.9	-21	1.5	4.6	14.4	7	2
GEORGIA-PACIFIC GROUP GP	5310.0	-3	16144.0	28	130.0	-43	530.0	-2	2.4	4.2	17.4	8	1
LOUISIANA-PACIFIC LPX	652.4	-18	2207.4	2	-40.9	NM	37.8	-79	NM	8.7	5.4	12	1
UNIVERSAL FOREST PRODUCTS UFPI	371.0	-4	1106.7	-3	8.1	-15	27.1	-2	2.2	2.5	13.0	9	1
(B) PAPER													
GROUP COMPOSITE	21632.0	15	62163.5	14	1195.5	10	3742.1	39	5.5	5.7	13.4	17	2
BOISE CASCADE BCC	1921.2	7	5793.8	14	84.6	72	155.2	25	4.4	2.7	13.8	8	1
BOWATER BOW	628.0	23	1715.2	7	50.0	NM	100.9	73	8.0	NM	7.0	23	1
FORT JAMES FJ	1796.2	3	5229.4	2	104.8	11	317.6	-9	5.8	5.4	30.5	22	1
INTERNATIONAL PAPER IP	7800.0	24	21000.0	15	175.0	21	689.0	479	2.2	2.3	6.1	20	1
KIMBERLY-CLARK KMB	3529.5	7	10381.2	8	440.4	-8	1344.9	8	12.5	14.5	31.5	20	1
MEAD MEA	1150.1	17	3161.6	11	58.3	15	147.6	25	5.1	5.2	9.7	12	1
WEYERHAEUSER WY	3690.0	18	11516.0	30	199.0	-16	728.0	45	5.4	7.6	11.8	11	1
WILLAMETTE INDUSTRIES WLL	1116.9	3	3366.3	12	83.4	2	258.9	46	7.5	7.5	14.8	11	1
20 PUBLISHING & BROADCASTING													
INDUSTRY COMPOSITE	22885.4	20	63288.5	19	2211.9	50	4671.0	-6	9.7	8.3	9.9	39	1
(A) BROADCASTING													
GROUP COMPOSITE	5458.9	65	14246.4	61	1169.9	NM	2067.5	138	21.4	4.2	6.8	33	1
CHARTER COMMUNICATIONS CHTR	839.0	NA	2355.3	NA	-210.0	NA	-587.6	NA	NM	NA	NA	NA	1
CLEAR CHANNEL COMMUNICATIONS CCU	1576.7	98	3325.1	86	448.9	NM	440.8	363	28.5	0.2	4.3	55	1
COX COMMUNICATIONS COX	902.2	53	2561.0	60	838.1	NM	1996.9	160	92.9	2.0	20.3	12	1
INFINITY BROADCASTING INF	1026.0	66	2789.0	65	111.0	0	283.0	9	10.8	17.9	2.6	87	1
USA NETWORKS USAI	1115.0	41	3215.9	40	-18.2	NM	-65.6	NM	NM	NM	-2.4	NM	1
(B) PUBLISHING													
GROUP COMPOSITE	17426.5	12	49042.1	12	1042.0	-26	2603.5	-42	6.0	9.0	14.1	42	1
BELO (A.H.) BLC	390.4	13	1167.1	12	17.5	6	65.2	-40	4.5	4.8	9.9	17	1
DOW JONES DJ	529.4	7	1730.1	18	-33.9	NM	155.3	-27	NM	20.7	40.0	24	1
GANNETT GCI	1599.3	24	4453.9	18	208.3	5	677.0	7	13.0	15.3	20.5	16	1
HARCOURT GENERAL H (2)	871.2	26	1684.4	15	173.5	42	99.9	98	19.9	17.6	22.0	24	1
HOUGHTON MIFFLIN HTN	476.5	4	825.8	8	95.3	5	71.2	15	20.0	19.7	13.7	20	1
KNIGHT-RIDDER KRI	812.9	4	2473.1	5	76.1	0	333.2	48	9.4	9.7	26.6	11	1
MCGRAW-HILL MHP	1391.7	6	3213.4	9	217.7	14	383.2	26	15.6	14.5	26.7	25	1
NEW YORK TIMES NYT	787.3	8	2515.8	12	75.0	25	259.8	27	9.5	8.2	27.2	18	1
PRIMEDIA PRM	401.6	-5	1231.6	-2	-43.0	NM	-89.5	NM	NM	NM	NM	NM	1
READER'S DIGEST ASSOCIATION RDA (6)	559.7	8	1750.2	6	30.0	8	78.4	18	5.4	5.5	36.6	23	1
SCHOLASTIC SCHL (7)	362.1	98	1070.8	36	-10.6	NM	23.1	NM	NM	NM	15.2	23	1
SCRIPPS (E.W.) SSP	409.6	10	1259.7	10	35.4	42	115.2	15	8.6	6.7	13.0	29	1
TIME WARNER TWX	6873.0	2	20517.0	8	88.0	-77	62.0	-94	1.3	5.7	9.2	NM	1
TRIBUNE TRB	1359.4	89	3408.5	61	79.2	-20	270.7	-79	5.8	13.9	6.4	27	1
WASHINGTON POST WPO	602.5	12	1740.8	8	33.5	-35	98.8	-40	5.6	9.6	11.4	33	1
21 SERVICE INDUSTRIES													
INDUSTRY COMPOSITE	98737.1	44	252100.2	35	1970.6	1	5426.0	-5	2.0	2.8	7.9	42	1
(A) CONSTRUCTION & ENGINEERING													
GROUP COMPOSITE	8472.0	11	23291.9	9	178.7	34	492.3	97	2.1	1.7	9.6	20	1
EMCOR GROUP EMCG	921.6	14	2529.9	24	11.5	33	25.6	59	1.2	1.1	17.8	9	1



Rate your enterprise software investment.

If the answer isn't 10, you need to find out about Hummingbird's platform independent software solutions. Visit www.hummingbird.com/scale6 or call 1-877-FLY-HUMM.

Hummingbird EIP



Where the future of e-Business takes flight

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE- EARNINGS RATIO 11-2	12 MON. EARN. PER SHA
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
FLUOR FLR ⁽²⁾	2902.7	-5	8458.9	-11	33.3	-34	136.6	382	1.1	1.6	12.9	13	2.7
FOSTER WHEELER FWC	1008.4	7	2835.4	1	10.1	NM	27.2	NM	1.0	NM	-30.6	NM	-2.8
GRANITE CONSTRUCTION GVA	441.8	6	1001.9	4	24.9	19	43.1	12	5.6	5.0	15.8	12	2.1
JACOBS ENGINEERING GROUP JEC ⁽³⁾	870.2	13	2609.9	13	19.6	13	56.8	13	2.2	2.3	10.3	22	1.9
MASTEC MTZ	382.3	27	952.7	28	25.1	46	57.9	72	6.6	5.7	14.2	21	1.8
QUANTA SERVICES PWR	487.8	79	1245.1	110	40.7	112	91.3	233	8.3	7.1	11.4	22	1.7
URS URS ⁽²⁾	558.5	30	1606.8	89	14.2	37	33.9	47	2.5	2.4	16.5	6	2.3
WASHINGTON GROUP INTERNATIONAL WNG ⁽¹⁾	898.8	51	2051.3	29	-0.7	NM	20.0	-43	NM	2.1	8.0	16	0.7
(B) INDUSTRIAL DISTRIBUTION													
GROUP COMPOSITE	57674.4	79	134850.1	58	951.1	39	2411.2	34	1.6	2.1	11.7	33	1.3
AIRGAS ARG ⁽⁸⁾	410.1	6	1225.2	7	10.4	-45	20.7	-43	2.5	4.9	6.3	16	0.8
APPLIED INDUSTRIAL TECHNOLOGIES AIT ⁽⁶⁾	420.9	9	1239.3	6	7.2	23	26.2	7	1.7	1.5	10.8	11	1.1
ARROW ELECTRONICS ARW	3337.1	40	9268.2	36	101.9	177	249.0	211	3.1	1.5	16.6	11	2.4
AUDIOVOX VOXX ⁽¹⁾	470.3	59	1192.1	59	10.0	55	22.2	40	2.1	2.2	10.3	9	1.4
AVNET AVT ⁽⁶⁾	2957.2	79	8372.3	71	75.6	241	183.4	19	2.6	1.3	9.6	12	2.1
BELL MICROPRODUCTS BELM	511.0	80	1259.7	71	4.8	104	12.0	88	0.9	0.8	12.0	29	0.8
BRIGHTPOINT CELL	511.1	13	1437.5	18	8.7	208	24.4	NM	1.7	0.6	18.6	11	0.7
CELLSTAR CLST ⁽¹⁾	629.8	12	1781.0	8	-13.3	NM	-43.6	NM	NM	2.7	-9.1	NM	-0.1
CRANE CR	363.2	-5	1134.9	-5	21.4	17	96.9	12	5.9	4.8	19.2	15	1.1
DYNEGY DYN	8366.1	82	19434.9	80	235.0	364	394.6	270	2.8	1.1	15.7	37	1.1
ENRON ENE	30007.0	154	60038.0	106	292.0	1	919.0	20	1.0	2.5	11.3	59	1.1
GENUINE PARTS GPC	2159.9	4	6373.4	6	91.7	1	280.1	4	4.2	4.4	17.5	9	2.1
GETTY PETROLEUM MARKETING GPM ⁽¹¹⁾	310.8	59	846.5	65	-7.2	NM	-3.6	NM	NM	0.0	-6.0	NM	-0.1
GRAINGER (W.W.) GWW	1241.7	6	3678.9	8	48.1	5	145.0	-5	3.9	3.9	11.6	18	1.1
HUGHES SUPPLY HUG ⁽¹¹⁾	874.1	13	2427.5	16	22.3	7	2.6	7	2.6	2.7	12.3	6	2.1
PIONEER-STANDARD ELECTRONICS PIOS ⁽⁸⁾	714.8	13	2065.0	17	11.7	14	33.3	21	1.6	1.6	12.5	10	1.1
PSS WORLD MEDICAL PSSI ⁽⁹⁾	444.9	-1	1358.8	5	2.5	-83	-7.6	NM	0.6	3.2	0.7	50	0.7
RELIANCE STEEL & ALUMINUM RS	443.7	17	1315.4	16	15.8	7	48.7	15	3.6	3.9	14.8	10	2.1
SCHEIN (HENRY) HSC	603.0	4	1725.0	3	16.2	41	44.0	27	2.7	2.0	10.8	18	1.1
U.S. OFFICE PRODUCTS OFIS ⁽⁸⁾	545.8	-13	1777.2	-9	-45.1	NM	-193.0	NM	NM	NM	-98.3	NM	-5.1
UNITED STATIONERS USTR	999.0	14	2907.3	16	26.4	19	73.1	25	2.6	2.5	20.7	11	2.1
WESCO INTERNATIONAL WCC	974.7	8	2887.3	13	14.6	7	36.6	30	1.5	1.5	36.4	9	0.7
WORLD FUEL SERVICES INT ⁽⁹⁾	378.1	26	1104.6	57	0.2	NM	1.7	-58	0.1	NM	2.4	30	0.7
(C) POLLUTION CONTROL													
GROUP COMPOSITE	922.4	3	2622.5	13	61.9	-5	182.4	3	6.7	7.3	12.6	11	1.1
IT GROUP ITX	383.3	-3	1048.3	10	6.9	-44	18.0	-33	1.8	3.1	8.6	5	0.7
REPUBLIC SERVICES RSG	539.1	8	1574.2	15	55.0	5	164.4	9	10.2	10.5	13.3	11	1.1
(D) PRINTING & ADVERTISING													
GROUP COMPOSITE	4991.8	12	14648.5	14	283.3	35	891.2	22	5.7	4.7	24.5	27	1.1
BANTA BN	404.6	22	1079.3	15	19.2	10	41.8	7	4.8	5.3	16.4	10	2.1
DONNELLEY (R.R.) DNY	1433.0	2	4164.8	7	92.3	8	195.3	6	6.4	6.1	27.7	9	2.1
INTERPUBLIC GROUP IPG	1320.4	15	3936.8	16	61.9	-9	236.0	-11	4.7	5.9	16.7	41	1.1
OMNICOM GROUP OMC	1452.5	20	4351.8	20	85.7	22	356.6	47	5.9	5.8	34.4	34	2.1
TRUE NORTH COMMUNICATIONS TNO	381.2	7	1115.8	10	24.2	NM	61.4	NM	6.3	NM	24.6	18	2.1
(E) OTHER SERVICES													
GROUP COMPOSITE	26676.6	13	76687.1	18	495.7	-42	1448.9	-48	1.9	3.6	0.6	NM	0.7
ABM INDUSTRIES ABM ⁽²⁾	461.9**	12	1330.5	11	12.4	12	29.9	13	2.7	2.7	14.2	16	1.1
ACNIELSEN ART	390.9	2	1166.7	4	17.0	-27	32.0	-36	4.3	6.1	10.8	24	0.7
ADMINISTAFF ASF	962.0	71	2582.0	67	7.4	69	7.7	101	0.8	0.8	14.2	70	0.7
AUTONATION AN	5338.1	-2	15907.8	5	93.1	1	254.4	3	1.7	1.7	-0.7	NM	-0.1
CARMAX GROUP KMX ⁽¹⁰⁾	673.6	26	1803.5	29	16.3	403	28.5	NM	2.4	0.6	6.7	8	0.7
CASEY'S GENERAL STORES CASY ⁽⁸⁾	530.0*	36	1380.6	40	15.7	7	27.9	-6	3.0	3.8	12.5	16	0.7
CDI CDI	441.6	8	1300.4	8	11.2	-16	35.9	4	2.5	3.3	14.6	8	2.1
CENDANT CD	1225.0	-13	3490.0	-15	214.0	2	515.0	-59	17.5	14.8	-38.2	NM	-1.1
CINTAS CTAS ⁽⁷⁾	522.0	14	1500.7	11	50.8	18	152.7	51	9.7	9.4	18.4	40	1.1
CONVERGYS CVG	544.5	21	1580.0	24	50.4	27	140.5	34	9.3	8.8	16.4	43	1.1
GROUP 1 AUTOMOTIVE GPI	955.0	36	2745.0	51	11.6	10	32.6	26	1.2	1.5	15.7	5	1.1
KELLY SERVICES KELYA	1154.5	6	3341.3	5	26.0	4	63.9	5	2.3	2.3	14.6	15	2.1
LITHIA MOTORS LAD	443.1	24	1256.5	41	7.5	29	18.7	39	1.7	1.6	15.3	7	1.1
MANPOWER MAN	2820.9	8	8103.3	14	54.1	11	117.7	16	1.9	1.9	24.6	16	2.1
MARCHFIRST MRCH	369.4	200	976.9	181	-436.7	NM	-928.5	NM	NM	7.3	-14.0	NM	-6.1
PAYCHEX PAYX ⁽⁷⁾	397.7	21	1196.3	27	58.6	36	159.8	36	14.7	13.1	33.2	NM	0.7
QUINTILES TRANSNATIONAL QTRN	412.3	2	1249.5	7	10.5	50	21.2	72	2.5	5.2	-0.7	39	0.7
REGIS RGIS ⁽⁶⁾	310.8	17	901.8	16	12.7	1	38.9	52	4.1	4.7	17.2	13	1.1
RENT-A-CENTER RCII	405.0	16	1189.7	14	23.9	53	79.4	91	5.9	4.5	33.7	10	0.7
ROBERT HALF INTERNATIONAL RHI	689.6	30	1993.4	32	48.0	39	138.3	33	7.0	6.5	24.6	33	0.7
SERVICEMASTER SVM	1586.3	0	4559.1	8	47.5	-29	155.9	30	3.0	4.2	17.4	14	0.7
SONIC AUTOMOTIVE SAH	1594.9	83	4607.6	111	22.1	75	61.9	111	1.4	1.4	18.1	5	1.1
SPHERION SFN	936.7	-2	2842.0	33	24.4	83	76.8	60	2.6	1.4	8.5	8	1.1

"Earthshaking."

"Perfect."

"Stupendous."

"Not bad."

Telecom ads exaggerate. Telecom users don't. They're tough to please. So when they say "not bad," we know they mean "great job." After all, with Global One's wealth of experience in global telecommunications, great customer service comes naturally. With a single point of contact around the clock – and service guarantees that have real teeth – that's actually "pretty good." For more information, call 877-460-4141 or visit us at www.globalone.net.



A Member of the France Telecom Group

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 11-2	MO. EARLY IN SY.
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
STAFF LEASING STFF	783.6	15	2294.8	15	0.7	-90	-1.0	NM	0.1	0.9	4.7	23	0
UNITED AUTO GROUP UAG	1331.2	23	3646.1	20	11.2	24	27.9	31	0.8	0.8	7.9	7	1
UNITED RENTALS URI	859.0	28	2167.9	39	75.4	34	140.0	42	8.8	8.4	12.9	10	1
VOLT INFORMATION SCIENCES VOL (2)	537.2	-4	1573.5	-1	9.8	28	21.2	33	1.8	1.4	13.5	10	2
22 TELECOMMUNICATIONS													
INDUSTRY COMPOSITE	91287.0	12	235821.4	12	9340.2	29	28582.8	40	10.2	9.7	10.4	24	1
(A) EQUIPMENT & SERVICES													
GROUP COMPOSITE	52038.5	14	121833.7	15	2200.6	-12	8097.7	36	4.2	6.0	4.5	35	0
ADC TELECOMMUNICATIONS ADCT (2)	891.0	67	2255.5	49	18.5	175	799.9	NM	2.1	1.3	29.4	21	1
AT&T T	16975.0	4	49097.0	6	1316.0	-19	4805.0	12	7.8	10.0	5.4	12	1
AT&T WIRELESS GROUP AWE	2799.0	37	7474.0	36	21.0	17	247.0	461	0.8	0.9	-0.3	NA	
CENTURYTEL CTL	482.6	15	1318.7	5	67.2	4	174.4	-3	13.9	15.4	12.1	22	0
LEVEL 3 COMMUNICATIONS LVLT	341.0	154	752.0	120	-351.0	NM	-903.0	NM	NM	NM	-21.9	NM	-3
LUCENT TECHNOLOGIES LU (3)	9359.0	NA	NA	NA	208.0	NA	NA	NA	2.2	NA	7.4	42	0
MCLEODUSA MCLD	366.6	52	986.7	53	-127.7	NM	-311.9	NM	NM	NM	-14.6	NM	-0
NEXTEL COMMUNICATIONS NXTL	1416.0	59	3755.0	60	-184.0	NM	-704.0	NM	NM	NM	-59.6	NM	-1
PRIMUS TELECOMMUNICATIONS GROUP PRTL	301.1	20	889.2	57	-56.4	NM	-150.4	NM	NM	NM	NM	NM	-4
SCIENTIFIC-ATLANTA SFA (6)	597.2	71	1590.6	55	113.3	349	210.5	125	19.0	7.2	18.8	48	1
SPRINT FON GROUP FON	4403.0	2	13234.0	5	384.0	-8	1194.0	-9	8.7	9.7	13.3	12	0
SPRINT PCS GROUP PCS	1673.0	98	4310.0	97	-390.0	NM	-1356.0	NM	NM	NM	-86.2	NM	-2
TELEPHONE & DATA SYSTEMS TDS	568.3	11	1622.8	11	75.1	42	139.2	-54	13.2	10.4	3.4	41	2
TELLABS TLAB	870.6	46	2310.8	44	210.4	49	493.2	35	24.2	23.7	27.5	32	1
U.S. CELLULAR USM	414.2	11	1171.9	11	95.1	67	199.0	-29	23.0	15.3	10.0	27	2
WILLIAMS COMMUNICATIONS GROUP WCG	533.8	7	1582.3	6	-149.9	NM	-250.1	NM	NM	NM	-16.2	NM	-0
WORLDCOM WCOM	10047.0	12	29483.0	11	951.0	-12	3511.0	32	9.5	12.0	8.5	11	1
(B) TELEPHONE COMPANIES													
GROUP COMPOSITE	39248.5	10	113987.7	10	7139.6	47	20485.1	42	18.2	13.6	27.9	19	2
ALLTEL AT	1803.2	8	5223.2	8	484.0	222	1703.6	210	26.8	9.0	38.7	10	6
BELLSOUTH BLS	6903.0	7	20142.0	9	1036.0	4	3101.0	29	15.0	15.5	25.2	21	2
BROADWING BRW	531.3	108	1492.5	102	-23.4	NM	-108.5	NM	NM	9.8	-7.4	NM	-0
SBC COMMUNICATIONS SBC	13454.0	7	39237.0	7	2999.0	164	6672.0	38	22.3	9.0	29.6	23	2
VERIZON COMMUNICATIONS VZ	16557.0	13	47893.0	12	2644.0	4	9117.0	39	16.0	17.3	28.5	15	3
23 TRANSPORTATION													
INDUSTRY COMPOSITE	64875.5	7	188271.4	9	3002.1	-4	8773.1	15	4.6	5.1	13.7	17	2
(A) AIRLINES													
GROUP COMPOSITE	26678.7	11	76523.1	11	928.7	-27	2986.1	-24	3.5	5.3	15.1	12	2
ALASKA AIR GROUP ALK	602.3	2	1644.8	4	15.9	-71	15.5	-87	2.6	9.3	3.7	22	1
AMERICA WEST HOLDINGS AWA	590.5	7	1771.4	8	1.3	-94	49.4	-45	0.2	4.0	10.9	5	2
AMR AMR	5256.0	12	14844.0	12	322.0	51	732.0	64	6.1	4.5	13.3	6	5
AMTRAN AMTR	347.3	15	1002.2	16	3.0	-78	6.9	-85	0.9	4.5	4.7	20	0
CONTINENTAL AIRLINES CAL	2622.0	16	7470.0	15	137.0	32	304.0	-5	5.2	4.6	30.2	7	7
DELTA AIR LINES DAL (6)	4345.0	13	12726.0	13	233.0	-32	910.0	-2	5.4	9.0	25.4	5	9
NORTHWEST AIRLINES NWAC	3178.0	12	8675.0	12	207.0	15	325.0	20	6.5	6.3	288.9	7	3
SOUTHWEST AIRLINES LUV	1478.8	20	4182.2	18	184.3	45	470.6	24	12.5	10.3	17.6	27	1
TRANS WORLD AIRLINES TWA	972.7	11	2736.6	9	-34.8	NM	-102.3	NM	NM	NM	NM	NM	-5
UAL UAL	4905.0	1	14559.0	7	-110.0	NM	340.0	-69	NM	7.4	7.4	11	3
US AIRWAYS GROUP U	2381.0	13	6912.0	7	-30.0	NM	-65.0	NM	NM	NM	NM	NM	-2
(B) RAILROADS													
GROUP COMPOSITE	8941.0	-6	26484.0	0	673.0	44	1709.0	5	7.5	4.9	8.2	15	1
BURLINGTON NORTHERN SANTA FE BNI	2315.0	-1	6788.0	1	259.0	-26	725.0	-12	11.2	14.9	14.0	11	2
CSX CSX	2039.0	-27	6144.0	-21	59.0	NM	132.0	124	2.9	NM	1.8	52	0
NORFOLK SOUTHERN NSC	1517.0**	1	4590.0	23	99.0	421	167.0	-20	6.5	1.3	3.4	28	0
UNION PACIFIC UNP	3070.0	6	8962.0	7	256.0	17	685.0	27	8.3	7.5	10.8	13	3
(C) TRANSPORTATION SERVICES													
GROUP COMPOSITE	16530.5	6	47847.7	10	550.3	-15	1471.5	-4	3.3	4.1	11.0	17	1
AIRBORNE FREIGHT ABF	804.5	2	2428.0	4	-5.5	NM	26.1	-65	NM	2.8	4.9	12	0
ANC RENTAL ANCX	1005.7	-2	2726.9	1	51.0	177	42.0	71	5.1	1.8	0.5	58	0
AVIS GROUP HOLDINGS AVI	1130.3	1	3239.8	39	48.4	23	105.4	29	4.3	3.5	14.3	10	3
BUDGET GROUP BD	707.9	2	1919.4	11	11.3	-62	-8.8	NM	1.6	4.3	-17.3	NM	-2
CNF CNF	1534.9	9	4526.9	12	27.7	-37	113.0	-16	1.8	3.1	15.4	9	2
DOLLAR THRIFTY AUTOMOTIVE GROUP DTG	322.9	8	844.1	10	36.0	19	72.0	37	11.1	10.1	19.0	5	3
FEDEX FDZ (7)	4778.7	11	14145.6	10	168.7	6	526.8	15	3.5	3.7	14.1	20	2
FRITZ FRTZ (7)	413.0	5	1207.5	14	5.8	-2	8.2	94	1.4	1.5	6.2	17	0
GATX GMT †	347.6	18	953.0	6	37.6	3	107.6	7	10.8	12.3	15.9	15	2
HERTZ HRZ	1437.8	7	3862.3	11	142.8	11	302.8	10	9.9	10.3	20.3	10	3
HUB GROUP HUBG	354.8	6	1027.7	7	1.6	-51	3.5	-54	0.4	1.0	5.0	9	0



We can show you things no one else can.

What if you could access accurate information on virtually every building in every major U.S. market? With CoStar Group's suite of Internet products, you will. In fact, you'll find hard-to-get details like comparable sales, buildings for sale, income and expense data, cap rates, lease expirations and loan terms. Plus four times the amount of for-lease space offered by our closest competitor. All enhanced by photographs, floorplans and aerials. Our research team drives 2 million miles each year to bring you this information – conducting on-site building inspections, examining over 60 million public records, and regularly interviewing 1 million tenants, owners and brokers. With our resources at your command, you'll develop a thorough understanding of the marketplace. You'll identify more opportunities. And you'll win more business. To learn more about CoStar Property,™ CoStar Tenant,™ CoStar COMPS® and CoStar Exchange,™ call 1-877-6COSTAR or visit www.costargroup.com.



EVERY BUILDING. EVERY DETAIL.

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE-EARNINGS RATIO 11-2	MO. EARLY
	3RD QUARTER 2000 \$ MIL	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
PITTSBURGH PZB	1055.3	1	3107.6	5	7.8	-68	17.0	-68	0.7	2.3	0.0	67	0
ROBINSON (C.H.) WORLDWIDE CHRW	747.6	26	2148.7	28	18.5	31	52.6	36	2.5	2.4	23.6	35	1
RYDER SYSTEM R	1338.8	6	3979.6	10	12.1	-66	61.6	-8	0.9	2.8	5.5	17	1
TRINITY INDUSTRIES TRN (B)	550.7	-21	1730.8	-20	-13.2	NM	41.6	-69	NM	6.6	8.1	12	2
(D) TRUCKING & SHIPPING													
GROUP COMPOSITE	12725.3	10	37416.5	12	850.1	18	2606.5	342	6.7	6.2	26.4	23	2
AMERICAN FREIGHTWAYS AFWY	364.0	20	1046.1	22	20.5	42	52.5	53	5.6	4.7	19.3	8	2
ARKANSAS BEST ABFS	488.5	8	1403.5	11	23.3	45	54.2	57	4.8	3.6	26.6	6	2
CONSOLIDATED FREIGHTWAYS CFWY	592.9	-5	1772.6	0	1.3	-72	-1.6	NM	0.2	0.8	-5.0	NM	-0
HUNT (J.B.) TRANSPORT SERVICES JBHT	509.4	-3	1626.5	9	9.1	84	25.2	-4	1.8	0.9	7.6	15	0
LANDSTAR SYSTEM LSTR	534.6	52	1220.2	21	11.5	-5	29.3	-3	2.2	3.4	45.8	10	4
ROADWAY EXPRESS ROAD	698.9	7	2083.5	11	10.8	12	31.1	23	1.6	1.5	16.4	8	2
SWIFT TRANSPORTATION SWFT	320.6	15	928.7	20	15.3	-18	42.5	-12	4.8	6.7	14.9	16	0
UNITED PARCEL SERVICE UPS	7367.0	10	21871.0	12	702.0	22	2210.0	895	9.5	8.6	31.0	25	2
USFREIGHTWAYS USFC	626.0	9	1856.1	14	24.3	-18	74.2	1	3.9	5.2	17.6	7	3
WERNER ENTERPRISES WERN	304.6	13	903.2	17	12.3	-28	35.5	-25	4.0	6.3	9.2	14	1
YELLOW YELL	918.9	7	2705.2	15	19.6	23	53.5	59	2.1	1.8	15.9	7	2
24 UTILITIES													
INDUSTRY COMPOSITE	133159.8	47	316105.8	36	8951.9	-5	20065.7	6	6.7	10.4	12.2	17	2
(A) ELECTRIC, WATER & COGENERATION													
GROUP COMPOSITE	115148.1	43	270512.5	34	8432.9	-7	17618.4	0	7.3	11.3	12.3	17	2
AES AES	1761.0	108	4775.0	125	134.0	131	427.0	268	7.6	6.8	13.9	48	1
ALLEGHENY ENERGY AYE	1058.5	43	2790.6	35	77.4	1	237.7	-2	7.3	10.3	16.9	16	2
ALLETE ALE	323.5	5	973.1	15	35.0	1	129.6	126	10.8	11.2	15.5	11	1
ALLIANT ENERGY LNT	658.4	10	1851.8	14	261.2	257	326.2	108	39.7	12.2	16.7	6	4
AMEREN AEE	1195.4	0	2961.1	6	259.2	2	440.0	10	21.7	21.2	13.8	13	3
AMERICAN ELECTRIC POWER AEP	3921.0	11	10134.0	8	403.0	0	524.0	-33	10.3	11.4	7.7	19	2
AMERICAN WATER WORKS AWK	364.1	3	1018.3	7	50.7	-4	123.0	16	13.9	14.9	9.2	16	1
AVISTA AVA	2864.3	-23	5599.7	-12	34.5	25	23.6	-58	1.2	0.7	-5.4	NM	-0
BLACK HILLS BKH	453.2	106	1038.2	81	16.3	68	33.4	26	3.6	4.4	19.7	16	2
CALPINE CPN †	671.7	183	1256.1	122	147.1	243	216.9	231	21.9	18.1	23.7	50	1
CINERGY CIN	2299.8	29	5652.4	27	94.9	-23	311.1	0	4.1	6.9	14.7	12	2
CMS ENERGY CMS	2395.0	63	5821.0	34	56.0	-33	218.0	-17	2.3	5.7	10.1	13	2
CONECTIV CIV	1551.5	44	3749.3	33	94.7	274	155.8	35	6.1	2.3	14.1	10	1
CONSOLIDATED EDISON ED	2820.8	20	7181.3	28	283.3	-17	546.9	-7	10.0	14.5	12.2	11	3
CONSTELLATION ENERGY GROUP CEG	981.6	-3	2842.2	0	150.8	8	269.1	-9	15.4	13.8	9.9	21	1
CP&L ENERGY CPL	1084.2	6	2853.6	12	297.1	102	489.8	63	27.4	14.4	16.4	11	3
DOMINION RESOURCES D	2351.0	41	6479.0	52	256.0	9	326.0	37	10.9	14.1	5.5	36	1
DPL DPL	355.5	7	1056.9	5	53.2	-1	119.1	-27	15.0	16.2	19.2	25	1
DUKE ENERGY DUK	15691.0	135	33907.0	118	770.0	75	1492.0	-12	4.9	6.6	13.7	24	3
EDISON INTERNATIONAL EIX	3653.2	24	9125.7	27	364.7	38	621.7	14	10.0	8.9	14.9	11	2
ENERGY EAST EAS	651.1	14	1907.5	10	33.4	-29	183.4	-4	5.1	8.3	15.1	11	1
ENERGY ETR	3431.6	12	7380.8	5	306.7	4	660.9	14	8.9	9.7	9.2	13	2
EXELON EXC	1629.0	-6	4366.0	4	239.0	2	526.0	7	14.7	13.6	44.3	16	3
FIRSTENERGY FE	1891.6	9	5201.7	11	212.4	4	523.4	4	11.2	11.8	12.6	10	2
FLORIDA PROGRESS FPC	1313.9	19	3357.5	16	150.6	9	337.8	20	11.5	12.4	16.9	14	3
FPL GROUP FPL	2087.0	10	5225.0	6	317.0	8	649.0	10	15.2	15.5	13.8	14	4
GPU GPU	1455.3	2	3912.1	16	105.2	-30	29.5	-93	7.2	10.5	3.0	41	0
HAWAIIAN ELECTRIC INDUSTRIES HE	445.9	14	1260.9	13	22.6	2	71.6	7	5.1	5.6	11.3	11	3
KANSAS CITY POWER & LIGHT KLT	324.4	8	742.7	5	81.6	118	108.9	46	25.2	12.5	12.3	14	1
LG&E ENERGY LGE	681.9	-21	1913.6	-8	85.7	-2	126.9	-35	12.6	10.1	17.9	19	1
NIAGARA MOHAWK HOLDINGS NMK	1099.6	6	3339.7	9	10.6	NM	22.1	-35	1.0	NM	-0.7	NM	-0
NORTHWESTERN NOR	1613.6	114	4582.2	147	9.3	30	30.0	17	0.6	1.0	13.8	12	1
NRG ENERGY NRG	624.8	267	1469.8	418	88.6	221	140.9	386	14.2	16.2	12.4	26	1
NSTAR NST	730.8	41	2026.6	60	66.4	-3	136.3	10	9.1	13.2	11.2	15	2
OGE ENERGY OGE	1008.0	32	2318.4	47	107.3	19	139.8	1	10.6	11.8	15.2	11	1
PG&E PCG	7504.0	21	18150.0	13	244.0	24	772.0	38	3.3	3.2	3.2	44	0
PINNACLE WEST CAPITAL PNW	1607.4	80	2852.0	52	116.0	-8	260.0	16	7.2	14.0	13.3	12	3
POTOMAC ELECTRIC POWER POM	835.7	-3	2018.0	2	120.8	-22	188.5	-26	14.5	17.9	9.8	15	1
PPL PPL	1458.0	5	4168.0	21	142.0	-15	389.0	7	9.7	12.0	26.5	12	3
PUBLIC SERVICE CO. OF NEW MEXICO PNM	499.5	47	1149.8	31	46.9	119	86.9	39	9.4	6.3	11.6	11	2
PUBLIC SERVICE ENTERPRISE GROUP PEG	1525.0	-5	4970.0	3	144.0	-35	560.0	-6	9.4	13.9	16.7	13	3
PUGET SOUND ENERGY PSD	979.0	138	2165.3	52	19.0	-24	124.6	0	1.9	6.1	12.4	12	2
RELIANT ENERGY REI	9522.7	92	19521.3	74	389.1	-77	738.7	-53	4.1	34.2	15.6	14	2
RGS ENERGY GROUP RGS	314.3	12	1010.9	15	14.1	-17	71.7	4	4.5	6.0	12.1	11	2
SCANA SCG	816.0	46	2300.0	49	61.0	-12	168.0	26	7.5	12.4	10.3	13	1
SOUTHERN SO	7479.0	100	13247.0	48	614.0	0	1201.0	4	8.2	16.5	14.8	14	2
SOUTHERN ENERGY SOE †	4281.0	524	5473.0	220	91.0	-41	272.0	-8	2.1	22.3	13.8	NA	



mpulse

No one has ever run a successful business by being uninformed. In fact, making critical decisions based solely on impulse wastes time, resources and effort. With Information Builders' business intelligence and integration software solutions your decisions can be based on something far more valuable—pertinent information that is available on demand to employees, customers and partners—everyone who impacts your success. That's the power of i-business, it puts the intelligence in e-business and provides companies like Merrill Lynch, General Motors and Sony with an intelligent real time view of their overall business. Only Information Builders offers that kind of knowledge. So you can seize the moment, act intelligently and perform like never before.

i-business changes everything

**Information
Builders**

www.informationbuilders.com/i-business

1.800.969.INFO

©2000 Information Builders, Inc. All trademarks, registered marks and service marks are the property of their respective owners. All rights reserved.

CORPORATE SCOREBOARD

COMPANY SYMBOL	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 9-30	PRICE- EARNINGS RATIO 11-2	12 MONTH EARNING PER SHARE
	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 \$ MIL.	CHANGE FROM 1999 %	9 MONTHS 2000 \$ MIL.	CHANGE FROM 1999 %	3RD QUARTER 2000 %	3RD QUARTER 1999 %			
TECO ENERGY TE	614.7	11	1698.7	14	82.0	47	193.0	22	13.3	10.1	16.5	15	1.86
TXU TXU	5834.0	32	15202.0	20	337.0	-7	764.0	17	5.8	8.2	13.9	11	4.06
UNICOM UCM	2220.0	7	5686.0	7	168.0	-40	512.0	-1	7.6	13.5	15.4	NA	3.19
UNISOURCE ENERGY UNS	342.8	28	757.5	22	17.2	-67	28.1	-44	5.0	19.3	10.4	14	1.07
WISCONSIN ENERGY WEC	850.8	44	2233.8	32	44.9	-35	126.2	-27	5.3	11.7	7.8	14	1.35
WPS RESOURCES WPS	458.6	83	1232.2	54	13.6	-7	55.8	14	3.0	5.8	12.2	13	2.50
XCEL ENERGY XEL	2562.5	41	6606.3	31	92.6	-56	389.0	-8	3.6	11.5	9.0	16	1.64

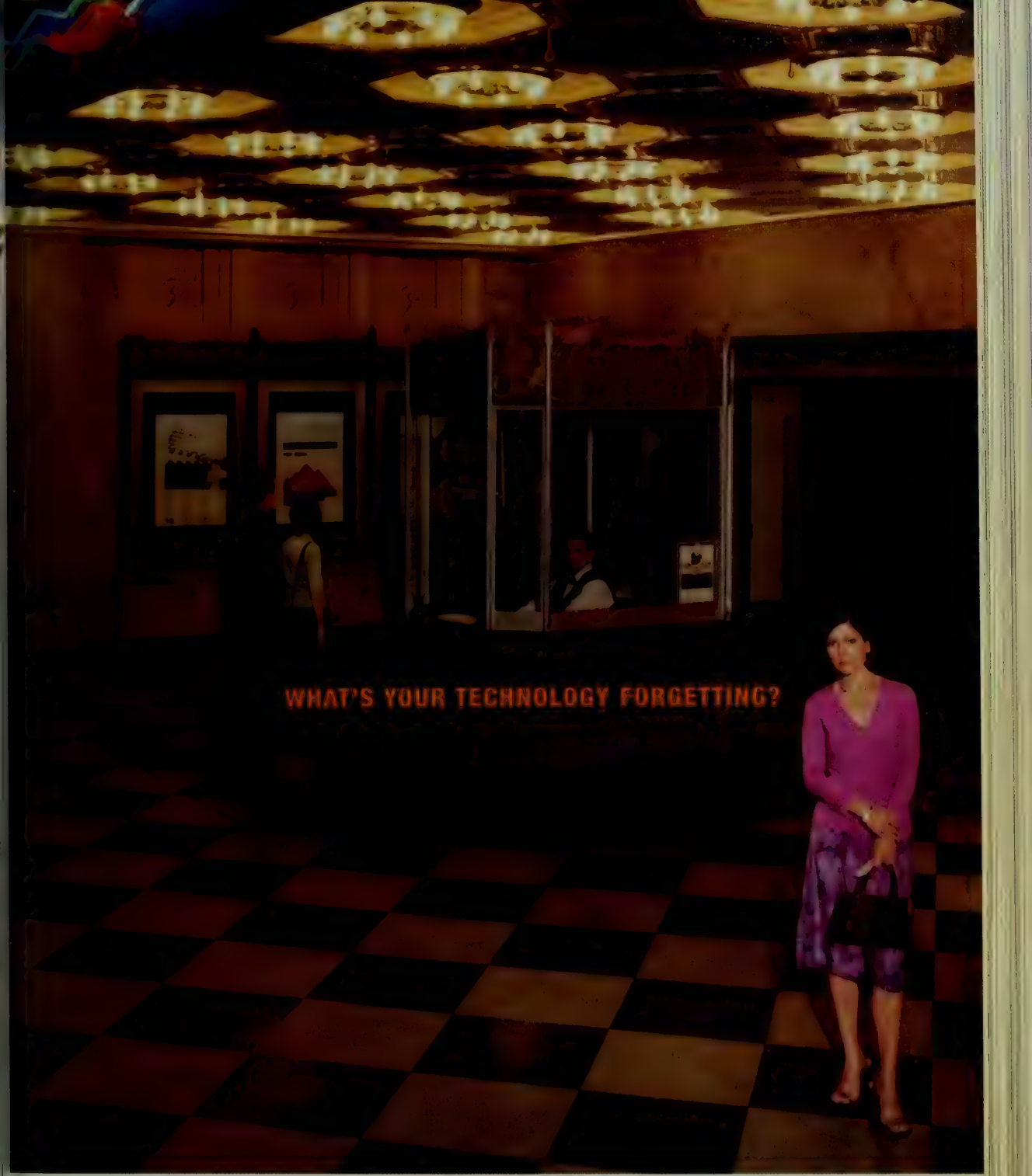
(B) GAS, OIL & TRANSMISSION

GROUP COMPOSITE	18011.7	76	45593.3	47	519.1	60	2447.3	95	2.9	3.2	11.5	21	1.73
COLUMBIA ENERGY GROUP CG	382.5	14	1831.5	-9	19.5	-5	245.8	13	5.1	6.1	19.7	NA	4.93
EL PASO ENERGY EPG	6987.0	114	14320.0	76	144.0	213	455.0	NM	2.1	1.4	7.8	63	1.01
EQUITABLE RESOURCES EQT	344.2	78	1061.7	32	19.1	234	74.5	74	5.6	3.0	15.1	19	3.03
KEYSPAN KSE	947.1	76	3211.3	57	14.6	62	240.2	37	1.5	1.7	10.8	16	2.23
KINDER MORGAN KMI	749.1	51	1779.4	31	26.6	352	97.5	131	3.6	1.2	12.2	21	1.87
MDU RESOURCES GROUP MDU	530.8	41	1265.8	37	40.0	37	74.5	25	7.5	7.7	13.1	17	1.66
NICOR GAS	301.0	32	1308.7	22	-62.7	NM	6.7	-92	NM	8.7	5.8	37	0.98
NISOURCE NI	1005.5	45	2996.1	33	54.0	80	161.1	20	5.4	4.3	13.9	17	1.48
ONEOK OKE	1754.8	265	3970.4	180	10.1	461	98.2	37	0.6	0.4	NA	NA	NA
SEMPRA ENERGY SRE	1810.0	48	4739.0	19	117.0	5	353.0	18	6.5	9.1	18.1	10	2.03
VECTREN VVC	317.9	38	940.8	24	15.7	-5	46.6	-33	4.9	7.1	5.9	21	1.11
WILLIAMS WMB	2881.8	31	8168.6	33	121.1	331	594.2	468	4.2	1.3	NA	29	1.46

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

A	American Standard 13a	Bank United 17c	Cadence Design Systems 18c	Computer Sciences 18c	Devon Energy 11a	F
A&P 10c	American Water Works 24a	Banknorth Group 3a	Calpine 24a	Compuware 18c	Dial 6d	Fairchild Semiconductor 9d
Abbott Laboratories 12b	AmeriSource Health 12a	Banta 21d	Campbell Soup 10b	ConAgra Foods 10b	Diebold 18a	Family Dollar Stores 8
ABM Industries 21e	Ames Dept. Stores 8	Barnes & Noble 8	Capital One Financial 17a	Concord EFS 17a	Dillard's 8	Fannie Mae 17a
ACNielsen 21e	Amgen 12b	Bausch & Lomb 12d	Cardinal Health 12a	Connectiv 24a	Dime Bancorp 17c	Federal-Mogul 2b
ACT Mfg. 9d	Amkor Technology 9d	Baxter International 12d	Caremark Rx 12a	Conexant Systems 9d	Dole Food 10b	Federated Dept. Stores 8
ADC Telecomm. 22a	Amphenol 9d	BB&T 3c	Carlisle 15a	Conoco 11a	Dollar General 8	FedEx 23c
Administaff 21e	AMR 23a	Bear Stearns 17a	CarMax Group 21e	Conseco 17b	Dollar Thrifty Automotive 23c	Ferro 4
Adobe Systems 18c	AmSouth Bancorporation 3c	Beckman Instruments 9c	Carnival 14d	Consol Energy 11a	Dollar Tree Stores 8	Fidelity National Finl. 17a
Advanced Micro 9d	Amtran 23a	Bed Bath & Beyond 6b	Casey's General Stores 21e	Consolidated Edison 24a	Dominion Resources 24a	Fifth Third Bancorp 3b
AES 24a	Anadarko Petroleum 11a	Belden 16c	Caterpillar 15c	Cons. Freightways 23d	Donaldson 15c	First American 17a
Aetna 17b	Analog Devices 9d	Bell Microproducts 21b	CB Richard Ellis Svcs. 13b	Consolidated Stores 8	Donnelley (R.R.) 21d	First Data 18c
Affiliated Computer Svcs. 18c	ANC Rental 23c	BellSouth 22b	CBRL Group 14a	Constellation Brands 6c	Dover 15c	First Data Resource Natl. 3c
AFLAC 17b	Anheuser-Busch 6c	Belo (A.H.) 20b	CDI 21e	Constellation Energy 24a	Dow Chemical 4	First Union 3c
AGCO 15c	Anixter International 5	Bemis 7b	CDW Computer Centers 8	Continental Airlines 23a	Dow Jones 20b	Firststar 3b
Agilent Technologies 9c	AnnTaylor Stores 8	Benchmark Electronics 9d	CellStar 21b	Convergys 21e	DPL 24a	FirstEnergy 24a
Agribands International 10b	Aon 17b	Bergen Brunswig 12a	Cendant 21e	Cooper Cameron 11b	Dreyer's Grand Ice Cream 10b	Flsery 18c
Air Products & Chemicals 4	Apache 11a	Berkley (W.R.) 17b	Centex 13b	Cooper Industries 9a	DST Systems 18c	FleetBoston Financial 3a
Airborne Freight 23c	Apple Computer 18b	Best Buy 6b	CenturyTel 22a	Cooper Tire & Rubber 2c	Duke Energy 24a	Fleetwood Entls. 14d
Airgas 21b	Applied Industrial Tech. 21b	Bethlehem Steel 16b	Champion Enterprises 13b	Coors (Adolph) 6c	Dun & Bradstreet 17a	Fleming 10a
AK Steel Holding 16b	Applied Materials 15c	Beverly Enterprises 12c	Charming Shoppes 8	Corn Products Intl. 10b	DuPont 4	Florida Progress 24a
Alaska Air Group 23a	Arch Coal 11a	Bindley Western Inds. 12a	Charter Communications 20a	Corning 15a	Dura Automotive Systems 2b	Flowers Industries 10b
Alberto-Culver 8	Archer Daniels 10b	BJ Services 11b	Charter One Financial 17c	Costco Wholesale 8	Dynegy 21b	Flowerserve 15a
Albertson's 10c	Arkansas Best 23d	BJ's Wholesale Club 8	Chase Manhattan 3a	Countrywide Credit 17a		Fluor 21a
Alcoa 16a	Armstrong Holdings 6b	Black & Decker 15b	Chevron 11a	Coventry Health Care 12c	E	FMC 15c
Allegheny Energy 24a	Arrow Electronics 21b	Black Hills 24a	Chiquita Brands Intl. 10b	Cox Communications 20a	E*Trade Group 17a	Footstar 8
Allegheny Tech. 5	Ashland 11a	Block (H&R) 17a	Cigna 17b	CP&L Energy 24a	Earthgrains 10b	Ford Motor 2a
Allergan 12b	Associates First Capital 17a	Blockbuster 14b	Cincinnati Financial 17b	Crane 21b	Eastman Chemical 4	Fort James 19b
Aliette 24a	Astoria Financial 17c	BMC Software 10c	CiEnergy 24a	Crestline Capital 14c	Eastman Kodak 14d	Fortune Brands 15a
Alliant Energy 24a	AT&T 22a	Boeing 1	Cintas 21e	Crompton 4	Eaton 2b	Foster Wheeler 21a
Allstate 17b	AT&T Wireless 22a	Boise Cascade 19b	Circuit City Group 6b	Crown Central Petroleum 11a	Ecolab 6d	Foundation Health 12c
Altet 22b	Atmel 9d	Borders Group 8	Cisco Systems 18c	Crown Cork & Seal 7a	Edison International 24a	FPL Group 24a
Alpine Group 9c	Audiovox 21b	BorgWarner 2b	CIT Group 17a	CSK Auto 8	Edwards (A.G.) 17a	Franklin Resources 17a
Altera 9d	Autoliv 2b	Boston Scientific 12d	Citigroup 17a	CSX 23b	El Paso Energy 24b	Freddie Mac 17a
Amazon.com 8	Automatic Data 18c	Bowler 19b	CKE Restaurants 14a	Cummins Engine 15c	Electronic Data Systems 18c	Freeport-McMoran C&G 16c
AMC Entertainment 14b	AutoNation 21e	Bradlees 8	Clear Channel Communs. 20a	CVS 12a	EMC 18b	Fritz 23c
Amerada Hess 11a	AutoZone 8	Brightpoint 21b	CMGI 18c	Cypress Semiconductor 9d	Emcor Group 21a	Fuller (H.B.) 4
Ameren 24a	Avaya 9b	Brinker International 14a	CMS Energy 24a	Cytec Industries 4	Enervizer Holdings 15a	Furniture Brands 6b
America Online 18c	Avery Dennison 15a	Bristol-Myers Squibb 12b	CNF 23c	D	Energy East 24a	G
America West Holdings 23a	Avis Group 23c	Broadcom 9d	Coastal 11a	D&K Healthcare Resources 12a	Engelhard 16c	Galileo Intl. 18c
American Axle & Mfg. 2b	Avista 24a	Browning 22b	Coca-Cola 6c	Dana 2b	Enron 21b	Gannett 20b
American Electric 24a	Avnet 21b	Brown Shoe 6a	Coca-Cola Enterprises 6c	Danaher 9c	Entergy 24a	Gap 8
American Express 17a	Avon Products 6d	Brown-Forman 6c	Colgate-Palmolive 6d	Darden Restaurants 14a	EOG Resources 11a	Gateway 18b
American Freightways 23d	AXON 9d	Brunswick 14d	Collins & Aikman 15d	Dean Foods 10b	Equifax 17a	GATX 23c
American General 17b	B	Budget Group 23c	Columbia Energy Group 24b	Deere 15c	Equitable Resources 24b	Genentech 12b
American Greetings 14d	Baker Hughes 11b	Burlington Coat Factory 8	Comerica 3b	Del Monte Foods 10b	Equity Office Properties 13b	General Cable 16c
American Home 12b	Ball 7a	Burlington Industries 15d	Commercial Metals 16b	Delhaize America 10c	Estée Lauder 6d	General Dynamics 1
American Intl. Group 17b	BancWest 3d	Burlington Northern Santa Fe 23b	Community Health Sys. 12c	Dell Computer 18b	Everest Re Group 17b	General Electric 5
American Management Sys. 18c	Bank of America 3c	Burlington Resources 11a	Compaq Computer 18b	Delta Air Lines 23a	Exide 15a	General Mills 10b
American National 17b	Bank of New York 3a	C	Compass Bancshares 3c	Deluxe 18a	Express Scripts 12c	General Motors 2a
American Power 9a	Bank One 3b	Cabot 4	Computer Associates 18c		Exxon Mobil 11a	



WHAT'S YOUR TECHNOLOGY FORGETTING?

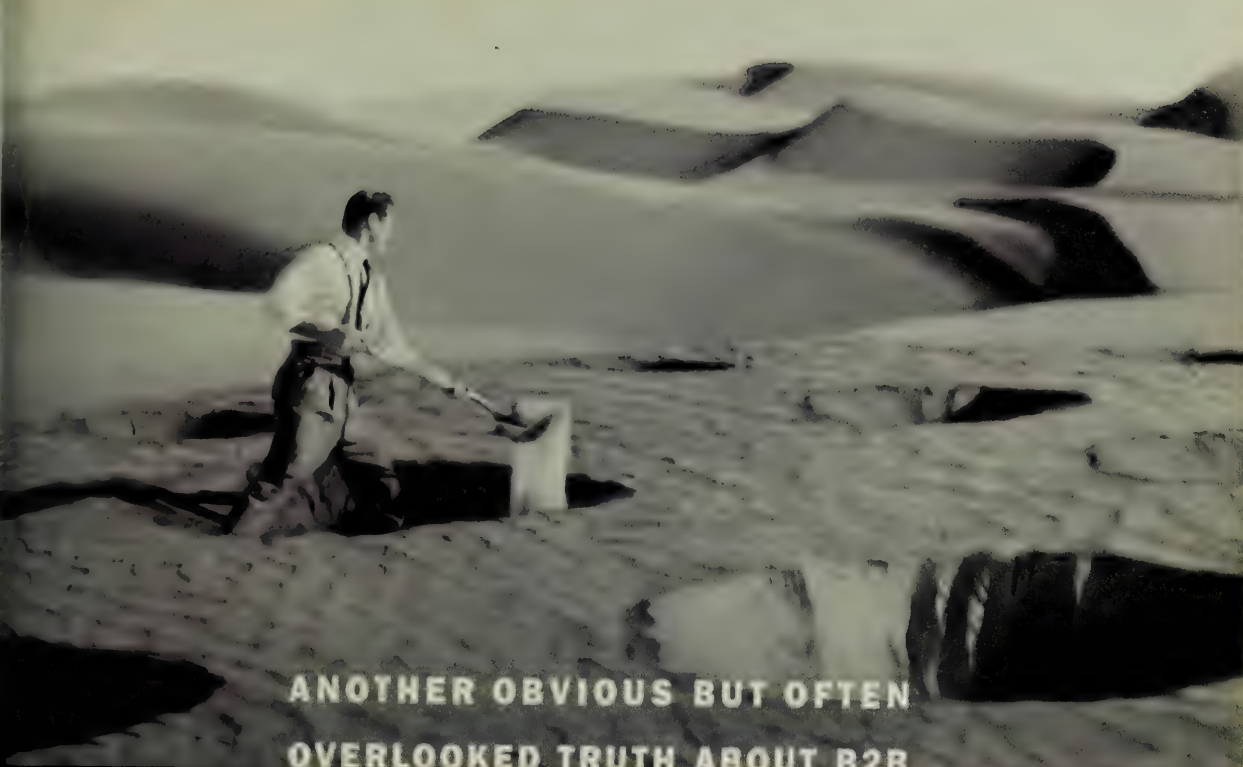
APRISMA
MANAGE WHAT MATTERS

If everything in your life stops when there's a problem with your IT infrastructure, then you need intelligent technology that helps you monitor and manage the things that matter. Because your infrastructure should know what's important to your business and your world. And that's exactly what Aprisma develops and delivers—solutions as dependable as you. 877.437.0291 www.aprisma.com

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

- Genuine Parts 21b
Genuity 18c
Georgia Gulf 4
Georgia-Pacific Group 19a
Getty Petroleum 21b
Gillette 6d
Golden State Bancorp 17c
Golden West 17c
Golden S&S Group 17a
Goodrich (B.F.) 1
Goodyear Tire & Rubber 2c
GPU 24a
Grace (W.R.) 4
Grainger (W.W.) 21b
Granite Construction 21a
Great A&P 10c
Great Lakes Chemical 4
GreenPoint Financial 17c
Group 1 Automotive 21e
Guidant 12d
- H**
Halliburton 11b
Harcourt General 20b
Harley-Davidson 14d
Harrman International 6b
Harrar's Entertainment 14b
Harris 9b
Harsco 15a
Hartford Financial Services 17b
Hasbro 14d
Hawaiian Electric 24a
Hayes Lemmerz Intl. 2b
HCA-The Healthcare Co. 12c
Health Management Assocs. 12c
Healthsouth 12c
Heinz (H.J.) 10b
Heller Financial 17a
Hercules 4
Hershey Foods 10b
Hertz 23c
Hewlett-Packard 18b
Hibernia 3c
Hillenbrand 15a
Hilton Hotels 14c
Home Depot 8
HomeBase 8
HON Industries 18a
Honeywell Intl. 5
Hormel Foods 10b
Houghton Mifflin 20b
Household Intl. 17a
Hub Group 23c
Hubbell 9a
Hughes Electronics 9b
Hughes Supply 21b
Humana 12c
Hunt (J.B.) 23d
Huntington Bancshares 3b
- I**
i2 Technologies 18c
IBM 18b
IBP 10b
IKON Office Solutions 5
Illinois Tool Works 15c
IMC Global 4
Infinity Broadcasting 20a
Ingersoll-Rand 15c
Ingram Micro 18c
Insight Enterprises 8
Intel 9d
Interface 15d
International Flavors 4
Intl. Multifoods 10a
International Paper 19b
Interpublic Group 21d
Interstate Bakeries 10b
Intimate Brands 8
Iomega 18b
- IT Group 21c
ITT Industries 15c
- J**
Jabil Circuit 9d
Jacobs Engineering 21a
JDS Uniphase 9d
Jefferson-Pilot 17b
J&S Industries 15c
John Hancock Financial 17b
Johns Manville 13a
Johnson & Johnson 12d
Johnson Controls 15a
Jones Apparel Group 6a
- K**
Kaiser Aluminum 18a
Kansas City Power & Light 24a
Kaufman & Broad Home 13b
Keebler Foods 10b
Kellogg 10b
Kellwood 6a
Kelly Services 21e
KEMET 9d
Kennametal 15b
Kerr-McGee 11a
KeyCorp 3b
KeySpan 24b
Kimball Intl. 6b
Kimberly-Clark 19b
Kinder Morgan 24b
KLA-Tencor 9c
Kmart 8
Knight-Ridder 20b
Kohl's 8
Kroger 10c
- L**
L-3 Communications 9b
Laboratory Corp. of America 12c
Lafarge 13a
Lam Research 15c
LandAmerica Financial 17a
Landstar System 23d
La-Z-Boy 6b
Lea 2b
Legg Mason 17a
Leggett & Platt 6b
Lehman Brothers Holdings 17a
Lennar 13b
Lennox International 13a
Level 3 Communs. 22a
Lexmark International 18b
LG&E Energy 24a
Liberty Financial 17b
Lilly (Eli) 12b
Limited 8
Lincoln National 17b
Linen 'n Things 6b
Lithia Motors 21e
Liton Industries 9b
Liz Claiborne 6a
Lockheed Martin 1
Longs Drug Stores 12a
Louisiana-Pacific 19a
Lowe's 8
LSI Logic 9d
LTV 16b
Lubrizol 4
Lucent Technologies 22a
Lyondell 4
- M**
M&T Bank 3a
Mail-Well 7b
Mandalay Resort 14b
Manor Care 12c
Manpower 21e
Manufacturers Services 9d
marchFIRST 21e
Marriott Intl. 14c
Marsh & McLennan 17a
Marshall & Isley 3b
Martin Marietta Materials 13a
MasSec 21a
- Mattel 14d
Maxtor 18b
Maxxam 16a
May Department Stores 8
Maytag 6b
McCormick 10b
McDermott Intl. 15c
McDonald's 14a
McGraw-Hill 20b
McKesson HBCO 12a
McLeodUSA 22a
MDU Resources Group 24b
Mead 19b
Medtronic 12d
Mellon Financial 3a
Merck 12b
Mercury General 17b
Merrill Lynch 17a
Metris 17a
Metro-Goldwyn-Mayer 14b
MGM Mirage 14b
Michaels Stores 8
Micron Electronics 18b
Micron Technology 9d
Microsoft 18c
Milacron 15c
Miller (Herman) 18a
Minnesota Mining 15a
Mitchell Energy 11a
Mohawk Industries 15d
Molex 9d
Morgan (J.P.) 3a
Morgan Stanley Dean Witter 17a
Motorola 9b
Murphy Oil 11a
Musicland Stores 14d
- N**
Nabisco Group 10b
Nabisco Holdings 10b
Nabors Industries 11b
Nacco Industries 15b
National City 3b
National Commerce 3c
National Semicond. 9d
National Service 9a
National Steel 16b
Nationwide Financial Svcs. 17b
Navistar International 2a
NCR 18a
Neiman Marcus Group 8
New York Times 20b
Newell Rubbermaid 15a
Newmont Mining 16c
Newport News Shipbuilding 1
Nextel Communications 22a
Niagara Mohawk 24a
Nicox 24b
Nike 6a
NiSource 24b
Noble Affiliates 11b
Nordstrom 8
Norfolk Southern 23b
Northern Trust 3b
Northrop Grumman 1
Northwest Airlines 23a
Northwestern 24a
Novellus Systems 15c
NRG Energy 24a
NSTAR 24a
Nucor 16b
NVR 13b
- O**
Occidental Pet. 11a
Office Depot 8
OfficeMax 8
OGE Energy 24a
Ohio Casualty 17b
Old Kent Financial 3b
Old Republic Intl. 17b
Olin 16c
Martin Marietta Materials 13a
Omnicom Group 21d
- ON Semiconductor 9d
Oneok 24b
Oracle 18c
Oshkosh Truck 2a
Outback Steakhouse 14a
Owens & Minor 12d
Owens-Illinois 7a
Oxford Health Plans 12c
- P**
Paccar 2a
Pacific Century Fin. 3d
Packaging Corp. America 7b
Pactiv 7b
PaineWebber Group 17a
Pall 5
Palm 18b
Park Place Entertainment 14b
Parker Hannifin 15a
Paychex 21e
Payless Cashways 8
Payless ShoeSource 8
PC Connection 8
PE Biosystems 9c
Penn Traffic 10c
Penney (J.C.) 8
Pennzoil-Quaker State 11a
Pentair 15c
PeopleSoft 18c
Pep Boys 8
Pepsi Bottling Group 6c
PepsiCo 6c
Performance Food 10a
PerkinElmer 9c
Pfsmart 8
Pfizer 12b
PG&E 24a
Pharmacia 12b
Phelps Dodge 16c
Philip Morris 6e
Phillips Petroleum 11a
Phillips-Van Heusen 6a
Pier 1 Imports 6b
Pillowtex 15d
Pinnacle West 24a
Pioneer-Standard 21b
Pitney Bowes 18a
Pittston 23c
PNC Financial Svcs. 3a
Polaris Industries 14d
Polaroid 14d
PolyOne 4
Popular 3c
Potlatch 7b
Potomac Electric 24a
PPG Industries 13a
PPL 24a
Praxair 4
Precision Castparts 1
Price (T. Rowe) 17a
Priceline.com 18c
Primedia 20b
PRIMUS Telecom. 22a
Procter & Gamble 6d
Progressive 17b
Protective Life 17b
Provident Financial 3d
PS Co. of New Mexico 24a
PSINet 18c
PSS World Medical 21b
Public Service Ent. 24a
Puget Sound Energy 24a
Pulte 13b
- Q**
Quaker Oats 10b
Qualcomm 9b
Quanta Services 21a
Quantum DLT & Storage Sys. 18b
Quantum Hard Disk Drive 18b
Quest Diagnostics 12c
Quintiles Transnational 21e
Quorum Health Group 12c
- R**
R&B Falcon 11b
R.J. Reynolds Tobacco 6e
RadioShack 6b
Ralston Purina 10b
Raytheon 1
Reader's Digest 20b
Reebok International 6a
Regions Financial 3c
Regis 21e
Reinsurance Group 17b
Reliance Steel & Alum. 21b
Reliant Energy 24a
Rent-A-Center 21e
Republic Services 21c
Reylon 6d
RGS Energy Group 24a
Rite Aid 12a
Roadway Express 23d
Robert Half International 21e
Robinson (C.H.) 23c
Rock-Tenn 7b
Rockwell International 9a
Rohm & Haas 4
Ross Stores 8
Royal Caribbean Cruises 14d
RPM 13a
Ruddick 10c
Russell 6a
Ryder System 23c
Ryerson Tull 16b
Ryland Group 13b
- S**
Sabre Holdings 18c
Safeco 17b
Safeway 10c
Saks 8
Sanmina 9d
Sara Lee 10b
SBC Communications 22b
Scana 24a
Schein (Henry) 21b
Schering-Plough 12b
Schlumberger 11b
Scholastic 20b
Schwab (Charles) 17a
SCI Systems 9d
Scientific-Atlanta 22a
Scripps (E.W.) 20b
Seaboard 10b
Seagate Technology 18b
Sealed Air 7b
Sears, Roebuck 7b
Sempra Energy 24b
ServiceMaster 21e
7-Eleven 10c
Shaw Industries 15d
Sherwin-Williams 13a
ShopKo Stores 8
Siebel Systems 18c
Silgan Holdings 7a
Silicon Graphics 18b
Smith International 11b
Smithfield Foods 10b
Smurfit-Stone Container 7b
Snap-on 15b
Sodexo Marriott 14a
Soletron 9d
Solutia 4
Sonic Automotive 21e
Sonoco Products 7b
Southdown 13a
Southern 24a
Southern Energy 24a
SouthTrust 3c
Southwest Airlines 23a
Sovereign Bancorp 17c
Spartan Stores 10a
Spherion 21e
Spiegel 8
Sports Authority 8
Springs Industries 15d
Sprint FON Group 22a
Sprint PCS Group 22a
- T**
Talbots 8
Target 8
TD Waterhouse Group 17a
Tech Data 18a
Teco Energy 24a
Tecumseh Products 13a
Teleflex 15a
Telephone & Data Sys. 22a
Tellabs 22a
Temple-Inland 7b
Tenet Healthcare 12c
Tenneco Automotive 5
Teradyne 9c
Terex 15b
Tesoro Petroleum 11a
Texaco 11a
Texas Industries 16b
Texas Instruments 9d
Textron 5
Thermo Electron 9c
3Com 18c
3M 15a
Tiffany 8
Timberland 6a
Time Warner 20b
Timken 15c
TJX 8
Toll Brothers 13b
Toro 15c
Tosco 11a
Tower Automotive 15a
Toys 'R' Us 8
Trans World Airlines 23a
Transatlantic Holdings 17b
Transocean Sedco Forex 11b
Triad Hospitals 12c
Tribune 20b
Tricon Global Restaurants 14a
Trinity Industries 23c
True North Communs. 21d
Trump Hotels 14b
TRW 5
TXU 24a
Tyco Intl. 15c
- U**
U.S. Bancorp 3b
U.S. Cellular 22a
U.S. Office Products 21b
UAL 23a
Ultramar Diamond Shamrock 11a
Unicom 24a
Unifi 15d
Union Carbide 4
Union Pacific 23b
Union Planters 3c
UnionBanCal 3d
Unisource Energy 24a
Unisys 18b
- SPX 9a
Staff Leasing 21e
Standard Pacific 13b
Standard Register 18a
Stanley Works 15b
Staples 8
Starwood Hotels & Resorts 14c
State Street 3a
Steelcase 18a
Stilwell Financial 17a
Storage Technology 18b
Stryker 12d
Suiza Foods 10b
Summit Bancorp. 3a
Sun Microsystems 18b
SunGard Data Systems 18c
Sunoco 11a
SunTrust Banks 3c
Supervalu 10a
Swift Transportation 23d
Symbol Technologies 18b
Synovus Financial 3c
Sysco 10a
- V**
Valero Energy 11a
Valhi 5
Valspar 13a
Value City 8
Vectren 24b
Venerator Group 8
Veritas Software 18c
Verizon Communications 22b
VF 6a
Viacom 14b
Viad 5
Viastream Group 9d
Vishay Intertechnology 9d
Visteon 2b
Vito Info. Sciences 21e
Vulcan Materials 13a
- W**
Wabash National 2b
Wachovia 3c
Walgreen 12a
Wallace Computer 18a
Wal-Mart Stores 8
Walter Industries 16b
Washington Group Intl. 21a
Washington Mutual 17c
Washington Post 20b
Watco 13a
Weatherford Intl. 11b
Webb (Del) 13b
Weis Markets 10c
WellPoint Health 12c
Wells Fargo 3b
Wendy's Intl. 14a
Werner Enterprises 23d
WESCO International 21b
Western Digital 18b
WestPoint Stevens 15d
Westvaco 7b
Weyerhaeuser 19b
Whirlpool 6b
Whitman 5
Willamette Industries 19b
Williams 24b
Williams Communications 22a
Williams-Sonoma 6b
Winn-Dixie Stores 10c
Wisconsin Energy 24a
World Fuel Services 21b
WorldCom 22a
Worthington Inds. 16b
WPS Resources 24a
Wrigley (Wm.) Jr. 10b
- X Y Z**
Xcel Energy 24a
Xerox 18b
Xilinx 9d
Yellow 23d
York Intl. 13a
Zale 8
Zions Bancorporation 3d



ANOTHER OBVIOUS BUT OFTEN
OVERLOOKED TRUTH ABOUT B2B

E-COMMERCE: PEOPLE CAN'T
BUY WHAT THEY CAN'T FIND.

Consider the massive entanglement of the B2B e-commerce ecosystem tangled on the messy basis of human principles. Namely, the degree to which customers experience the buying process through desktops that is intuitive, painless and easy. At Requisite, we predicted this need early on. It's our focus on e-commerce management tools, messages and finding technology, and helping Global 2000 buyers, suppliers and resellers make it all happen. We've helped suppliers and resellers jump up and realize ROI. We did it by giving suppliers a single, update, easy-to-use place to access the rich, current information. When buying becomes as easy and simple as anybody can do, it's no wonder your company would like more sales about B2B.

Learn more about us at www.requisite.com

requisite**technology**



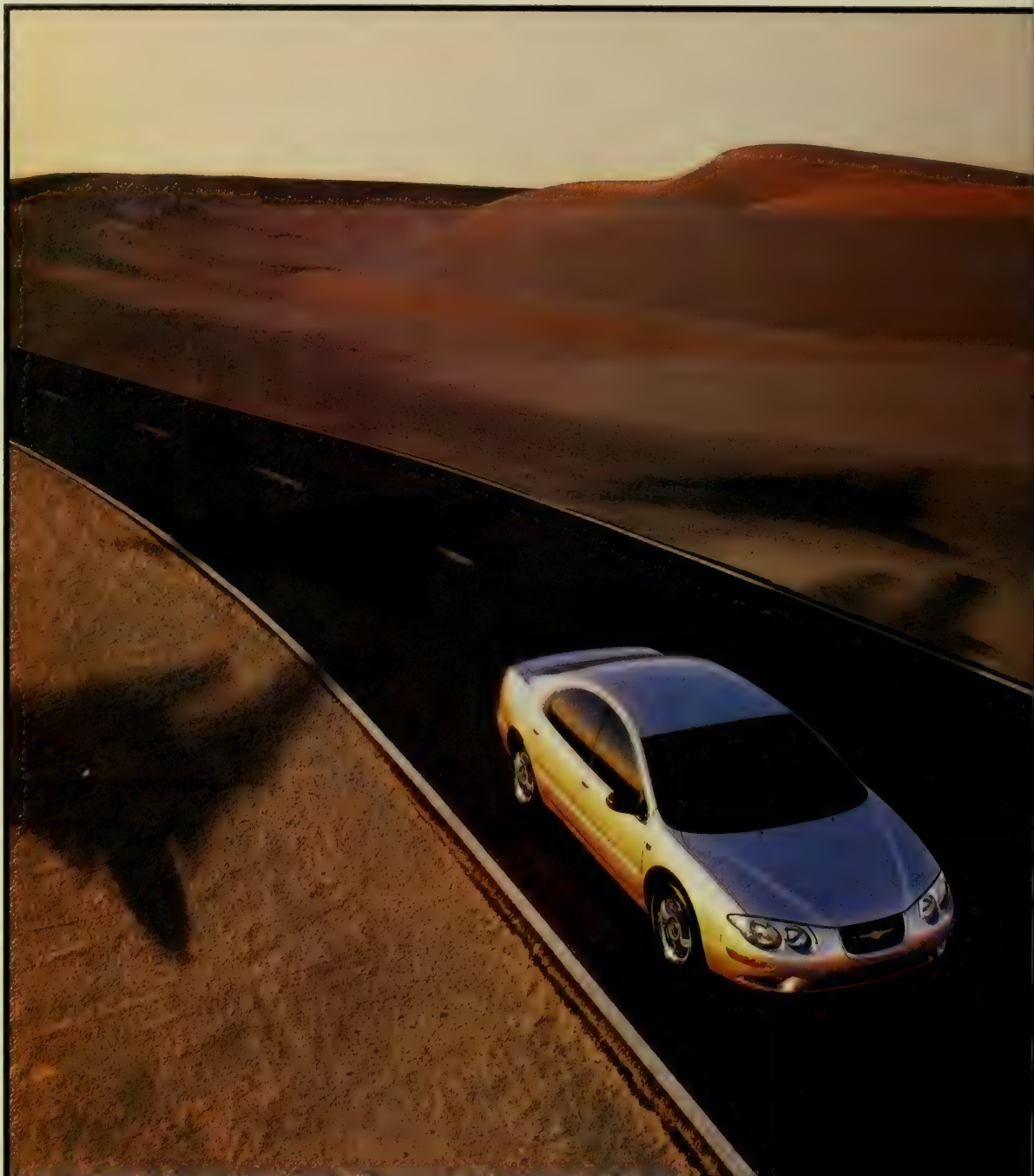
E-COMMERCE CONTENT SOLUTIONS THAT POWER B2B E-COMMERCE.

www.requisite.com

Are you still call ne

the new economy?





300M

It is truly the most powerful V6 sports sedan in its class.*

The Chrysler 300M—winner of a *Consumers Digest* "Best Buy" award. Info? 1.800.CHRYSLER or www.chrysler.com

CHRYSLER



*Ward's lower luxury. The BEST BUY SEAL is a registered trademark of Consumers Digest, Inc., used under license.



IT US IN: Loosening restrictions may help the plight of undocumented immigrants like these

THE LABOR MARKET

WORKERS OF THE WORLD: WELCOME

employers and even unions are pushing for easier entry of permanent-resident status for immigrants

aced with a tight-as-a-drum labor market, Bob Keesler, director of hotel operations at the plush Broadmoor resort in Colorado Springs, has recruited college kids from as far away as Croatia and Poland to work as waiters, front-desk clerks, and spa assistants. The staff also includes Jamaican housekeepers and stewards. In all, im-

migrants make up more than a fifth of the Broadmoor's 1,600-person workforce. Without them, says Keesler, "we might have had to turn away business."

The welcome mat is out at Texas Instruments Inc., too. The Dallas semiconductor maker employs more than 1,000 foreign-born product designers, quality-control engineers, and other specialists in the U.S. And with over 1,000 job openings, TI execs breathed a sigh of relief on Oct. 17 when President Clinton signed into law a dramatic increase in the number of H-1B visas for highly skilled foreigners. "To stay on the cutting edge, we need access to the best

and brightest around the world," says TI senior counsel Rodney Malpert.

All across America, immigrants account for a growing proportion of workers, from cooks and parking-lot attendants to computer programmers and physicists. A just-released study by the independent National Research Council estimates that 17% of America's highly skilled tech professionals are foreign-born. In all, immigrants represented 11.7% of the civilian workforce in 1999, up from 10.8% in 1995.

But it may not be enough. Corporate America argues that more immigrants of all types are urgently needed. The ink is barely dry on the H-1B law, and already pressure is growing to liberalize laws that limit the number of permanent-resident visas and to grant amnesty to more illegals. Corporations also are seeking new rules that would make it easier for them to bring foreign execs to the U.S. for, say, one-year stints. With a powerful coalition pressing for change, immigration will be a hot issue in the next Congress.

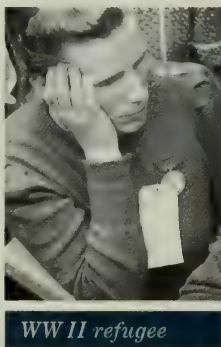
The end-of-session battle over even a

modest amnesty hints at the potential political fireworks to come. A key reason Congress will have to hold a rare lame-duck session starting on Nov. 14 is the standoff between Republican leaders and the President over an immigration measure tacked onto a bill to fund the Commerce, State, and Justice Depts. The provision would allow hundreds of thousands of illegals who have lived in the U.S. for years to remain here permanently. It would also let certain Central Americans who came to the U.S. as refugees gain permanent-resident status. Republicans say amnesty will only encourage more illegal immigration, but fearful of offending Hispanic voters, they offered a more limited measure. The President scoffed at the GOP terms and said he will veto the spending bill if Republicans don't agree to a broader amnesty.

But as record numbers of newcomers continue to pour in and America's reliance on immigrant labor—legal and illegal—grows, some economists warn of a downside. Studies show that wages among the lowest-paid workers are depressed by the fresh supply of foreigners willing to work long hours for little pay. Even among highly skilled tech professionals, wages could suffer because of the higher H-1B cap. If the economy slumps, the debate over whether to ease entry could fizzle fast. Moreover, in a recession, foreign workers could suffer if the country's mood once again turns against them and lawmakers cut the social safety net on which they depend.

For now, such concerns seem distant as immigration explodes. A recent study by the independent New York-based Century Foundation reports that legal immigration from 1991-2000 will exceed 9.1 million people, more than in any other decade in U.S. history. By 2015, predicts Jeffrey S. Passel, a demographer at the Urban Institute, immigrants will represent 14% of the workforce.

In contrast to the anti-immigrant climate that prevailed during the 1996 Presidential election, Washington is holding the door open. The just-enacted immigration law hikes the annual cap on temporary H-1B visas for skilled professionals to 195,000 for three years, up from 115,000 in the year ended Sept. 30. And the ease with which the in-



WW II refugee

THE EBB AND FLOW OF A CENTURY OF IMMIGRATION

1901-1910 5.8 million
Largely unregulated wave of immigration

1911-1920 5.7 million
WW I; Congress enacts literacy requirements; bars many Asian immigrants

1921-1930 4.1 million
Congress establishes national-origins quotas that favor northern European

1931-1940 530,000 million
Great Depression; start of WW II

1941-1950 1 million
End of WW II; refugees from a ravaged Europe

1951-1960 2.5 million
Peace and prosperity; Congress drops annual quotas for all countries, opening the door to nationalities previously barred

1961-1970 3.3 million
Racial criteria eliminated entirely

1971-1980 4.5 million
Cap on legal immigration raised annually

1981-1990 7.3 million
Inflow of refugees from Central American civil wars; amnesty for 3 million illegals; ceiling on legal immigration raised to 700,000 annually

1991-2000 9.1 million*
Booming economy; Congress twice raises cap on visas for skilled foreign workers; impact of '86 amnesty and hike in legal immigration continues

*Estimate.

DATA: IMMIGRATION REFORM BY T. ALEXANDER ALEINIKOFF, BUSINESS WEEK



Landing at Ellis Island, N.Y.

crease was enacted has emboldered business, unions, and interest groups to push for an immigration overhaul.

What's fueling this rethinking of migration? In the midst of a record 3.9% jobless rate and a still-powder economy, employers increasingly view immigrants as a critical safety valve. But even if the economy cools, the U.S. will probably need to absorb immigrants at a steady clip as baby boomers retire and the birthrate stagnates. "Growth in the labor force will come to a standstill in 10 years and start declining thereafter if we don't allow immigrants to come to the degree we do today," says Mark M. Zandi, chief economist at Enron.com Inc. in West Chester, Pa.

A GROWING CONSTITUENCY. The growing political clout of key minority groups, chiefly Latinos and Asians, also want to keep U.S. doors open, also make it tough to reverse course. "Between ethnic-interest groups and the Business, you will not see substantial cuts in immigration so long as there's a severe downturn in the economy," says Georgetown University law professor T. Alexander Aleinikoff, author of the Century Foundation report.

Adding to the drumbeat: Even top leaders are calling for amnesty for an estimated 6 million illegal immigrants living in the U.S. and repeal of sanctions on employers who hire them. The AFL-CIO, which had long viewed immigrants as a threat, has changed its tune. The reason: Immigrants are a growing labor constituency. "A lot of labor's success in organizing in the past five years has been among immigrants," says Eliseo Medina, executive vice-president for the Service Employees International Union, which represents janitors and health-care workers. Medina estimates that immigrants account for as much as 30% of the S.E.I.U.'s 1.4 million members.

Increasingly, the new foreign recruits are turning up in places far from New York, Los Angeles, and other traditional gateway cities. In Omaha, the U.S.



A Chinese immigrant is sworn in



THIS YEAR, E-COMMERCE SALES WILL HIT \$48.6 BILLION. BUCKLE UP.

We make websites fast and reliable. The rest is up to you.

The competition has never been more fierce. But the stakes keep getting higher. Now that e-commerce is a business-critical necessity, you need fail-safe hosting, content delivery, network services, and application services like never before. Guaranteed, 24x7.

At Digital Island, we call it a Global e-Business Delivery Network. And it's earned us "Most Innovative Enterprise Internet Service Provider 2000" from Network Computing—and accolades from some of the best companies of the new economy.

We'll help any e-business provide a better online experience—to keep customers coming back for more. Contact us at www.digitalisland.net.



Digital Island
e-Business without Limits

Government

Food & Commercial Workers Union is trying to organize 4,000 meatpackers, the majority of whom are Latino immigrants. The Sheet Metal Workers union has caps emblazoned with the Spanish or Vietnamese equivalents of "Proud to Be Union" for recruitment drives at plants in California, Minnesota, North Carolina, and Texas.

Labor backs the Democratic proposal to let hundreds of thousands of illegal immigrants who have lived and worked in the U.S. for many years gain permanent residency. That amnesty, coupled with the H-1B legislation, could prove to be the first step in a broad re-vamping of U.S. immigration policy. The key elements of the coming debate:

■ *Expansion of legal immigration.* Some employers want to increase the annual 140,000 cap on permanent visas for skilled workers—green cards—or at least earmark a specific number for certain high-tech specialists. "There's an argument to be made that 140,000 is not going to cut it—just look at the demographics," says Sandy Boyd, assistant vice-president for human-resource

policy at the National Association of Manufacturers (NAM).

Meanwhile, a coalition representing restaurant, hotel, and other companies is drafting a proposal for new permanent and temporary visas for lower-skilled

stints and to move teams of executives among clients in different countries. Another idea gaining support: letting spouses of foreigners with visas work here if their home country lets American trailing spouses work. "Our economy

is becoming global, but our immigration policy doesn't reflect that," argues Ali Cleveland, manager for labor policy at the U.S. Chamber of Commerce. ■ *Amnesty for illegal immigrants coupled with an end to employer sanctions.* One idea is a rolling registry date



HIGH-TECH EXPLOSION

Skilled foreign labor, such as these Indian software workers, is in huge demand

workers. "We need workers, too," argues John Gay, senior director for government affairs at the American Hotel & Motel Assn. "The travel and tourism industry is booming."

■ *New rules that ease executive transfers.* Business will press for a relaxation of curbs to make it easier for companies to post foreign executives in the U.S. for short

would grant permanent residency to illegal immigrants annually, based on the year of their arrival. That would avoid having to go back to Congress periodically for amnesties. Currently, only illegal immigrants who came to the U.S. before 1972 may apply for permanent status.

■ *Reform of the Immigration & Nat-*



Christina Dickerson
(private banking)

jpmorgan.com

Strategic advice / M&A

Capital raising

Risk management

Sales & Trading

©2000 J.P. Morgan & Co. Incorporated. J.P. Morgan Securities Inc., member SIPC. J.P. Morgan Securities Ltd., member London Stock Exchange, regulated by SFA. Morgan Guaranty Trust Company of New York, member FDIC. J.P. Morgan Securities Asia Pte Ltd. regulated by SEC Hong Kong, MAS of Singapore, and FSA of Japan. J.P. Morgan is the marketing name for J.P. Morgan & Co. Incorporated and its subsidiaries worldwide. J.P. Morgan is proud to sponsor Robotics October 14, 2000, to January 3, 2001, at The Tech Museum of Innovation, 201 South Market, San Jose, California U.S.A. thetech.org

We are proud of the diversity of our client list. It actually extends beyond the human, if you take into account *Robotics*, an exhibition we're sponsoring at The Tech Museum of Innovation in San Jose. It is born

ization Service. In 1998, only 77,517 of 140,000 green cards reserved for led foreign nationals were issued because of horrific backlogs in processing applications. Immigration experts say competence isn't the only factor. Chronic underfunding and congressional mismanagement have also taken a toll on the INS. Boyd of NAM predicts that

ca's shrinking native-born labor force. An open-door policy could stoke U.S. growth, since so many highly skilled newcomers become entrepreneurs. Immigration "is a huge win for the U.S.," argues Australian native Phillip Merriker, founder and CEO of software start-up webMethods Inc. in Fairfax, Va.

But there are losers, too. A 1997

Government. And with hundreds of thousands more H-1B visa-holders flocking to the U.S.—more than half of whom stay on permanently—even high-paid engineers and programmers could take a pay hit if the economy skids.

The cost of providing social services, such as hospitals and schools, to newcomers and their families is mounting. And the squeeze is being felt well beyond the big immigration states of California, Florida, Illinois, New Jersey, New York, and Texas.

That's because of the rapid influx of immigrants in states stretching across the middle of the country, from Oregon to North Carolina. Between 1960 and 1990, about a third of new immigrants settled in California. But in the '90s, only 22% did. The remaining 11% went to the heartland states, says the Urban Institute's Passell.

For now, the costs associated with increased immigration seem manageable. State coffers are flush, jobs are plentiful, and Americans are in a welcoming frame of mind. That's why Corporate America and Big Labor are seizing the moment.

By Amy Borrus in Washington

W-TECH OPPORTUNITY

cor sees workers, such as migrant meatpackers, ripe for unionization

INS will supplant the Internal Revenue Service as Public Enemy No.1 on Capitol Hill next year.

The H-1B bill took baby steps and cutting red tape. It also the INS to allocate unused visa slots to applicants from countries such as India and

China that have already used up their visas. But INS critics insist the agency should focus more resources and attention on service.

Would modernizing America's creaky immigration system and easing entry for more foreign-born workers benefit U.S.? Most economists say, on balance, yes—especially in view of Ameri-



study by the independent National Research Council found that immigration depressed wages for low-skilled native Americans by 5%. "Right now, it's hard to see that because real wages are growing. But if we have a recession, the unskilled will pay the price," says George J. Borjas, a professor of public policy at Harvard's Kennedy School of

of a firm-wide endeavor to bring understanding to the revolution that is changing our world; and to inspire young minds who will one day carry it further. A new horizon, a new playing field. The same intelligence, the same fervor.



JPMorgan

AIRCRAFT

TAXI! GET ME TO NEBRASKA



A New Plane Borrows From an Old War Horse

De Havilland's Mosquito was perhaps the most versatile plane of World War II, instrumental in defending Britain against Nazi bombers and buzz bombs. Soon, some of its innovations—including a fuselage split down the center for ease of manufacture—may be revived for Farnborough-Aircraft.com's F1 air taxi.

	F1 AIR TAXI	MOSQUITO FIGHTER-BOMBER
LENGTH FT.	35.1	41.2
WINGSPAN FT.	40.7	54.2
ENGINE POWER HP	850	1,480 X 2
CRUISE SPEED MPH	378	340
RATE OF CLIMB FT./MIN.	3,000	2,500
CEILING FT.	35,000	37,000
USEFUL PAYLOAD LBS.	1,918	8,000
TYPICAL RANGE MILES	975	1,650
CONSTRUCTION	Plastic composite	Wood composite



THE F1'S DESIGN
DRAWS HEAVILY ON
THE BRITISH
MOSQUITO (INSET)

Richard Nobel gets his kicks from living on the edge. Ever since he was 6 years old, in 1952, he has dreamed of setting a new speed record for cars. "The bug wouldn't leave me," he says. So in 1974, he decided "it was time to have a go" and chucked his job as a salesman. In 1977, Nobel trashed his first jet-powered car. But in 1983, he streaked across Nevada's Black Rock Desert in his new Thrust 2 car and set a world record: 633.5 mph.

The Scotsman wasn't content, though. For an encore, he wanted to break the sound barrier on land. In the fall of 1997, Nobel's team returned to Black Rock. Deeming himself too old to pilot the new ThrustSSC (for supersonic car), Nobel turned the wheel over to Captain Andrew Green, a Royal Air Force fighter pilot. On Oct. 15, Green fired up the car's two Rolls-Royce jets and, riding the equivalent of 110,000 horsepower,

zoomed across the desert. On his first run, Green hit 759.3 mph—and 766.6 mph on the second. Both runs broke the sound barrier, and the official record of 763 mph still stands.

SHOESTRING. Then came a fateful encounter. To pay off some outstanding bills from the project, Nobel took to the lecture circuit, talking about how the ThrustSSC team was organized to innovate on a shoestring budget. Early in 1998, he was invited to a meeting of Dell Computer Corp.'s European managers. Afterward, Nobel was hobnobbing with several execs, including Chairman Michael S. Dell. When asked what he was going to do next, Nobel said he was working on an idea for a new business jet. That led to a discussion about Dell's mounting frustration with airline service. "They told me they had tried using business jets, but those jets were just as hopeless because they used the

same crowded airports as the big jets," recalls Nobel. "That's how it started."

"It" is an air-taxi service that will use small airports, an Internet-based reservation service, the global positioning system (GPS), and the latest cockpit electronics. Combined, the result will be a small plane that's as safe as a jetliner and more comfortable than a day's executive jet. And travelers can summon it, like a taxi cab, to a nearby airport and fly straight to the local airport closest to their destination.

Nobel hatched the scheme after a little homework had unearthed some startling facts: There are 2,071 airports in Europe and 5,736 in North America. Only 3% are used by large commercial jets, and business jets are restricted to just 15%. So passengers often bog down through crowded hubs to get to their real destinations. Furthermore, scheduled flights of less than 1,000

dreams made real.

Very nice. But can it download a jpeg?
With innovative FBAR filter technology,
Agilent helps make the next generation in
miniature wireless communication devices
possible. So you can do more with less.
Imagine videoconferencing, email, family
photos and Internet right there on your
wrist. Not to mention the time of day.



Agilent Technologies

Innovating the HP Way

Agilent Technologies is a new company composed of the former Hewlett-Packard test and measurement, chemical analysis, semiconductor components and medical products businesses. www.agilent.com

the average speed is 325 mph or less. Thus, a plane that could land at small airports and fly at 350 mph would not only avoid big-airport congestion but also provide quicker service.

To create such a plane—a roomy five-seat prop-jet dubbed the F1—Nobel tapped engineers who had worked on the supersonic car, including William Brooks, head designer of ultralight planes at Pegasus Aviation in Marlborough, Wiltshire. Brooks had helped part-time with the ThrustSSC but left Pegasus to work full-time on the F1. As chief engineer, Nobel lured Nigel Bamber from Britain's Defense Evaluation & Research Agency. At DERA, Bamber was in charge of analyzing how well aircraft withstand the stresses of flight. Together with a handful of other engineers, this team set up shop in 1998 as Farnborough-Aircraft.com Ltd. in a building on the airstrip in Farnborough, Hampshire, home of the annual Farnborough International Air Show.

To help the startup make good on its scheme, Dell is furnishing high-end com-

Richard Nobel's F1 air taxi will let business travelers avoid big jets and crowded airports—for about the cost of a first-class ticket

puters—and 18 other companies are providing goods and services to minimize Nobel's costs. For example, materials for the plane come from Cytec Fiberite Ltd. in Wrexham, England, and Obo-Werke & Co. in Stadthagen, Germany. Another booster is Unisys Corp., which processes 50% of world air reservations—and hosts Farnborough-Aircraft's Web site. The Blue Bell (Pa.) company is developing a new reservation system, and it will include the specific ability to handle the type of on-call air service that Nobel envisions on the Internet. "This is out-of-the-box thinking—a whole new approach to airline congestion," says Dennis Christ, general manager of Unisys Global Transportation. "I think [Nobel] has a real market—and a small-business aircraft that could

take a lot of the market from existing business planes.

Charles M. Stancil agrees. A transportation expert at Georgia Institute of Technology's Research Institute says: "What this kind of Internet-based system brings is a utility that has never before existed in transportation."

Business people will no longer have to travel at airlines' convenience, often wasting a day going to and from hubs. "For business, this would be a very good stuff," Stancil says.

LOW ALTITUDE. Much of America's West Coast is already "wired" for an air type of service, Stancil adds, with a network that can guide takeoffs and landings at airports without control towers—and monitor flights over hundreds of miles. "It was demonstrated during the Atlanta Olympics," he notes. NASA managed all low-altitude traffic in the Atlanta region using GPS technology. When Georgia Tech dug into the economics of a regional air-taxi service, Stancil notes, "it turned out to be competitive with first-class tickets."

NASA is promoting further deployment

GETTING LOTS OF THRUST—FROM THE NET

Sitting motionless, the ThrustSSC (for supersonic car) looks like a sleek jet fighter with its wings clipped off. In fact, that's roughly what it is: a plane designed to hug the ground. Its two monster engines are Rolls-Royce turbojets designed for the Phantom fighter. Each produced 25,000 pounds of thrust when the car set the current land-speed record in October, 1997—763 mph. That wasn't much of a strain. The car was designed to reach 850 mph, or more than 100 mph past the sound barrier on the Nevada desert.

When Andrew Green, a Royal Air Force fighter pilot, strapped himself in the driver's seat between the engines, he was at the wheel of the ultimate hot rod—a dragster that can jump from a standing start to 100



SPEED DEMONS: Green and Nobel's supersonic jet car holds the world record, set in 1997 on Nevada's desert flats

mph in only 4 seconds. Within 16 seconds, Green was rocketing across the Black Rock Desert floor at 600 mph. After just 30 seconds, the car approached top speed—and had traveled five miles from the start line. Green made some two dozen attempts, start-

ing in early September, before breaking the sound barrier on Oct. 13, then setting the new record on Oct. 15.

These and other rich details of the ThrustSSC are chronicled at www.thrustssc.com. The site also describes the nonhierarchical organization that leader Richard Nobel considers essential to the success of venture projects. This site is the model for Nobel's latest startup, Farnborough-Aircraft.com. The new company will rely almost exclusively on Web site visitors to generate its finances. And like the

ThrustSSC Web site, which contains blow-by-blow updates that Nobel and other crew members posted for the 200-odd companies that lent support, the Farnborough Web site will provide regular news on the F1's progress.

By Otis Port in New York



your job will provide you with...

- ☐ first-class industry experience
- ☐ resume folder
- ☐ a place to go on
weekdays

Make the most of your mind

Why wait?

intel.com/jobs

intel®

of GPS systems to aid pilots of small planes. As the infrastructure for air taxis spreads, Farnborough-Aircraft will face some stiff competition. Indeed, Bell Helicopter Textron, a division of Textron Inc., has a nine-passenger tilt-rotor aircraft, called the Bell/Augusta 609, that is scheduled

to make its maiden flight next summer. It has two turbo-prop engines that swivel. Pointing up, the 609's oversize propellers enable it to land like a helicopter. With the engines rotated forward, the plane cruises at 300 mph. Bell says it has already booked 80 orders—vs. two for Farnborough—including a pair for a planned air-taxi service in Europe.

The first problem Farnborough-Aircraft faced when it opened its doors was money. To build three prototypes for test flights starting in 2002—and leading to airworthiness certification as early as 2004—Nobel figures he will need around \$25 million.

He didn't even try to get the money from venture bankers. He knew from

past experience with the ThrustSSC that they weren't interested in such long-term gambles. But the experience with three cars has honed a business model that skimps along on a day-by-day basis.

To create the SSC, he enlisted 200-odd corporate sponsors, which picked up most of the project's \$4.1 million tab, but individuals chipped in some 20%. When Nobel didn't



**The new prop jet
would seat five and fly
at 350 mph between
small airfields, using GPS**

have the cash to buy the 250,000 gallons of jet fuel needed for a big cargo plane to ferry the 60-foot-long, 10-ton car to Nevada, he issued an appeal on www.thrustssc.com. Racing buffs and

Web site regulars bought all 250,000 gallons of fuel. For the way he exploited the Internet, Nobel won praise from William E. Fulmer, a senior fellow at Harvard Business School, in his book *Shaping the Adaptive Organization*, published last March.

Because of the response to his jet message, Nobel plans to rely on the Internet to raise almost 100% of his requirements. Since October, 1999, when shares were first offered on the site, 310 people have expressed interest—and 110 have actually coughed up money. "The usual investment is about

\$6,000," says Nobel, "and we've raised close to \$1.5 million." Share prices will increase as Farnborough passes major milestones. Early investors will reap big payoffs. Nobel expects to hand-to-mouth for the next few years. "We'll probably never need more than six weeks' worth of capital," he says.

The second big problem, as with funding, is wing design. Getting a prop jet in and out of small airports takes a special wing. One that performs efficiently at high speeds and altitudes can be a bear during landings and takeoffs.

THE WALL read nemesis does S

DOW JONES

VOL. CCXXXIII

It's

It's N

That's why most jets land "hot"—at speed—which means long runways. Enter Gordon M. Robinson. As a researcher at Southampton University, Robinson pioneered an evolutionary approach to wing design, using so-called genetic algorithms. Combined with advanced optimization techniques, genetic algorithms breed progressively better plans by combining solutions to individual specifications in myriad ways—often coming up with results that human engineers might never have considered. Robinson mentioned all this to Nobel, who had also worked on the project at SSC—he was promptly invited to come down from his ivory tower "and do for real," as he tells it. Adds Nobel: "I had wasted months going in the wrong direction. That changed when Gordon joined us"—in January, 1999. Simulations of Robinson's wing design indicate that it generates lots of lift during landings, enabling the F1 to swoop over small airfields. And after takeoff, the plane can climb rapidly to avoid flying over nearby houses, reaching 25,000 feet in just 8 minutes, compared with 14 minutes or more for rival business planes such as the Socata TBM 700. The wing design is now undergoing wind-tunnel tests.

Robinson also triggered a change in fuselage design, improving its ease of manufacture. Here, his model was the World War II Mosquito fighter-bomber, designed by de Havilland Aircraft Co. and made of wood. That was partly to reduce dependence on scarce aluminum but also to ramp up output rapidly—by farming out the production of the fuselage and wings to local homebuilders and boatbuilders. Now, Farnborough hopes to do the same with its fiber-reinforced composite airframe.

The plan worked for de Havilland. Between 1940 and 1945, it assembled nearly 8,000 "Mossies," which flew faster and much farther than the original Spitfire. They also flew higher than any other plane in the early years of the war. Mossies shot down hundreds of Hitler's buzz-bombs and night bombers.

SPICED. When Robinson picked the brains of two retired de Havilland engineers, he learned another trick: The Mossie's fuselage was built in two halves, split vertically down the center. That way, the cockpit instruments, cables, wires, and ducts could be easily installed before the halves were spliced together. "That was very clever," says Robinson. "Normally, fitting out all the

internal systems takes a lot of time," because technicians have to crawl around in very cramped spaces.

If everything comes together as planned, Nobel boasts, the F1 will be a \$1.9 million "pilot's plane"—easy to fly, rugged, and very fuel-efficient. Indeed, he expects some airline pilots to give up their big-jet wings and buy F1s, just as many taxicabs are operated by owner-drivers. Nobel calculates the F1's total operating costs at roughly \$400 per hour over 1,000 hours of flight time a year. If an owner-pilot charged \$2 per mile and the plane averaged 345 mph, it would bring in revenues of \$690,000—for a profit of \$283,000, or double the salary of many airline pilots. "I may fly one myself when I retire," says Nobel, who is an accomplished pilot.

The airlines think the solution to airport congestion is bigger planes and bigger airports, sniffs Nobel. "That's precisely what passengers don't want," he asserts. "We're coming the other way, offering point-to-point service that you schedule at your convenience." He's confident the concept will turn air travel on its ear—and validate the F1's nickname: the hub-buster.

By Otis Port in New York

before your evil FEET JOURNAL.

WSJ.com

....

75 CENTS

Index

Work Week

Solution

per hand. Delivered daily. Imagine what The Journal could do for you. **Adventures in Capitalism.**

IF OPPORTUNITY KNOCKS

12,000 MILES AWAY, WILL YOU HEAR IT?

www.csfb.com

Opportunity isn't always in your own backyard. It can be in a different country. It can be a different industry. At Credit Suisse First Boston, we help our clients take advantage of global opportunities. We helped France Telecom expand its global reach with the acquisition of Orange plc. We advised the Commonwealth of Australia on the landmark privatization IPO and secondary offering of Telstra. And we led Hewlett-Packard's first global bond. What we do is empower our clients in the face of change, creating a bridge between opportunity and success. **CREDIT SUISSE FIRST BOSTON**

EMPOWERING CHANGE

EDITED BY NEIL GROSS



HEAVY HITTERS. A WHOLE NEW BALL

MAJOR LEAGUE BASEBALL, the run records have been going faster than a towering McGwire clout in the few years. So are baseballs livelier than they used to be? The answer is yes, according to researchers at the

AT BAT: University of Rhode Island who looked at donated major league balls from 1963, 1970, 1989, 1995, and 2000.

A team of six engineers, chemists, and textile researchers first discovered that the two more recent balls jumped higher than their older counterparts. Taking the balls apart to find out why, they noted that the cork and rubber core of the newer balls contained more rubber than the earlier ones, making the new cores 30% bouncier. In addition, some of the yarn wound around the newer cores was synthetic instead of the traditional wool, possibly adding to the balls' bounce. The conclusion: While other factors, like stronger hitters, may be contributing to the home run barrage, a juicier ball "is part of the answer to the mystery," says Dennis C. Hilliard, co-director of the university's Forensic Science Partnership. *John Carey*

STEM CELLS AT STEM DAMAGE

EVIDENCE IS ACCUMULATING that our own bodies may hold the antidote for a variety of neurological maladies, including spinal-cord injury, stroke, multiple sclerosis, and Lou Gehrig's disease. At the recent Society of Neuroscience annual meeting in New Orleans, researchers reported remarkable success in using precursor cells housed in the marrow, known as stem cells, to restore function to neurons suffering from paralysis and brain damage caused by neurological disease. Although these therapies have yet to be tried in humans, researchers predicted that in the next few years there would be early-phase clinical trials of neuronal stem cells. Stem cells are undifferentiated cells that, based on

genetic signals, give rise to a whole range of tissues, from skin to heart to nerves. Researchers from Johns Hopkins Medical Institute reported that they injected stem cells into the spinal fluid of mice and rats paralyzed by a virus that attacks the nerves controlling movement. The paralysis resembles that caused by Lou Gehrig's disease. Eight weeks later, 50% of the rodents regained at least some movement in their hind limbs, and a post-mortem analysis found that the transplanted cells had migrated to the area of damage in the spinal cord.

Other studies corroborated such migrations. Scientists at the University of Pennsylvania and Harvard University who injected stem cells into mice with brain injuries observed significant improvement—regardless of where in the brain the cells were injected. *Catherine Arnst*

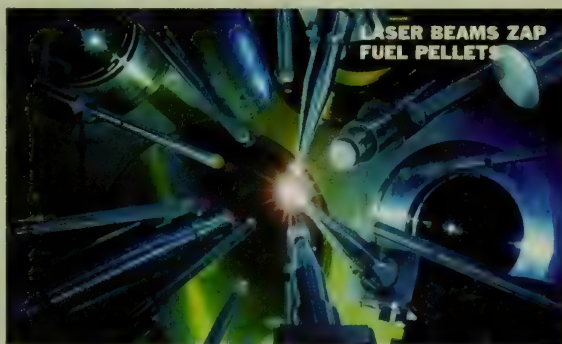
FUSION: RESEARCH IS REALLY HEATING UP...

CALL IT BEER-CAN FUSION. RESEARCHERS AT LOS ALAMOS National Laboratory and the U.S. Air Force Research Lab in Albuquerque are brewing a way to unleash fusion energy in a cylinder about the size of a can of suds. The scheme, called magnetized target fusion (MTF), was outlined at an October physics meeting in Quebec City.

Duplicating the sun's source of energy has long been a dream, but getting atoms to fuse here on earth is incredibly difficult. The hydrogen ions used as fuel repel one another vigorously. The sun overcomes this repulsion with its massive gravity, which creates a soup of gas-like plasma so dense that ion collisions are inevitable. But without the sun's gravity, a lot more heat is needed. Large experimental fusion reactors called tokamaks heat ion plasma to 100 million degrees Celsius—six times as hot as the sun's core—inside a complex magnetic field.

In contrast, MTF could make do with a pulsed, sun-like environment. A hot plasma gets injected into a cylinder, which instantly compresses the plasma to an immense density. With this technique, asserts Richard E. Siemon, fusion program manager at Los Alamos, MTF prototypes will cost "millions, not billions." The MTF team thinks it could have a prototype by 2020, at a cost of \$800 million.

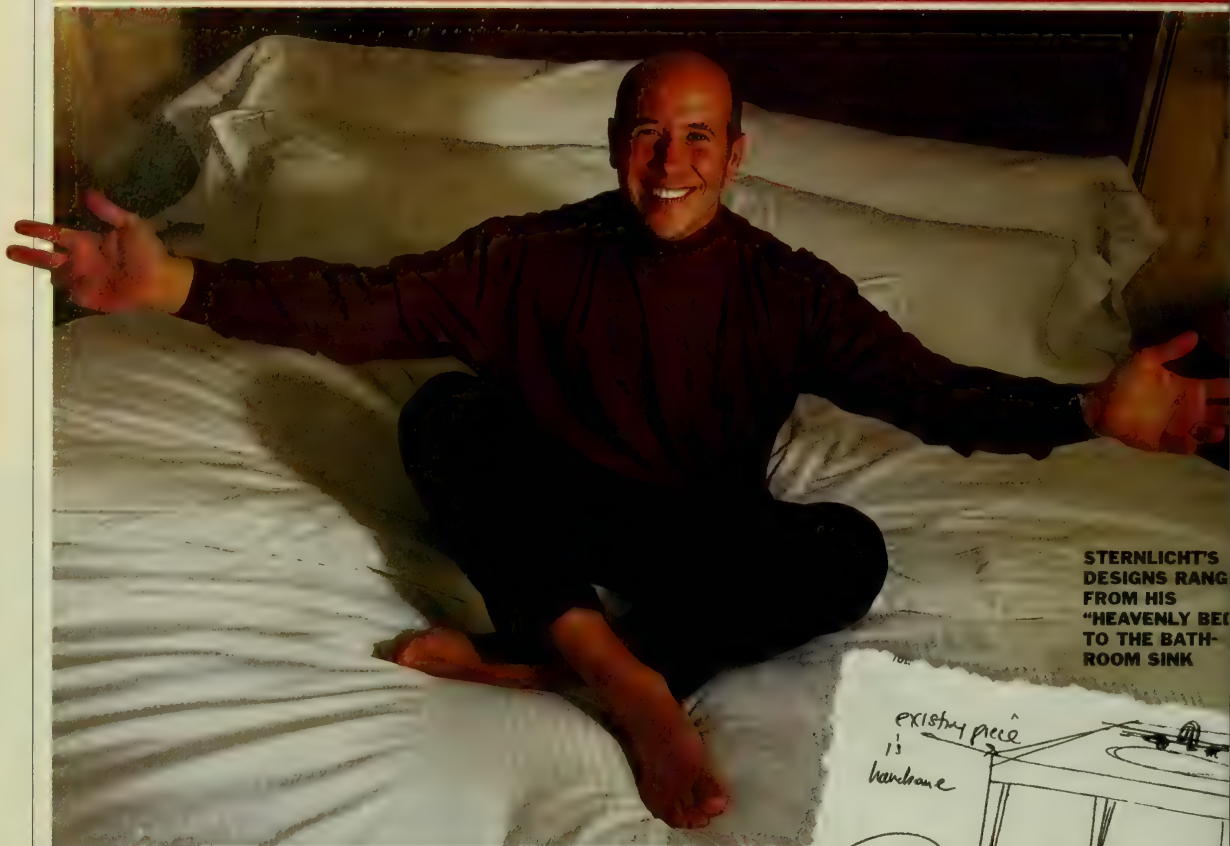
Peg Fong



...WITH A LITTLE HELP FROM LASERS

THE PROGNOSIS FOR FUSION POWER PLANTS IS ALSO looking up. Researchers at the University of Rochester scored a 70% increase in fusion reactions with their Omega laser, which bombards a small fuel pellet with 60 powerful beams. The idea is to smack the pellet from all angles, squishing it to the point where some atoms fuse.

However, if the intensities of all 60 beams aren't perfectly uniform, there will be minute weak spots that allow the pellet to bulge instead of shrink. As a partial fix, the beams have been outfitted with the equivalent of Polaroid sunglasses—special crystals that polarize the laser light. This smooths out irregularities within individual beams and produces the higher reaction rate. The National Ignition Facility at Lawrence Livermore National Laboratory is building a 192-beam setup to fill the remaining weak-spot gaps between the beams. *Otis Port*



**STERNLICHT'S
DESIGNS RANG
FROM HIS
"HEAVENLY BED
TO THE BATH-
ROOM SINK**

EXECUTIVE SUITE

AT STARWOOD, THE CEO IS IN THE DETAILS

Hands-on hotelier Barry Sternlicht's attention to the little things is starting to pay off big

Barry S. Sternlicht doesn't hold back. If he's got an opinion—and when it comes to his hotels, he almost always does—someone is going to hear about it. A quick walk through the Sheraton Stamford with the chairman and CEO of Starwood Hotels & Resorts Worldwide Inc. goes like this: First, Sternlicht cringes over an old hallway carpet and jokingly compares the coffee shop to a Denny's where "you're all things to all people,

but nobody wants to eat there." Both are, of course, due to change. Then he gushes over the "Ralph Lauren look" of the revamped rooms, complete with pinstriped bed covers, velvet drapes, even "accent walls" papered in jewel tones. What Sternlicht didn't design himself, he at least approved early on. "The whole room has an elegant, refined feel," he says.

The former real-estate dealmaker lives for these kinds of details. Since he began acquiring some of the best-known names in the hotel industry four years ago, Sternlicht has looked at more carpet swatches and paint samples than any CEO should care to. Although he runs one of the world's largest hotel chains—742 establishments in 80 coun-

tries—and counts Sheraton, Westin, Regis, and W among his brands, Sternlicht lavishes attention on even the most mundane matters. At W, he sketched out everything from hotel facade to bathroom sinks.

"REAL DISTINCTION." Sternlicht, an amateur painter, says that emphasizing achieving the right look and feel is central to his strategy. "I'm not hiring an art; I'm investing in design," he says. "This stuff matters, especially if it's going to be replicated 10,000 times." The idea is to create an image and experience that customers are willing to pay more for. "Barry's thesis was that you could create real brand distinction through the quality of material and design—and he was right," says Fris-



BLUE MARTINI
SOFTWARE

THEY COME TO YOUR SITE LOOKING FOR SOMETHING DIFFERENT. GIVE IT TO THEM.

Everybody's different. When you know your customers—what they need, what they like and what may be of interest to them in the future—it's a lot easier to give them what they're looking for. Blue Martini has the power to make it all happen. Our applications analyze customer information, then deliver a highly personalized experience based on that analysis. The time spent interacting with your company is more relevant. It's quicker. And it's far more likely to produce a sale. To find out how Blue Martini's e-business solutions can improve your customer's experience, visit www.bluemartini.com/prism.

Kleisner, who left Starwood last year to become chairman and CEO of the Wyndham International Inc. hotel chain, where he's proudly imitating Sternlicht's "visually serene" style.

Indeed, Sternlicht is inspiring more respect than jibes these days. He used to be derided as an inept manager, better suited for the job of head designer than CEO. Rivals ridiculed him, investors were wary of him, and some employees openly grumbled about him. Several high-profile departures, hefty debt, and seemingly whimsical innovations didn't help. The company's stock sank from a high of \$60.38 three years ago to \$20 in March of this year. Sternlicht's alleged weak leadership wasn't solely to blame; Starwood also lost its favorable tax status at a time when few investors were that enthusiastic about hotels anyway.

MORE DISCIPLINE. Sternlicht took the criticism seriously. He appointed Sheraton veteran Robert F. Cotter as chief operating officer nine months ago. Cotter has already brought more credibility and discipline to the top management. Says Sternlicht: "Everything we were deficient in was a fastball through the middle for Bob." Meanwhile, Sternlicht has sold off more than \$7 billion in noncore assets to reduce debt. Starwood also plans to sell its Ciga group, a collection of 25 European luxury hotels that could go for as much as \$1.7 billion.

All of that seems to be paying off. Starwood is pushing ahead of its rivals in earnings and market share. It just posted record results for the third quarter, with operating income jumping 26% from the year earlier, to \$274 million on sales of \$1.1 billion. That's the fourth straight quarter in which Starwood has led rivals Marriott International Inc. and Hilton Hotels Corp. in North American revenue per available room. The result: Starwood's \$31 stock price now commands multiples near or above its competitors. "In investors' minds, they've shed the image of being a dysfunctional mess, although there's still room to improve," says Michael J. Reitbrock, an analyst at Salomon Smith Barney.

And as Sternlicht nears 40, the ambitious, impatient, and supremely self-confident hotelier is maturing into the role of CEO. He still wears his baseball cap backward at

A SWATCH TOO FAR? "I'm investing in design.... This stuff matters, especially if it's going to be replicated 10,000 times"

home, and he's not about to give up the self-deprecating jokes. But he's becoming a leader who can delegate, share credit, and admit mistakes—the first of which, he says, was not trusting his managers with some of the details. Those close to him say Sternlicht is also less cavalier these days. "Barry used to feel he could tell everyone anything and it would be taken in the right vein," says wife Mimi.

Meanwhile, his much-maligned obsession with design is looking smart. Sternlicht came up with the Heavenly Bed concept (all-white, down-filled covers and pillows) for Westin, which has helped push up the chain's rate from \$135 to almost \$160 per night. Guests like the beds so much, they're taking home four a day, at up to \$2,700 each. The \$750 million Sheraton renovation has reinvigorated a tired brand and boosted occupancy rates to 78.2% last quarter from 74.8% the

year before. And W Hotels, a hip boutique brand launched by Sternlicht years ago, is widely regarded as one of the industry's most successful launches. His involvement was total. Theresa Fatino, vice-president of W design, says she even debated her boss over the tones. "You immediately sense his passion and intuitiveness," she says. "It was an industry full of bad poly bedspreeds, and Barry changed that."

Sternlicht honed his artistic sensibilities at an early age. Growing up in Stamford, Conn., as the second of three boys, he says he inherited his mother's love of painting and gardening. He studied art in high school and earned a liberal arts degree at Brown University, where he volunteered at a psychiatric hospital. After a few years of entry-level corporate jobs, Sternlicht headed to Harvard Business School, and then to real estate. Sternlicht got his big break in the hotel business just the way a brash entrepreneur might expect: He battled Hilton to take over ITT Corp. in late 1997 for \$14.6 billion. That followed his nearly \$1.8 billion purchase of W Hotels & Resorts. Suddenly, a man who had made his fortune flipping real estate was heading a behemoth.

His inexperience soon showed. Armed with razor-sharp intelligence and unwavering faith in his own judgment, Sternlicht quickly earned a reputation as a controlling taskmaster. In June, 1998, Sternlicht hired his friend, Richard D. Nanula, from Disney Co. to be Starwood's CEO. The duo clashed, and less than a year later, Nanula left. In an article after the split, Sternlicht was depicted as abrasive, egocentric, in over his head. Sensitive to his image and worried about company morale, he recalls the period as "a low point in my life."

Sternlicht is mostly over that now. Critics still question whether such paint samples is a good use of a CEO's time. And chances are Sternlicht will be back to look at that new carpet in the Stamford Sheraton. But he says he has learned that "when you're CEO, managing your image is important." Nothing helps a CEO's image like running a company that's on an upward

By Diane Sawyer
in Stamford



BARRY S. STERNLICHT

BORN Nov. 27, 1960,
Lake Success, N.Y.

EDUCATION BA, law and
society, Brown University,
1982; MBA, Harvard, 1986

CURRENT JOB Chairman and CEO,
Starwood Hotels & Resorts Worldwide
Inc.

FIRST JOB Booz Allen analyst, 1982-83:
"I found it odd that a kid out of college
could tell companies what to do."

FIRST LOVE Painting

SELF-IMAGE Considers himself an eclectic
thinker: "I'm more of a spaghetti
head than a box head. Life is more like a
bowl of spaghetti to me."

STARWOOD HIGH Launched W Hotels in
December, 1998, a modern boutique
brand. The chain has 13 hotels, with
eight more to open by 2002.

STARWOOD LOW Abrasive personality
blamed for several high-profile departures

FAMILY Wife, Mimi; three children

"A business takes off
like a rocket. Now there needs to be a plan to
capture that energy
and make sure owners and employees
are rewarded in the long run."

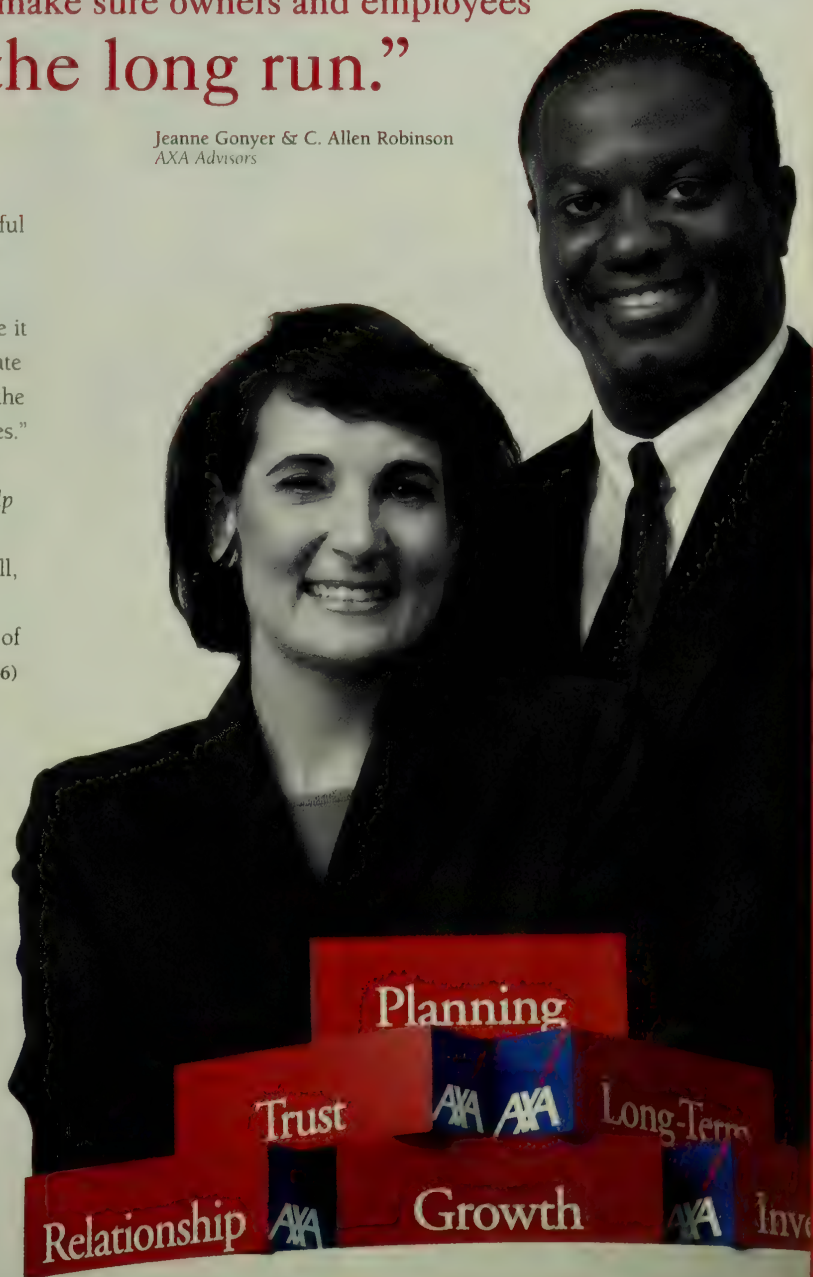
Jeanne Gonyer & C. Allen Robinson
AXA Advisors

"A start-up becomes truly successful when the people who built the business start to see long-term rewards. It's our job to help make it happen. That could mean an estate plan, deferred compensation for the owners...or a 401(k) for employees."

AXA Advisors helps entrepreneurs create a financial plan that may help turn business success into a truly rewarding financial future. "After all, it's not just about making it...it's about making it last." Reach one of us at 1(888)AXA-INFO (292-4636) or visit www.axa-advisors.com.



AXA ADVISORS
Building Futures





BRANDS

ZAGAT ZIGS OVER TO THE NET

The restaurant guides seek a global readership

For the foodies working at Zagat Survey LLC over the years, sharing their love of a great meal with readers meant more than feeding the bottom line. Sure, by early this year, the New York guidebook company had grown to 40 people since lawyers Tim and Nina Zagat began rating restaurants based on the opinions of their friends in 1979. Although they had one of the most recognized names in leisure information, the Zagats had done little to realize the potential of their self-published brand. Instead, the goal was to create communities of reviewers around food and fun. Advertising was generally limited to word of mouth, and expansion was funded from the couple's pocketbook. With money in the bank and food on the table, the Zagats didn't see much need to pump

up sales. "We've had constant calls from potential investors over the past 10 years, but we weren't interested," says Tim, 60, wiping barbecue sauce off his lips after a catered soul food lunch for employees.

That's about to change. In June, 1999, the couple went to Japan to launch a Tokyo guide on NTT DoCoMo Inc.'s wireless i-mode service—a venture initiated by DoCoMo—and they were overwhelmed by the popularity of their guides. Says 58-year-old Nina: "Suddenly, we saw what a huge opportunity we had to grow a lot faster."

In the months since, the Zagats have raised \$31 million in outside capital, tripled their staff

MARKETING WHIZ

New CEO McIntosh

sees "unexploited potential in this brand"

to 130, radically revamped their site, wooed powerful partners like Yahoo! Inc. and American Express Co. to distribute content, and upgraded technology to speed expansion to new markets. On Nov. 1, they brought in consulting marketing whiz Amy B. McIntosh to be Zagat's first CEO.

Another first: This year, the company will invest more money than it will make—even though book sales are up 70% and Web traffic is soaring. The goal is to expand the franchise into new forms of leisure, put out guides in 100 new cities over the next two years, and distribute data across all media, from telephones to television. For example, Ford of General Atlantic Partners, which led a group of venture capitalists that took an undisclosed stake in February, that means more advertising, marketing, and management talent, as well as a public listing, to "broaden the brand's reach around the world."

While the privately held company doesn't disclose sales—except to say that it sells 650,000 copies of the New York guide each year—it's clearly pushing into a radical new stage of development. In the first three years, the couple got copied ratings and gave them away. Then they bound them into a book and a profitable venture was born. But in the creative mind, didn't quit his gig job to do the guide full-time until 10 years later. Business hummed along, strained largely by a lack of capital. The Zagats didn't want anyway. Nicholas Negroponte, senior director of the MIT Media Lab at Massachusetts Institute of Technology and a longtime fan of what he calls the Zagat's collective opinion-leadership model, "had to beg them to become an investor." They let him in this year.

AIR HOCKEY. Now, McIntosh is charged with helping turn the company into a global force. As the former group president of Verizon Communications' Internet and Data Services Div., who has held senior roles at American Express, McIntosh brings technology and marketing expertise to the job. She always thought there was unexploited potential in this brand, she says. McIntosh likens the energy to a "dot-com atmosphere"—there's even an air hockey table for





REDLEAF

Where innovation lives.



Ideas only go as far as you're willing to look for them.

Accelerate the expansion of your ideas and technology, with our revolutionary worldwide network. It's our unique way of developing business, and it's like no other innovation support on earth.

www.redleaf.com

YOU'RE CHANGING JOBS AND MUST DECIDE HOW TO INVEST YOUR 401(k) ROLLOVER, SO YOU:

- ☐ Throw darts wildly at the stock listings in the financial section. How badly can you do, right?
- ☐ Talk to some guy who has a friend who has a friend who knows about stocks, or is that bonds?
- ☐ Call the Rollover Specialists at T. Rowe Price. This is serious money. You can't afford to make a mistake.

Invest With Confidence™

T. Rowe Price



Call the Rollover Specialists at 1-800-541-4975

Get advice on how to invest your rollover. Our Rollover Investment Service kit provides everything you'll need to get started.
www.troweprice.com

Rollover Investment Service is a service of T. Rowe Price Associates, Inc., a registered investment adviser.

IRAR056740

Marketing

tech guys—and says her biggest challenge is “crafting a strategic growth plan that chooses the best of the opportunities.” High on the list: a marketing scheme to build brand recognition.

Of course, a number of challenges still lie ahead. While the Zagats Web site boosts sales of the gundy books in every market, distributing free content over the Net also carries the risk of cannibalizing an offline brand. Then there's the fact that a business built on grassroots in each market, getting enough reviews to hit 100 new cities in two years can be tough. What's more, Zagat is hard alone in trying to tap the market.

RECIPE FOR GROWTH

Zagat's plan for extending its brand

NEW PRODUCTS Look for guides to restaurants and new areas such as golfing and nightlife in an expanded list of American cities as well as new footholds abroad.

NEW MANAGEMENT Recently hired CEO Amy McIntosh brings strong background in marketing and the Internet.

NEW REACH Partnerships with NBCi Broadband, Ticketmaster Online, wireless providers, and others help Zagat mine a new audience.

travel, entertainment, and leisure reviews. Add to that the challenge of suading two passionate entrepreneurs to let go of key decisions in order to foster growth. “It's like their baby,” says Nathan P. Myhrvold, a stakeholder and co-president of Intellectual Ventures LLC, an investment company.

But the Zagats insist they're there to move onto a new stage. For one thing, the duo got several million dollars in the February funding. And as the chairs, they'll remain involved in strategy. Their son Ted, 25, is also on board in business development and up with the successful *Zagat Survey New York City Nightlife* guide this year. “We can be more relaxed and more focused,” says Ted. Meanwhile, the son of saucy ribs from Sylvia's restaurant in Harlem reminds workers that the Zagats don't intend to stray too far from their roots. For McIntosh, who used to eat out maybe once a week, the riding goal at the moment is “success without weight gain.”

By Diane Brady in New York

ALWAYS

On My Honor,

I will do my best to do my duty
to God and my country and to
obey the Scout Law; to help
other people at all times; to
keep myself physically
strong, mentally awake,
and morally straight.

BOY SCOUTS OF AMERICA



BE PREPARED

Boy Scouts of America

www.bsa.scouting.org



ECONOMICS

TIME FOR THE STADIUM BOOM TO GO BUST?

Studies say arena subsidies are a bad investment

In 1998, after the Denver Broncos won the Super Bowl, team owners gave their fans a choice: Build us a new stadium, or watch the team gallop off to Houston. The Broncos are getting a new stadium—and three-quarters of its estimated \$400 million cost will be paid for by taxpayers.

Denver is not alone. Nearly 50 stadiums and arenas were built for major professional sports teams in the 1990s—with about 70% of the cost borne by the public. Supporters of these projects argue that the new stadiums generate enough economic growth to be worth the cost to the public. They also produce noneconomic benefits, such as a stronger sense of civic pride.

Economists have long been skeptical about these claims. Now, new research shows that subsidies for sports stadiums may actually be an economic drag—reducing per capita income, according to one study by economists Dennis C. Coates and Brad R. Humphreys of the Uni-

versity of Maryland. Another new paper suggests that the intangible benefits of having a “big league” team are too small to justify today’s subsidies.

These findings come at a time when a large number of cities across the nation

Big League, Big Bucks

Publicly financed major league stadiums and arenas under construction

CITY	SPORT	COST MILLIONS	PUBLIC FUNDS
CINCINNATI	Baseball	\$334	91%
PITTSBURGH	Baseball	262	85
SAN ANTONIO	Basketball	175	84
MILWAUKEE	Baseball	394	77
DENVER	Football	400	75
PITTSBURGH	Football	252	70
SEATTLE	Football	360	70
HOUSTON	Football	367	69
DALLAS	Hockey/basketball	330	38
DETROIT	Football	325	35

DATA: STREET & SMITH'S SPORTS BUSINESS JOURNAL

HOME-FIELD ADVANTAGE

Pro sports stadiums built in the '90s were 70% publicly funded

are confronting the stadium issue. In fact, 50 or so are currently under construction (table) or in the planning stage. Stadiums and sports facilities are an important part of economic development strategy in many areas. The latest cities to grapple with this are Phoenix and Houston, where voters approved new sports facilities on November 7. Meanwhile, the possibility of public support for a new stadium for the New York Yankees is an active topic in New York City.

REAL VALUE? The research of Coates and Humphreys was triggered by a study made in 1995 when Maryland lured the Cleveland Browns to Baltimore. Coates, who loves football, thought the projections of huge new tax revenues and other benefits were outrageous. “I wanted to get some idea of the real value of professional sports to a city,” he says. Their study examines all 37 cities that had at least one big-league football, baseball, or basketball franchise at any point between 1969 and 1996. As a result, the study includes cities that attracted new franchises, that lost franchises, and that built new stadiums for existing teams. It also used the latest statistical techniques to control for regional differences, such as number of sports teams in an area.

Coates and Humphreys conclude that these stadium projects actually depressed per capita income. In cities with baseball franchises, for example, constructing a new ballpark is found to reduce income by \$10 per person per year and building a basketball arena cuts income by \$7 per person. The disparity, they suggest, is because baseball teams play more games and draw a larger crowd.

Bringing a new team to a city does have some economic benefits—fit—if there is already a stadium for it to play. But if it is necessary to build a new arena or stadium for the team without public financing, the net value is usually negative.

Why? For one thing, subsidies for sports facilities mean that taxes must rise or that local governments must reduce other spending. “That’s money that could’ve been used to dredge a harbor, or for education, or to hire more police,” all of which could make business more productive.



HP Brio Business PCs: Featured with Intel® Pentium® III processor 600 MHz
Intel, the Intel Inside Logo and Pentium are registered trademarks of Intel Corporation ©2000 Hewlett-Packard Company All rights reserved.



It's horrible to be misunderstood.

To have a reputation for being something you are not. To be perceived as being expensive when you are actually quite reasonably priced. For the latest pricing information, visit www.buy.hp.com. Then feel free to say what you like about us.

Demand a better computer.



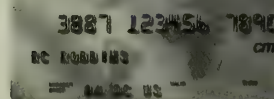
**AFTER 30 DAYS, MOST
CHARGE CARD COMPANIES
GIVE YOU A WARNING.**

WE GIVE YOU ANOTHER 30 DAYS.



There must be a catch, right? Actually, no. We understand that sometimes a three-day business trip turns into three weeks and, by necessity, you could use some extra time to pay your bill. That's why we always give you the convenience of an extra billing period to pay when you need it, interest-free. Another difference is having a real person answer your calls and help you, 24 hours a day. We also give you an award-winning rewards program that allows you to earn miles that can be redeemed on every major U.S. airline. And, of course, the Diners Club Card is welcomed by airlines, hotels, car rental companies and millions of other places you go. Call us at 1 800 2 DINERS. We'll answer all of your questions, no extra charge.

 **Diners Club
International**



CITIBANK

BREAKING THE PLASTIC

produce more local spending than a team, Coates says. Coates adds that subsidized stadiums use taxpayer money to generate more wealth for owners and players, who do not tend to spend a large portion of their income in the local area. "Players and large don't live in the cities where they play," says Coates. Meanwhile, the new facility siphons money from other local establishments. If more people fill the seats in an expanded stadium, fewer dollars are left over for other entertainment, such as casinos, bowling, or nightlife.

IT AIN'T SO. Stadiums alone can't revitalize a troubled neighborhood or old business district. People often cite Jacobs Field for revitalizing downtown Cleveland and Camden Yards for reviving Baltimore. But both stadiums were part of a much larger strategy of economic development, says Vanil University economist John J. Fried, a sports economics expert who has called the Coates and Humphreys study "a step up from the clouds."

Supporters of new sports facilities argued that economists underestimate the intangible benefits of having a team. And certainly having a major league sports team gives towns such as Green Bay, Wis., much more visibility than they would have otherwise.

But economists who have tried to measure the value of such intangibles have found they are not worth the cost of subsidizing a team. Earlier this year, a research team headed by Bruce Johnson, of Centre College in Danville, Ky., used community surveys to place a dollar value on the civic pride and enjoyment generated by the Pittsburgh Penguins, the city's financially troubled hockey team. The economics team asked Pittsburgh residents how much they would pay to keep the franchise in town.

Their finding: Keeping the Penguins is worth about \$66 million to the residents of Pittsburgh, far less than the \$100 million or more a new arena would cost. On the basis of this study and earlier work on stadium projects in Kentucky, Johnson and his colleagues concluded that public subsidies for sports facilities can't be justified.

These studies give powerful ammunition to opponents of public financing for sports facilities. In the end, there will be only one reasonable community response to a team's demand for a stadium: Tell the owner, "Build it yourself."

by Charles J. Whalen in New York



Las Vegas is making room. Room for you and any convention of any size by dramatically expanding the Las Vegas Convention Center. The more than 1.3 million square feet of new space now under construction will make this already state-of-the-art facility the most impressive in the country. We're creating even more availability in a town that, from hotels to transportation to entertainment, was practically designed for business. Completion is scheduled for fall of 2001. So plan on having your next convention in Vegas, baby. For more information call 702.892.0711 or visit vegASFreed.com.

THE STREET'S PUNISHING PAY STUBS

As markets tighten, investment banks choke on rich salaries

Stock market investors may not be making much money this year, but investment bankers certainly are. Wall Street is expected to create twice as many millionaires this year as it did in 1999. Four thousand managing directors, directors, and vice-presidents of investment banks will earn at least that much in 2000, according to compensation consultant Johnson Associates Inc. And 100 bankers, 30% more than last year, will rake in over \$10 million, putting them in the superstar league with the likes of Salomon Smith Barney telecom analyst Jack Grubman, who earns in excess of \$20 million a year.

Such pay packages assume the good times will keep on rolling. In fact, Wall Street firms have a history of agreeing to ultrahigh salaries and hiring too many employees—only to get into trouble when the market goes down. Are the banks doing it again? Trading volume and securities underwritings have already turned sluggish. In recent weeks, Salomon and Goldman, Sachs & Co. have reduced their earnings estimates for such investment banks as Lehman Brothers and Morgan Stanley Dean Witter. Says Judah Kraushaar, securities industry analyst at Merrill Lynch & Co.: “If we get to the point where revenues begin to go sideways or—God forbid—contract, the industry is going to have a very challenging time.”

Already, the trend toward more multimillion-dollar packages is driving the costs of doing business up sharply for many firms. The ratio of compensation to revenues is up to 55% at Salomon and 52% at Lehman, vs. 42% at Morgan Stanley. And consulting firms say investment banks will have to make even bigger outlays to survive, as the financial-services industry consolidates. Boston consultants Cerulli

Associates Inc. estimates that brokerages will have to spend \$14.9 billion between 2001 and 2005, vs. \$6.7 billion in the previous five years, just to recruit and train new brokers.

How have investment banks painted themselves into this corner? Just a year ago, they sweetened their compensation packages to keep their best and brightest from rushing off to join dot-com and venture-capital firms. This year, the pressure is coming from commercial banks and smaller investment banks trying to poach talent when two rivals merge. “All of the consolidation has worked incredibly in our favor,” says Bradley Jack, head of global investment banking at Lehman, which has hired about 1,000 bankers and analysts this year, many of them from merged competitors. “It’s harder for individuals to see that they’re having an impact in a large organization.” Such predatory attitudes, in turn, are forcing merged banks to pay even more to keep their stars.

PLAYING HARD TO GET. And, bizarre as it seems, Wall Street’s dimmed prospects are making it all the more important to attract, and keep, top talent. “Everyone wants to get their people in the chairs before the music stops,” says Alan Johnson, managing director at Johnson Associates. “So there’s a frenzy.”

Sought-after stars are becoming picky. “In the past, people just signed up with a firm if the pay was right,” says Robert L. Thornton, who took eight weeks and met with 10 Deutsche Bank executives before he decided to

BIZARRELY, DIMMING PROSPECTS

leave Lehman to head Deutsche’s West Coast tech mergers and acquisitions team. “People spend more time on seeing who will be a longtime survivor.”

Deutsche Bank is Wall Street’s top offender. It desperately wants to be a major player in North American investment banking. To boost its investment-banking muscle, it bought Bancroft Trust Alex. Brown Inc. in 1998—and that failed to give it the heft it wanted. So the big German bank is now pulling out its ranks by raiding other major investment banks. In the past 12 months

alone, the bank has poached heavy hitters from Salomon, Lehman, Morgan, and Donaldson Lufkin & Jenrette. And has spared no expense. The firm is keeping its compensation experts on specifics. But instead of compensation experts, the bank is offering out-year guarantees of multimillion-dollar packages to investment bankers.

WALL STREETERS GET RICHER

Investment Bankers' 2000 Compensation

POSITION	BASE PAY* THOUSANDS	TOTAL COMPENSATION* MILLIONS	INCREASE OVER 1999
MANAGING DIRECTOR	\$240	\$4	33%
RESEARCH DIRECTOR	240	3	33
DIRECTOR	210	1.7	31
VICE-PRESIDENT	170	1.3	30

* ESTIMATED MEDIAN

DATA: JOHNSON ASSOCIATES INC.





MAKING IT EVEN MORE URGENT TO ATTRACT—AND KEEP—TOP TALENT

ity analysts. Since it has stolen so many of its rivals' stars, "I don't think we're the most popular firm on the street right now," admits Alex Mason, head of corporate finance at Deutsche Bank. He denies that Deutsche has been overpaying people. "Average compensation packages have gone up—like major-league baseball contracts," he adds. "For small outfits that want to morph into major players, it's cheaper to chase talent than pay astronomical premiums to whole firms and then see the talent leave." Bank of America, for example, paid many of Montgomery Securities' executives when it bought the firm in 1998. And Deutsche Bank was hit by an exodus of top bankers after its Citicorp Trust deal. But the build-don't-buy strategy is still costly. "It's a never-ending round of poker, where you up ante every time," says Ed Jones, financial-services partner at KPMG. Sweet deals are trickling down. Many firms now give stock options to lower-level employees and let them invest in the bank's private funds. "Typically, com-

investing in a merchant-banking fund was reserved for the firm's managing directors," says John Rogan, a managing director of Russell Reynolds Associates' global banking practice.

Not all investment banks have joined the compensation craze. Robert Gottlieb, head of human resources at Goldman Sachs, regards the latest rich packages as irresponsible. "We are not out there bidding people away by promising them multiples of what they have earned. We just don't do that," he says. **LESS HEFTY HIKES.** And not everyone is being offered handsome premiums. Financial mergers are expected to throw at least 5,000 Wall Streeters out of work this year. With fewer places hiring, pay hikes for job-hoppers are already slowing down. Eric Archer, president of the executive search practice at consultant Spherion Corp., estimates that bankers who several years ago could double or triple their salaries jumping to a new firm can expect increases of only 25% to 50% now. One exception: Tech bankers say they can still double

their salaries by moving to a rival.

The pace is slowing, but a 25% leap on top of an already high base is still a lot of dough. Many research analysts are now taking home annual salaries in the seven figures. "The rate of growth in salaries will be slower this year," says Richard G. Lipstein, managing director of executive search firm Gilbert Tweed Associates Inc. "But the numbers are still staggering."

That could hurt the Street badly. "In most of 2000, the tide was moving with investment banks," says Johnson. "Now it looks like it's moving against them. If that trend continues, 2001 is going to be a significantly worse year—and they will get absolutely no sympathy from anyone."

For now, though, thousands of Wall Streeters are laughing all the way to the bank. Until February, when huge bonus payouts are traditionally made, at least most will stand pat and collect the cash—unless, that is, they get a better offer in the meantime.

By Emily Thornton and Heather Timmons in New York

As small caps crawl and large caps totter, midcaps look good

HAPPY MEDIUM

▲ INDEX: DEC. 31, 1999=100

DATA: BLOMBERG FINANCIAL MARKETS

Date	S&P 400	MIDCAP INDEX	NASDAQ COMPOSITE INDEX	DOW JONES INDUSTRIAL AVERAGE
DEC. 31, '99	100	100	100	100
Jan. 19, '00	98	115	105	95
Feb. 1, '00	105	110	100	92
Mar. 1, '00	110	105	95	90
Apr. 1, '00	115	100	90	92
May 1, '00	120	105	95	95
Jun. 1, '00	125	100	90	98
Jul. 1, '00	120	105	95	95
Aug. 1, '00	118	100	90	92
Nov. 7, '00	120	105	95	98

By Mara Der Hovav
in New York

"STORAGEAPPS MAKES OUR BUSINESS MODEL WORK."

Kevin Torf, Chairman and Founder
Tornado Development Inc.



Tornado Development started with a hot idea – provide a better way to manage the constant waves of information from voice mail, e-mail, pagers and faxes. The challenge: how to implement Tornado Messenger so that it works seamlessly with the infinite variety of systems, servers and storage that telco, ASP and ISP customers already were using.

That's why Tornado relies on the Proactive Network Storage Solutions™ portfolio from StorageApps.

"StorageApps gives us something other storage companies can't match: true any-to-any connectivity," explains Kevin Torf, Tornado's Chairman and Founder. *"And they offer carrier-class functionality at a better price, as well."*

With StorageApps SANLink™ storage appliances as the foundation of its solution infrastructure, Tornado hosts messaging solutions for ASPs, ISPs and carriers of all sizes around the world. And for customers who prefer to buy, Tornado provides SANLink as part of a turnkey solution. *"StorageApps is a real partner. They provide the technology we need to make our business model work,"* Torf says.

"Bottom line, what StorageApps really gives us is a smarter way to deliver customer value."

To find out more about smarter solutions for network storage, visit us at www.storageapps.com

StorageApps™
The Smarter Approach™



COMMENTARY

By Heather Timmons

BAD LOANS? WHAT BAD LOANS?

Lately, analysts who worry about America's banking system have been watching the rise in problem bank loans very closely. Such loans are generally considered a leading barometer of economic health—and of the soundness of banks. They've doubled since 1998, indicating that companies are facing growing problems in paying interest on their debts.

Banks are quick to point out that the latest upswing is coming off historic lows. What they're glossing over, though, is that the situation is far worse than it first seems. Banks have been scrambling to keep assets out of the nonperforming category, using stratagems to dress up their figures.

The banks are reclassifying loans that aren't performing well and then working hard to shovel them off their books. During the third quarter, First Union Corp. moved \$719 million in commercial loans to "held for sale" status—a category that removes the loans from the nonperforming column but still leaves the risk with the bank until they're sold. Bank of America Corp. sold off \$75 million of bad loans. Had it not, its nonperforming assets would have jumped 15% during the quarter. And bankers say Bank One Corp. is racing to unload loans it made in the health-care, finance, and entertainment industries. Bank One said in June that it was restructuring, and trying to shed unprofitable businesses and assets.

Why the rush? Simply, because bank regulators such as the Federal Deposit Insurance Corp. don't track the sale of bad loans. The FDIC only follows the credit quality of loans that are still held in banks' portfolios. If the agency sees an uptick in bad loans, it can force banks to increase their loan loss reserves, which crimps the amounts they can lend in the future. "It's possible that there may be

more there than meets the eye," concedes Ross Waldrop, a senior financial analyst at the FDIC.

The frantic activity is effectively obscuring a real glut of bad loans. Already this year, a record amount of them has been sold. Nearly \$18.5 billion in distressed bank debt was traded in the first three quarters of 2000, says Loan Pricing Corp., a New York database outfit, vs. \$8.9 billion in all of '99. Theodore L. Koenig, CEO of Hilco Capital LP, a fund that buys distressed bank debt, says he has looked

serves—a drain on the bottom line. And when they sell loans, they're required to account for them at market value, which usually means taking small writedowns. In the long run, though, it is preferable to take a charge instead of being seen stuffed with bad assets. "We have taken substantial steps to shed our balance sheet of assets that don't have a high enough return," says First Union Chief Financial Officer James H. Hance Jr. "At the end of the day, the balance sheet is strengthened."

COSMETICS? Moving loans off the books doesn't necessarily mean they're bad. But the strategy raises questions. "You have to ask why a bank moved loans over," says Jim Liddy, a partner with KPMG's assurance and advisory practice. "If the bank is trying to reduce its exposure in an industry, that's good. But it can also mean that underwriting got out of control."

Once they're sold to a bank, the loans are generally bundled together, insured by a third party, and then sold to investors. This "secondary" market blossomed in the late '90s, in response to institutional investor demand. But it has never been tested in a credit crunch. "There's a whole bunch of uncharted territory," says the FDIC's Waldrop.

The banks' balance-sheet cosmetics are successfully obscuring their true position. For example, in a Nov. 3 economics report, Goldman, Sachs & Co. said: "Fears about an impending credit crunch are overblown," in part because of banks' still historically low percentages of nonperforming loans.

Banking analysts, credit-ratings agencies, and the regulators need to take another, closer look at U.S. banks' exposure to bad loans. They will probably hate what they see.



Banks are dealing with the rise in nonperforming loans by renaming them

at 140 deals in the past 90 days, double the business he saw at the same time last year. "The challenge for us is to figure out what deals not to do," he says.

There's no doubt that it makes good business sense for the banks to dump questionable loans. If banks were to hold on to poorly performing loans, delinquencies and charge-offs would certainly rise, and they would need to increase their loan-loss re-

Timmons covers banking

NOW YOU CAN ACCESS YOUR NDB ACCOUNT ON THE FLY.



One of your stocks just hit its target price, but you're in a meeting. No problem. You receive a real-time stock alert and make the appropriate trade. You receive financial headlines at lunch and react accordingly. You analyze up-to-the-minute market movements on intraday charts while waiting for the elevator and immediately adjust your portfolio. You are a real-time, on-the-go, financial wizard, thanks to NDB's Mobility.SM

By partnering with Aether Systems, National Discount Brokers lets you buy and sell stocks, options and mutual funds in real time

as the markets move. This service, known as NDB's Mobility.SM makes accessing your portfolio, and the entire market, as easy as pushing a button.

With NDB's Mobility.SM

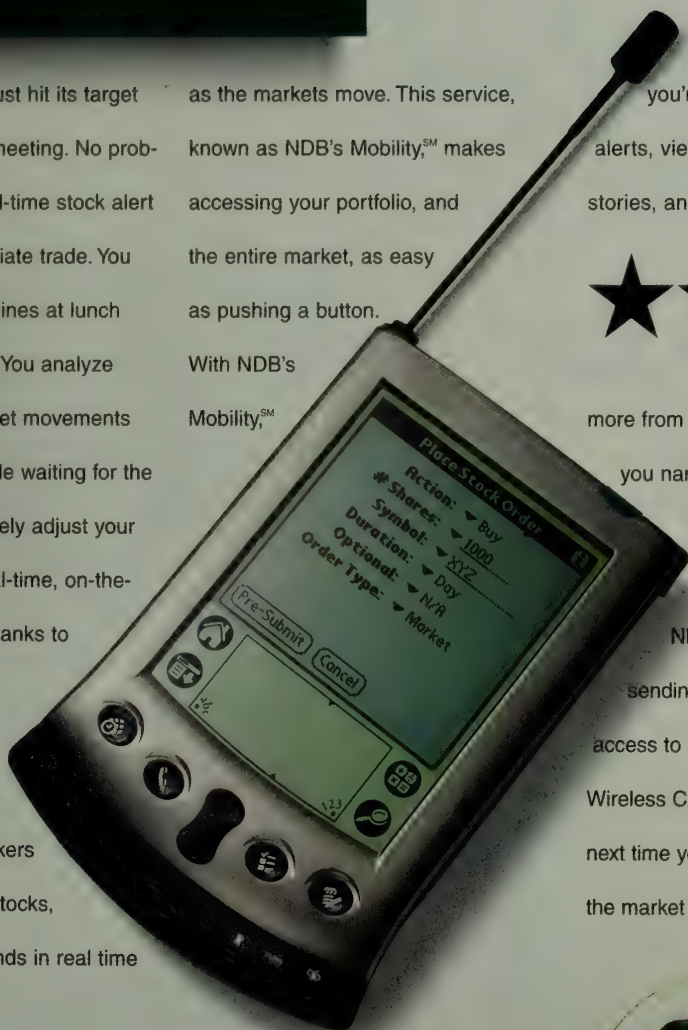
you're ready to trade, receive alerts, view financial headlines and stories, analyze market trends and



-Barron's*

more from the car, the train, the beach, you name it.

To learn more about the on-the-go advantages of NDB's Mobility.SM which include sending and receiving e-mail and access to over 2200 web sites, visit the Wireless Center at ndb.com. And the next time you're ready to take off, take the market with you.



*Source: Barron's 3/13/00 "Annual Survey of Online Brokers." Aether systems is not a registered broker dealer. NDB has relationships with third party research and data vendors. Market Guide and StockPoint are trademarks of their respective companies. System availability, trade execution and reporting times may vary due to market volatility, volume, system performance and other factors. NDB does not provide tax, legal or investment advice. Security products and services are offered through NDB. NDB is a National Discount Brokers Group, Inc., company. NDB is Member NASD/SIPC.

AETHER SERVICE

ndb.com 1-800-4-I-PRICE



NATIONAL DISCOUNT BROKERS | ndb.com
We take you under our wing.

COMMENTARY

By Joseph Weber

WHAT TO DO WITH ALL THAT %#* CASH

With Microsoft Corp.'s stock price sliced by 41% in the past year, Chairman William H. Gates III has plenty of problems. But he has one headache many managers might pine for: what to do with the \$24.7 billion in cash sitting on Microsoft's balance sheet.

Critics say Gates & Co. should put that trove—a tally that exceeds the company's last 12 months of sales—to productive use. If they can't step up Microsoft's already feverish investment pace, then give the money back to shareholders through bigger stock buybacks, which will drive up stock prices. Or, Old Economy-ish as it might seem, Microsoft's managers—usually stockholders themselves—might even think about paying a dividend. “This is not just their money. It also belongs to the outside shareholders,” says Richard C. Green, a professor at Carnegie Mellon University and editor of *The Journal of Finance*. “Why don't they pay it out?”

As the economy slips into lower gear, the same question might be asked of plenty of other big cash-generating outfits. Microsoft's embarrassment of riches, equal to just \$4.68 a share, or about 6.6% of its current stock price, is one of the more modest piles, on a per-share basis. By contrast, General Motors Corp., with \$11 billion in cash and marketable securities, can't seem to find uses for its \$20.54 per share, a trove worth more than one-third of each share's current price. The long-suffering shareholders of Sears, Roebuck & Co. can take a little consolation in knowing that the retailer's cash register holds \$4.2 billion, or \$12.59 a share—equal to nearly 42% of each share's current price. And AMR Corp.'s \$2.3 billion hoard works out to \$15.48 per share, or nearly half its current stock price.

Based on the most recent quarterly reports available, Standard & Poor's Compustat figures that the nonfinancial companies in the

S&P 500-stock index have built up war chests worth about \$367.9 billion, up 15% from their cash holdings a year ago. And those greenbacks sit idle in Treasury and other easily liquidated securities and even bank accounts, where they earn far less than they could if plowed into productive investments.

BIG BUYBACKS. Finding worthwhile places to put the lucre can be a big challenge. Microsoft, whose cash hoard has climbed nearly 31% in the past year, has made more than 40 investments or deals since January, and it has given back \$1.7 billion in stock buybacks in the last quarter alone. Last year it pumped \$5 billion

into AT&T's broadband and wireless efforts, and it soon may drop \$1 billion more into Rupert Murdoch's Star Global Networks Inc. operation. “Having cash allows you the flexibility to invest in those nascent technologies,” says Microsoft Treasurer Brent Callinicos, who adds that investors haven't been clamoring for dividend.

But skilled as Microsoft's managers are at finding places to invest, millions of investors operating independently can do a pretty good job, too. Through them, dividends and share repurchases amount to “a reallocation of capital from companies that don't need it to companies that do,” says Steven N. Kaplan, a finance professor at the University of Chicago.

With the economy slowing, some prudence is smart. Companies

do have to cover the costs of customers who don't pay bills, or to keep, say, crucial research and development efforts going. But hoarding can be risky. For one thing, unwanted suitors often covet cash to help finance takeovers. For another, in

slack times managers can spend unwisely, shoring up operations that might be better curtailed. “Most people want to have more employees rather than fire, whether it's in the shareholders' interest or not,” says Green. Too much cash, adds, “insulates management from the disciplines that the financial markets provide.”

Lots of managers and companies have thrived in the past five years or so. Now, they can't find places to turn the fruits of their labors to still better use, they should trust their shareholders to do the job. The investments that they will make with that cash could go a long way toward keeping the U.S. economic juggernaut going.



Hefty Hoards

	CASH BILLIONS	CASH PER SHARE	CASH/SHARE AS A % OF SHARE PRICE*
GENERAL MOTORS	\$11.0	\$20.54	36.0
AMR	2.3	15.48	47.1
RELIANT ENERGY	4.3	14.60	37.3
DELTA AIR LINES	1.8	14.23	30.6
PACCAR	1.0	12.73	29.6
SEARS ROEBUCK	4.2	12.59	41.6
APPLE COMPUTER	4.0	12.00	56.3
BAUSCH & LOMB	0.6	11.78	30.5
FORD MOTOR	20.9	11.03	44.1
VISTEON	1.3	10.05	60.9
ALZA	1.0	9.18	10.1
NAVISTAR	0.5	8.99	25.9
NEXTEL COMM.	6.4	8.36	26.1
MICROSOFT	24.7	4.68	6.6

DATA: STANDARD & POOR'S COMPUSTAT

*SHARE PRICE AS OF 11/7/00; CASH, LATEST QUARTERLY REPORT

With Jay Greene in Seattle

AOL All-New Version 6.0!

**The Easiest
Just Got Even Easier!**



- New look, design and features make it even easier to get started
- Free 24-hour customer service means help is just a phone call away
- Your security and privacy are always protected on AOL
- Parental controls to help safeguard your kids
- There's never been a better time to join

Call 1-800-4-ONLINE
NOW To Sign Up Today!

© 1999 America Online, Inc. Availability may be limited, especially during peak times.



So easy to use,
no wonder it's #1

THE 26-WEEK SMALL-CAP REVIEW

SELECTED PROFILES OF THE NATION'S TOP PRICE-PERFORMING SMALL-CAP COMPANIES AS OF 9/1/00

Seitel, Inc. • SEI • Seismic Data

Houston, TX • IR Contact: Russell Hoffman • 713-881-8900
www.seitel-inc.com



Seitel, Inc. is a leading seismic data provider owning and licensing a petabyte of seismic data, the largest data library in North America, to the oil and gas industry. The company also explores for oil and natural gas via its wholly-owned subsidiary, DDD Energy. Seismic data is the primary tool used for identifying oil and natural gas reserves in the ground. The resurgence of oil and gas exploration has increased the need for Seitel's seismic information and prospect development services.

Seismic library sales were in excess of \$22 million in the latest quarter, a 97% increase over first quarter 2000 levels. Demand has remained strong through the third quarter. DDD Energy, the wholly owned oil and gas exploration company, recently reported a 24% increase in production. The company has resumed its share buyback program, which started in fourth quarter 1999 with the purchase of 500,000 shares in the open market. Its goal is to generate significant cash flow from our existing seismic library and through timed divestitures of oil and gas properties while reinvesting capital into company stock repurchases, seismic data library acquisition, oil and gas exploration, and reducing debt.

GBC Bankcorp • GBCB • Banking

Los Angeles, CA • IR Contact: Amy Lin • 213-972-4166
www.generalbank.com

GBC Bankcorp is the holding company for General Bank, specializing in international trade financing, real estate and construction lending, and is one of the very few U.S. small-cap banks successfully financing the high-tech sector.



	Peer
	GBCB Banks Avg.
2000 R.O.E. (6 Mo.)	33.8 23.6
5 Year Average Annual	
EPS Growth	37.2 28.0
2000 R.O.A. (6 Mo.)	2.59 1.72
Efficiency Ratio (6 Mo.)	32.6 46.8
P/E Ratio (9/30/00)	9.4 16.0

GBC Bankcorp is the most efficient banking company in CA, the sixth most efficient in the U.S. (American Banker, 6/7/00), and nationally ranked eighth best performing publicly traded banking company based on return on average assets (American Banker, 9/6/00).

Key Manager Statement

"We are servicing an expanding immigrant market highly motivated to improve their financial condition. Our Asian network is well established and expanding, enabling us to excel in bridging the economic gap between the U.S. and Asian countries. The Bank's consistently high level of efficiency allows us to maintain a competitive edge."

Li-Pei Wu, Chairman & CEO

ADVO, Inc. • AD • Marketing Services

Windsor, CT • IR Contact: Chris Hutter • 860-285-6330



With revenue growth of 12.9%, and E.P.S. growth of 22.4% (substantial 44.8% excluding a one-time charge), ADVO has completed its 16th straight quarter of record performance in its 3rd quarter ended June, 2000. Over this period, the nation's largest direct mail advertising Company generated strong increases in E.P.S., resulting in a current trailing 12-month E.P.S. figure of \$2.25, versus \$0.78 in fiscal 1996. ADVO has strengthened its business via increased strategic investments in production equipment and data systems, which provide advertisers with unmatched penetration, reach, and response, as ADVO's advertising reaches 60 million households every week, and 90 million households once per month.

Key Manager Statement

"Our focus on strengthening service delivery processes, enhancing the targeting of our advertising investment has enabled significant improvements in our overall results, and enabled the business to continue to achieve real and sustainable revenue and earnings growth."

Gary M. Mulloy, Chairman & CEO

Energen Corporation • EGN • Energy

Birmingham, AL • IR Contact: Julie S. Ryland • 800-654-3210
www.energen.com



Energen Corporation is a diversified energy company that offers investors the strength and stability of a mature natural gas utility and the growth potential of a relatively low-risk oil and gas company specializing in property acquisitions and development. Over the last 5 fiscal years (1996-2000), Energen's earnings per diluted share (EPS) increased at a compound rate of more than 14 percent a year. Shareholder return over the same period exceeded that of the S&P 500, totaling 230% for a compound return of 27 percent a year.

Key Manager Statement

"We at Energen are pleased with the track record of our 5-year aggressive, diversified growth strategy. We also are excited about our future prospects. Energen's natural gas utility provides an excellent foundation as we pursue demand growth via oil and gas acquisition, exploitation and exploration. Our goal is unchanged: to increase E&P at a compound growth rate of at least 10% a year over each rolling year period."

Mike Warren, Chairman, Pres. & CEO

1-800 CONTACTS • CTAC • Contact Lenses

Draper, UT • IR Contact: Robert G. Hunter • 801-924-9802
www.contacts.com



1-800 CONTACTS is changing the way the world buys contact lenses. Through its toll-free telephone number, "1-800 CONTACTS" and its Internet website, www.contacts.com, the Company sells all of the popular brands of contact lenses, including those manufactured by Johnson & Johnson, CIBA Vision, Wesley Jensen, Bausch & Lomb, Ocular Sciences and CooperVision.

The Company's high volume, cost-efficient operations, supported by its proprietary management information systems, enable it to offer consumers an attractive alternative for obtaining replacement contact lenses in terms of convenience, price, speed of delivery and customer service. As a result of its extensive inventory, the Company is able to ship approximately 90 percent of its orders within 24 hours.

Key Manager Statement

"Since we opened, we've delivered more than three million orders to more than 1.5 million customers. Not only have we changed the way the world buys contact lenses, we've done it profitably."

Jonathan Coon, President & CEO

Barnes Group Inc. • B • Diversified Manufacturing

Bristol, CT • IR Contact: Phillip J. Penn • IR@barnesgroupinc.com
www.barnesgroupinc.com



Barnes Group Inc. is a diversified international manufacturer of precision metal parts and distribution of industrial supplies, serving a wide range of markets and customers. The Group consists of three businesses – Associated Spring, Barnes Aerospace, and Barnes Distribution – with 1999 sales of \$622 million. These businesses hold leadership positions in their respective industries, and are highly regarded for their work quality and customer focus. With an increasing global presence, rising order backlog, expanding product line in telecommunications and electronics, and significant distribution scale, Barnes Group is well positioned for future growth.

Key Manager Statement

"Over the past year we have completed three strategic acquisitions – one in each of our primary businesses – that have expanded annual revenue to a run rate in excess of \$800 million. All acquired businesses will enhance our ability to create shareholder value over the long term."

Edmund M. Carpenter, President & CEO

THE 26-WEEK SMALL-CAP REVIEW

SELECTED PROFILES OF THE NATION'S TOP PRICE-PERFORMING SMALL-CAP COMPANIES AS OF 9/1/00

IXYS CORPORATION • SYXI • Semi Cond. / IC Circuits

Clara, CA • IR Contact: Arnold Agbayani, CFO • 408-982-0700
www.ixys.net

IXYS IXYS Corporation, (Nasdaq:SYXI) designs, develops, manufactures and markets a broad range of high power semiconductors and integrated circuits targeted at worldwide telecommunications, computer and medical markets. IXYS continues its scientific expertise on the development of higher power products and adding added value and efficiency. The company's R&D effort spans a range of technologies from silicon devices, specialized power ceramics, to arsenide (GaAs).

Products are sold through a worldwide network of direct sales, local independent sales representatives, and authorized stocking distributors. IXYS has on the market for power semiconductors that are capable of processing more than 500 watts of power. The company has a global presence, generating 48% of its sales in Europe and the Middle East, about 37% in North America, and about 15% from Asia. Its strategy for growth includes increasing presence in targeted niche markets and strengthening its technology by continued R&D investments as well as technology enhancing acquisitions.

BARRA, Inc. • BARZ • Information / Financial Services

Berkeley, CA • 510-649-4546
www.barra.com

BARRA BARRA, Inc. provides risk management technology and decision support tools for power investment professionals worldwide to make superior investment decisions. Founded in 1975, BARRA's products and services set the industry standard for investment risk management. For investment professionals looking to ensure and proactively manage the risks of their investment strategy, BARRA provides a set of solutions that is unparalleled.

BARRA is a unique global franchise that supports the business critical portfolio enterprise risk management needs of more than 1200 financial institutions. BARRA also has a Ventures business that partners with organizations that leverage its core research and development into new lines of business.

Career Education Corp. • CECO • Education

Manassas, VA • IR Contact: Patrick K. Pesch • 847-585-3899
www.careered.com



Key Manager Statement

"Our strategy of offering unique programs coupled with our industry-leading marketing capability will allow us to reach \$1 billion in annual revenues by 2006, making us one of the largest quality providers of educational services in the world. We continue to exceed our growth goals in every area of our operations."

John M. Larson, Chrmn., Pres. & CEO

Career Education Corporation has campuses in 15 states and two provinces. Career Education Corporation is one of the largest providers of private, for-profit, postsecondary education in North America. The company has achieved dramatic growth internally and through acquisition. Net revenues were \$83 million in the 12-month period ended 9/30/00. Net income was in excess of \$290 million in the 12-month period ended 9/30/00. While over 30 percent of the company's net revenue growth has been organic, the company continues its acquisition strategy.

Carpenter Technology Corp. • CRS • Metals & Materials

Wyomissing, PA • IR Contact: Robert Dickson • 610-208-2165
www.cartech.com



CARPENTER

As the world demands materials that are lighter, stronger and more durable, Carpenter Technology leads the way with such high-value products as stainless steels and other specialty metals including titanium, and engineered products. The company is well positioned to take advantage of industry trends, especially since completing \$500 million in improvements and additions to its facilities. Efforts to reduce costs and improve productivity contributed to a 44 percent increase in net income for the 2000 fiscal year ended June 30, 2000, as Carpenter earned \$53.3 million compared with \$37.1 million in the prior year. In addition, the company launched several e-business initiatives in fiscal 2001.

Key Manager Statement

"Carpenter is positioned to benefit from strong demand in targeted end-use markets, such as aerospace engines, land-based industrial gas turbines, orthopedic devices and electronic strip products. We are focused on taking advantage of those opportunities by managing our production mix toward higher-margin materials."

Robert W. Cardy, Chrmn. & CEO

Western Gas Resources, Inc. • WGR • Natural Gas

Denver, CO • IR Contact: Ron Wirth • 800-933-5603
www.westerngas.com



Western Gas Resources, Inc. is an independent natural gas gatherer and processor, producer, transporter and energy marketer providing

a broad range of services from the wellhead to the sales delivery point. The Company owns and operates 18 gas gathering, processing and treating facilities located in major gas-producing basins in the Rocky Mountain and other regions of the U.S. Western is the largest gas gatherer, transporter, acreage holder and, jointly with our partner, the largest producer of coal bed methane (CBM) gas in the Powder River Basin.

Key Manager Statement

"Western is focused on developing new reserves and capturing opportunities that benefit all business segments. Our activities in the Powder River Basin CBM development are a prime example of this approach where we participate in the production, gathering, transmission and marketing sectors. The synergy between our business segments allows us to participate across the entire revenue chain and optimize the overall return to the Company."

Lanny Outlaw, President & CEO

3D Systems Corp. • TDSC • Rapid Manufacturing

Valencia, CA • IR Contact: Mary Woods • 661-295-5600 x 2508
www.3dsystems.com



3D Systems, the worldwide leader in solid imaging, manufactures systems that help reduce product development cycles, cut costs and get products to market more quickly. The company's integrated hardware, software and materials convert digital designs into physical models to verify ideas, collaborate, perform product testing, or create final production parts. 3D Systems is focused on new applications that promote financial growth, market expansion, and diversification. From improving supply chain management via its solid object printers to customized product manufacturing using its patented solid imaging process, 3D Systems is at the leading edge of manufacturing innovation.

Key Manager Statement

"Our technology is helping customers reach their goals. We expect our growth to continue as more manufacturers realize the benefits of solid imaging. Improvements in our functional materials and partnerships with complementary technologies will drive our business forward."

Brian Service, Pres. & CEO

THE 26-WEEK SMALL-CAP REVIEW

SELECTED PROFILES OF THE NATION'S TOP PRICE-PERFORMING SMALL-CAP COMPANIES AS OF 9/1/00

White Electronic Designs • WEDC • Semicon / DataCom

Phoenix, AZ • IR Contact: Hamid Shokrgozar • 602-437-1520
www.whiteedc.com



White Electronic Designs is an important player in the booming semiconductor and datacommunications infrastructure deployment. WEDC's two top clients are Lucent and Cisco. The Company provides innovative solutions for high technology sectors in both commercial and military markets: high-density memory products and multi-chip modules for communications providers; and high-legibility flat panel AMLCD displays for commercial, industrial, and military markets, including the in-flight entertainment industry. WEDC's products drive the world's communication and embedded networking systems in a way that saves space and power, reduces time-to-market, improves performance, and extends product life.

Key Manager Statement

"The major trend in technology manufacturing is specialization, which plays directly into the hands of WEDC's business model. We are the leader in this growing high-end niche market. Our products are building blocks in the world's communications infrastructure, which is driven by ongoing global development."

Hamid Shokrgozar, Chrmn. & CEO

SCP Pool Corp. • POOL • Wholesale, Durable Goods

Covington, LA • IR Contact: Craig Hubbard • 504-892-5521
www.scppool.com



SCP Pool Corporation is the world's largest independent manufacturer of swimming pool supplies and complementary products. SCP operates 129 service centers in 34 states, the U.K. and France and more than 52,000 products to 27,000 trade customers.

Key Manager Statement

SCP employs 3 long-term strategies: 1. Promotes growth of the industry through programs like www.backyardescape.com. 2. Promotes the growth of trade customers' businesses through value added sales programs. 3. Continuously strives to operate more effectively through employee development programs, technology investments and constant re-evaluation of methods and processes.

"We continue to make progress in our programs to increase sales and that SCP provides to its customers and suppliers. We are very excited about the growth opportunities ahead as our new sales and marketing initiatives contribute to the growth of the swimming pool industry and our customers' businesses."

Manuel J. Perez de la Serna, President

MOOG • MOG/A • Aerospace/Industrial

East Aurora, NY • IR Contact: Susan Johnson • 716-652-2000
www.moog.com



As a market leader in 90% of its business, Moog sets the standard for precision motion control products. Global diversification as well as technical superiority in both aerospace and industrial applications enables Moog to maintain its strong commitment to meeting expectations. With a stock price of \$31.00 (at 9/28/00), an estimated EPS (First Call) for FY '00 of \$2.82, and a book value of \$25.00, Moog offers a compelling story for investors who are looking for value.

Key Manager Statement

"Fiscal '00 was the sixth straight year of earnings growth for Moog, in spite of some real 'slow going' in commercial aircraft and commercial satellites this year and last. All of our markets are now strengthening, and, as a result, we're anticipating a return to the double digit growth in earnings per share that characterized our previous six years."

R.T. Brady, Chairman & CEO

Dime Community Bancshares • DCOM • Bank

Brooklyn, NY • 718-782-6200



DIME COMMUNITY BANCSHARES, INC.

Dime Community, through its wholly-owned subsidiary, the Dime Savings Bank of Williamsburgh, is a business in the New York City metropolitan area. The Bank's 18 branches and state-of-the-art call center serve as the collection points for consumer deposits, invested primarily in multi-family mortgage loans, also in the New York City metro area. Emphasis on low-cost core deposits, apartment house lending, and active capital management has resulted in annual compound EPS growth rate of 19% since the Company's IPO in June, 1996. Loans originated in fiscal 2000 exceeded \$495 million, placing Dime Community in a market leadership position.

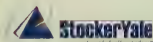
Key Manager Statement

"Cash Return on Shareholders' Equity during the Company's fiscal year, June 30, 2000, was 15.2%. Our latest quarterly dividend of 19 cents results in annualized dividends of 76 cents. Business conditions in our markets continue to provide opportunities in our core business lines, as non-performing loans remain at historical lows."

Vincent F. Palagiano, Chairman & CEO

StockerYale, Inc. • STKR • Optical Components

Salem, NH • IR Contact: Fred Pilon • 603-893-8778 x 229
www.stockeryale.com



StockerYale is a leading provider of optical communication components and specialized illumination products. Founded in 1951, the company has repositioned itself from a manufacturer of compasses and watches for the U.S. armed forces to a leading developer and manufacturer of optical components used in the building of next generation fiber optic networks. Today, StockerYale's optical components consist of Phase Masks and specialty optical fibers. Phase Masks are essential in the manufacture of high capacity fiber optic networks. Specialty optical fiber such as photosensitive and erbium-doped is integrated into those optical components that assist in optimizing the performance of optical networks.

Key Manager Statement

"StockerYale's future initiatives call for an accelerated development program in our optical components division. Our new fiber optic pre-form facility, when combined with our fiber optic drawing towers, will allow us to meet the unprecedented demand for application specific optical fibers from the telecommunications industry."

Mark W. Blodgett, Chrmn. & CEO

St. Mary Land & Exploration Co. • MARY • Oil/Gas

Denver, CO • IR Contact: Robert T. Hanley • 303-863-4371
www.stmaryland.com



St. Mary, founded in 1908, is engaged in the exploration, development, acquisition, and production of natural gas and crude oil in core areas in the U.S.: the Mid-Continent, ArkLaTex, Gulf Coast/Gulf of Mexico, Williston Basin, and Permian Basin. The Company builds per share value through consistent growth in net asset value and cash flow. Most of its budget consists of low to medium risk exploration, development, and niche acquisitions in each core area. The balance is allocated to higher risk, large target projects with significant upside potential. At year end 1999, the Company had oil and gas reserves of 321 billion cubic feet of gas equivalent (65% gas).

Key Manager Statement

"St. Mary is committed to maximizing per share value. With its strong Balance Sheet and low production costs, it has provided shareholders an 18%+ compounded return since going public in '92. Over the past five years, the company has maintained reserves at an average annual rate of 294%. St. Mary will continue to add value at every phase of its business to remain an industry leader."

Mark A. Hellerstein, President

THE 26-WEEK SMALL-CAP REVIEW

SELECTED PROFILES OF THE NATION'S TOP PRICE-PERFORMING SMALL-CAP COMPANIES AS OF 9/1/00

Woodward • WGOV • Energy Control Systems

Rockford, IL • IR Contact: Sheryl Kyweriga • 815-639-6628
www.woodward.com



WOODWARD

Key Manager Statement

"Woodward's strategy is to focus resources on becoming the leading global supplier of energy control systems. By partnering with Woodward to outsource their systems requirements, OEMs can focus on their core competencies of designing and building engines, while decreasing their time to market, resolving capacity issues, and reducing costs."

John Halbrook, Chrmn. & CEO

Brush Eng. Mat. Inc. • BW • High Performance Materials

Cleveland, OH • IR Contact: Mike Hasychak • 216-383-6823
www.BEMinc.com



Brush Engineered Materials Inc. (BW-NYSE), and its subsidiaries, which supply

high performance materials and is the only fully integrated beryllium producer in the world, have experienced record sales and double-digit earnings growth in 2000. This growth has been driven by a strong global market demand from telecommunications, computer, automotive electronics and optical media applications.

The Company's engineered materials are found in connectors and critical components in internet infrastructure equipment, cellular phones and base stations and automotive electronics. High performance ceramic packages for the wireless telecom and fiberoptic markets are also growing rapidly. Vapor deposition targets for magnetic and optical data storage is another high growth application. These unique, engineered materials typically provide a unique combination of benefits such as outstanding electrical and thermal conductivity, yield strength, formability and corrosion resistance, ultimately providing design flexibility, superior reliability, longer life and durability for these diverse applications.

Terex Corporation • TEX • Industrial Machinery

Westport, CT • IR Contact: Jack Lascar • 203-222-5943
www.terex.com



Key Manager Statement

"Our equipment provides customers with a better return on their invested capital than our competitor's equipment will. Driven by a variable cost structure, we are able to achieve lower manufacturing costs without sacrificing quality or design. At 7.5% of revenues, our overhead cost structure is less than half of the industry average, which contributes to our very competitive pricing."

Ronald M. DeFeo, Chrmn. & CEO

Family Room Entertainment Co. • FMYL • Filmed Ent.

Los Angeles, CA • IR Contact: M. Dal Walton, III • 323-850-2868
www.fmylroom.com



Family Room Entertainment was created to take advantage of an opportunity in the movie/video segment of the entertainment industry. The company founders (Randall Emmett and George Furla) believed that they could profitably produce moderate cost films that utilize top quality talent.

Since inception, the company has developed, produced and financed a number of motion pictures using this formula. The current movies and associated talent are: Ticker (Steven Seagal); Good Advice (Charlie Sheen and Denise Richards); Camp Grizzly (Dan Haggerty).

Family Room Entertainment employs a business model that minimizes investment risk and allows the Company to attain breakeven early in the product life cycle and achieve profitability.

Family Room Entertainment has excellent knowledge and depth in the independent film sector. With the entertainment industry experiencing rapid growth in the number of independently produced films sector (comprising over 60% of the entire filmed entertainment produced annually), the Company is positioned for success.

Applied Innovation • AINN • Telecommunication Equip.

Dublin, OH • IR Contact: Betty Thomas • 614-798-2000
www.aiinet.com

Applied Innovation provides high-performance network monitoring and management solutions for the telecommunications industry. Under the design, manufacture and deployment of state-of-the-art communications management networks, AI products provide critical network care for nearly every major service provider in the US. These systems enable simplification of the management of thousands of geographically dispersed network elements which a multitude of disparate industry

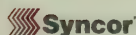
Key Manager Statement

"With a strong balance sheet and no debt, we are solidly positioned to capitalize on opportunities in the rapidly growing telecommunications industry, with emphasis on high-speed Internet connectivity."

Robert L. Smialek,
President & CEO

Syncor • SCOR • Healthcare

Woodland Hills, CA • IR Contact: Tim Guttman • 818-737-4507
www.syncor.com



Established in 1974, with 1999 revenues of \$520 million, Syncor is a high-technology health care services company that facilitates the effective and efficient use of complex medical technologies in addressing health care challenges.

The company is the national leader in preparing and delivering radiopharmaceuticals. Recently, with its investments in supporting a broader array of technologies, Syncor is extending its service capabilities into all phases of disease management: diagnosis, treatment, and patient monitoring. The expansion of Syncor's service offerings, coupled with its commitment to innovation and customer service, has led to superior financial results.

Key Manager Statement

"Syncor has achieved its growth goals by providing customers with responsive, high-quality services. We achieved 41% earnings growth over the last three years by expanding the scope of technologies that we provide to physicians and the patients they serve in both the U.S. and growing overseas markets."

Robert Funari, President & CEO

FINANCING
ELDER CARE,
BUYING VALUE
FUNDS

BusinessWeek Investor

ILLUSTRATIONS BY SAM HUNDLEY

Giving More Patients



Palliative care offers comfort over aggressive medicine

BY MARY C. HICKEY

In her job at a nursing home in Queens, N.Y., physician's assistant Donna Zaken tries to make dying as easy as it can be for patients. She runs the Margaret Tietz Center for Nursing Care's year-old palliative-care program, where she's part of a team helping terminally ill people for whom further medical treatment may be futile—and who now need comfort and peace of mind.

One of her recent patients was a 76-year-old man with end-stage Parkinson's disease. Although he was suffering from pneumonia, the medical team—with the consent of his family—chose to stop using antibiotics that were not really helping him. Instead, he was treated with acetaminophen

to keep his fever down and morphine to keep him pain-free. He died in his sleep—he wanted to go. "We make sure the wishes of dying patients are respected and honored," Zaken says. "We want them to have a good life whatever they define that to be."

Nearly three-quarters of all American hospitals and nursing homes, yet few of the institutions are prepared to offer patients the kind of care they most need at the end of life. Doctors routinely use strong medication and costly interventions such as defibrillators and respirators to keep the terminally ill going on, often in pain and discomfort.

Over the past few years, however, there has been a growing focus on palliative care, a more disciplinary approach that emphasizes dying patients' quality of life, not the quantity of time they have to live. "The focus isn't cure or treatment but rather comfort and compassion," says Dr. Russell Portenoy, chairman of the Palliative Medicine & Palliative Care Dept. at Beth Israel Medical Center.

od Death'

Medical Center in New York.

The National Hospice & Palliative Care Organization (NHPCO) has more than 3,100 member programs, nearly double the number it had in 1990. And more are on the way: Grants from the Robert Wood Johnson Foundation, the Soros Foundation, and the United Hospital Fund are helping to establish palliative-care programs in communities across the country.

Thousands of physicians are being trained in the specialty through such programs as the American Medical Assn.'s Education for Physicians on End of Life Care, which teaches how to manage pain and communicate with dying patients and their families. "Palliative skills don't come naturally to doctors. They need to learn them just as they need to learn to open a belly and take out an appendix," says Dr. David Weissman, who runs a train-the-trainer program at Medical College of Wisconsin in Milwaukee. The program will ultimately help to establish palliative-care components in 150 residency programs across the U.S.

Hospice, which began to take off in the mid-'70s, is the best-known type of palliative care. But the term has come associated with restrictive conditions: deny Medicare and insurance companies. Currently, in order for a patient to receive hospice at least one doctor must certify that the patient has six months or less to live and has decided to forgo life-prolonging treatments such as dialysis, chemotherapy, and radiation. Palliative care begins earlier in the process and allows for the sake of comfort.

Though palliative care potentially translates into huge cost savings for the health-care system, it may be more expensive for consumers than high-tech interventions. Currently, insurance companies do not cover nonhospice palliative care. That's likely to change soon as the program becomes more widespread and insurers face the economics. The field is also likely to come under closer scrutiny as health-care institutions rush to meet consumer demand. At present, there are few safeguards to help the public choose the best palliative-care programs. The Joint Commission on Accreditation of Healthcare Organi-

zations, a nonprofit agency that accredits 20,000 health-care providers, monitors hospice programs but not other palliative-care services. Members of NHPCO can follow a voluntary set of standards for palliative care.

In assessing a program, you should start by understanding what comprehensive palliative care includes. An important component is pain management, which the medical establishment has traditionally downplayed. But in places such as Baptist Memorial Hospital East in Memphis, patient comfort is a top priority. Phyllis Marshall, 61, dying of liver cancer, was in terrible pain that her doctor did not help ease. When she was transferred from a ward where she had been receiving radiation to the hospital's recently opened palliative-care unit, a specially trained staffer adjusted her medications until she was

pain-free. A social worker visited her and her husband, Don, several times a day, and a minister came to pray with them. Marshall's husband and son have been sleeping alternate nights in a comfortable bed in her hospital room, determined to be with her at the end. "This program has been a blessing," says Don. "Seeing Phyllis die is hard enough. Knowing she's comfortable and that we can be with her makes it easier."

Comprehensive palliative-care teams include psychologists, social workers, and clergy members who help patients deal with depression, anxiety, and fear, and grapple with spiritual issues. In model programs, patients are encouraged to talk about their feelings for loved ones, regrets, and the fences they hope to mend.

A thorough program should also include support for members of a dying person's family. Services generally include psychological and spiritual counseling as well as more practical support such as respite care from aides who relieve the caregivers so they can take a break. The focus on grieving relatives generally continues after the patient dies, in the form of bereavement counseling. Even the best palliative care cannot take away the pain of loss, but it aims to make it more manageable. □



Unlike those in hospice care, patients in palliative care don't have to agree to forgo treatments such as chemotherapy and dialysis

Health Care

Where to Go for Guidance

WEB SITE (WWW.)

AGING WITH DIGNITY
agingwithdignity.org

AMERICANS FOR BETTER CARE OF THE DYING
abcd-caring.org

LAST ACTS
lastacts.org

NATIONAL HOSPICE & PALLIATIVE CARE ORG.
nhpco.org

DESCRIPTION

Outlines questions to consider when writing an advance directive, which spells out the type of care you want if you're seriously ill

A source for news about end-of-life issues, such as legislative initiatives

A comprehensive directory of resources on end-of-life issues for professionals and the public

Offers a program locator to help you find hospice and palliative-care services in your area



MAKE YOUR MARK

VIRTUALLY ANYWHERE. To grow, your brand needs a whole new approach to custom-branded merchandise. HALO Branded Solutions,™ the world's premier branded merchandise company, combines 28 years of expertise with leading-edge Internet technology and innovation. We provide branded solutions to make your mark on almost anything, in almost no time.

Explore your branding possibilities today. CLICK  www.halo.com OR CALL  888.611.HALO



Nursing Homes Don't Have to Break You

Planning now can help preserve your savings

ALLEN HOFFMAN

No one relishes the thought of living in a nursing home. Yet as the average life span lengthens and more people become frail or suffer from a chronic illness, the more likely it is that you, your spouse, a parent, or another relative will have to pay for nursing-home care sometime in the future.

Last year the U.S. General Accounting Office reported that nearly 40% of people age 65 now are likely to spend some time in a nursing home. About half of them will stay less than six months, and 20% will spend five years there. The cost of such care is expensive and rising. A recent national survey of 435 nursing homes by the MetLife Mature Market Institute estimates the average cost of a year's stay in a nursing home to be \$55,000, or \$153 a day. In major metropolitan areas like New York City, the top nursing homes charge more than \$300 a day.

The big question, then, is this: If you or a fam-

ily member needs a nursing home, how will you pay for it? The first step is to reckon with the issue in your financial planning. "Ninety percent of the people I see come to me in a crisis," says Mary Moorhead, an elder-care specialist. "If they came to me several years before, we could plan the money out, maybe put some aside. But if they need 24-hour care and there's no answer but a nursing home, we look at how much money they have and how long it will last."

MEDICARE LIMITS. Begin the planning by evaluating both the potential need for nursing-home care and financial resources. If you have a

chronic illness or a family history of severe medical problems, you should definitely budget for a potential nursing-home stay. Lee Slavutin, a life insurance agent and consultant in New York City, points out that paying for nursing-home care is not really an issue for the poor and the rich. Those with few resources can qualify for Medicaid, a federal-state program that pays for health care. Those who are wealthy can go it alone. It's the middle group, who have a net worth of \$500,000 to \$10 million, who generally have the most need for long-term care insurance, says Slavutin.

Medicare, the federal program most people associate with health care for the elderly, offers very limited help. Usually it only pays the nursing-home expenses of patients who have been hospitalized for at least three days and whose doctors say they require skilled nursing, both to manage their condition and to provide services (such as physical therapy). What's more, once the patient is admitted to a nursing facility, Medicare pays fully for only 20 days. The patient must make a daily co-payment of \$97 from the 21st to the 100th day, after which the patient pays the entire bill.

To calm fears about being financially devastated by nursing-home costs, many people are buying long-term care insurance. The coverage usually offers a per-day rate, such as \$100, for a specific amount of time, such as two or five years. Many policies also pay some expenses for at-home care. The idea behind this insurance is to avoid being forced to "spend down" family

By buying into a "life care" community, you can live independently at first and then move up to higher levels of care at no or little more expense

assets in order to qualify for subsidized coverage from Medicaid. The AARP's free guide, *Long-Term Health Insurance: Understanding Your Options*, suggests that before buying such insurance, you take stock of your net worth and income to determine how much you can afford for a policy and how much coverage you'll need to pay any nursing-home bills. If you decide you need the coverage, ask your state insurance department for a list of companies that offer policies in your state.

One other option is a life insurance policy with an "accelerated death benefit." That allows you to take the proceeds if you're diagnosed with a terminal illness or one that will require extended care. The American Council of Life Insurance says 78% of life

insurers offer these policies, and only 13% of them charge an extra premium for the accelerated benefit. The downside is that if you spend the life insurance on nursing-home bills, it will not be available to your survivors.

LAST RESORT. Another approach is to buy into a residential "life care" community that offers increasing levels of care as you age. You start by living independently in your own housing unit, but you're able to move up to higher levels of care as you need them at no or little more expense. That's because you're making an investment in the community from the outset, not just paying rent. Alternatively, if you're at least 62 and have substantial equity in your home, you can get a reverse mortgage and use the proceeds to pay for long-term care expenses or insurance premiums. (For more information, visit www.reverse.org, the site of the nonprofit National Center for Home Equity Conversion.)

For people without insurance or savings, Med-

icaid is the last resort. But figuring out how to qualify can be difficult because the states have wide latitude for setting their own requirements concerning the amount of assets and income a nursing-home resident and spouse may have.

The Henry J. Kaiser Family Foundation, which supports research on Medicaid, says that in most states the program will pay nursing-home bills if an individual's assets are less than \$2,000 and a couple's less than \$3,000, and the individual uses all of his or her income—except about \$30 a month for personal needs—for nursing care. Certain assets are exempt from the program, including a home, its furnishings, a car, and sufficient assets to cover burial expenses. A patient's bank or brokerage accounts will be required to use those to pay for care before qualifying for Medicaid. Income limits vary by state. If your spouse enters a nursing home in 2000 and you do not, you may keep from \$10,230 to \$84,120 in annual income, and you may remain in the family home.

Experts identify two major challenges in planning for eventual Medicaid assistance. If you want to leave assets to your heirs, you must protect those assets from a Medicaid "spend-down" only by transferring them to someone else at least three years before you enter a nursing home or, if you set up certain kinds of trusts, years before admittance.

Planning ahead is especially appropriate for a married couple with one healthy spouse and one who is much older or ill. When the sick spouse enters the nursing home, says Herb Smith, an attorney for the Southern California Senior Citizens Law Center in Los Angeles, Medicaid will determine eligibility by considering all assets held in the names of both spouses. If assets, such as money in a brokerage account, are needed to bring the healthy spouse's income up to the state-applicable level, they may not have been sold. However, the rules governing asset transfer are complex and vary from state to state.

Smith says that before you take action, it's essential to get advice from a lawyer who is an expert in Medicaid and estate planning.

Be aware as well that once a nursing-home patient and his or her spouse have died, federal law requires states to try to reimburse Medicaid by recovering money from the estate. Thus, if your parents bequeath their home to their children, the state may try to sell it to pay the deceased's Medicaid bills. Other assets, such as a joint bank account or part interest in a business or property, may also be targeted.

The financial options listed here are more appealing than the possibility of having to move to a nursing home. But what hurts most is if you do no planning at all and have to scramble when a crisis hits.



Footing the Bills

WEB SITE (WWW.)

AARP
aarp.org

HEALTH CARE FINANCING ADMINISTRATION
hcfa.gov

MEDICARE
medicare.gov

NATIONAL ACADEMY OF ELDER LAW ATTORNEYS
naela.org

INFORMATION

Provides information and tips on long-term care options as well as Medicaid basics

Click on "Medicaid" and search by name for these documents: *Spousal Impoverishment* and *Transfers of Assets*

Read or order Medicare and You for details on Medicare's nursing home coverage

Offers help in locating a legal expert in estate and Medicaid planning



Value Funds: The Old Economy's Old Reliables

Great way to hedge and a proven long-term winner

WINE TERGESEN

Does your mutual-fund portfolio contain a mix of the past few years' winners? Then it's probably filled with names such as Janus Twenty, Amerindo Technology, and Munder NetNet. But with tech, telecom, and the whole Internet sector—the mainstay of those funds—on the ropes this year, the former superstars are bleeding red ink.

That's why you should consider long-neglected "value" funds, which hunt for bargain-priced stocks. Value players typically focus on unglamorous Old Economy industries such as banking, manufacturing, energy, and utilities. But a new breed seeks bargains in pricier sectors, including technology, as well. After six years of spotty performance, value funds are on the upswing. Since the tech-heavy Nasdaq index peaked on Mar. 10, value funds are up 14.6%, vs. a 13.2% decline for growth funds, as of Nov. 3.

Unfortunately, many fund investors are mere-

ly watching value's comeback. Over the past two years, investors have yanked \$128 billion out of value funds—or about 20% of the assets in value funds now. Between withdrawals and portfolio losses, value funds now account for only 13% of fund assets, down from 20% in 1997, according to Financial Research Corp. With many investors' portfolios skewed toward growth funds, "a little rebalancing would be appropriate," says Philip Edwards, managing director at Standard &

Poor's, which, like BUSINESS WEEK, is a division of The McGraw-Hill Companies.

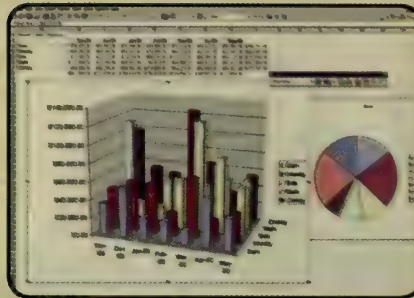
Even if technology snaps back, it makes sense to own some value funds. For one thing, value and growth stocks don't move in lockstep, so exposure to both styles provides a safety net when one is out of favor. Indeed, in October, value funds offered investors refuge from a falling market, gaining 1.5% even as the average domestic equity fund lost 2.7%.

SHIFTING DEFINITION. Moreover, although growth stocks have dominated since 1993, value investing remains the better long-term performer. Over the last 70 years, value stocks clocked a 13.4% average annual return, vs. 10.2% for growth stocks, according to Ibbotson Associates. Still, because it's difficult to predict which kind will do better at any one time, it's important to invest in both camps.

How much of your portfolio should be in value

Draw a line from the application

1.



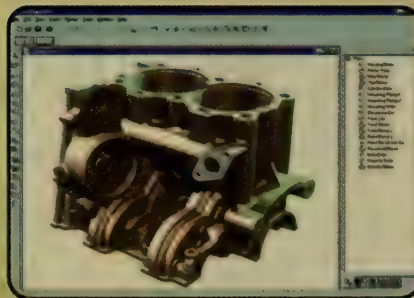
Microsoft Office 2000

2.



Adobe Photoshop 6.0

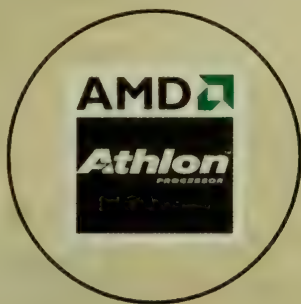
3.



Unigraphics Solutions' Solid Edge

processor that can now run it faster.

A.



B.



C.



Whatever applications you choose, run them on a PC based on the new, faster, 1.2 GHz AMD Athlon™ processor. AMD Athlon was the first processor to break the gigahertz barrier. And with performance-enhancing cache memory and faster speeds, they're better than ever. No wonder 4 of the world's top 5 computer manufacturers rely on AMD Athlon processors. To see how you can increase your productivity and run applications faster, head straight for www.amd.com/faster.

Side Edge is a trademark of Unigraphics Solutions, Inc. Other product names used are for identification purposes only and may be trademarks of their respective companies.

Over the past 70 years, value stocks have posted an average annual return of 13.4%, compared with 10.2% for growth stocks

depends on how much risk you want to take. Value funds appeal to conservative types because they are less volatile than funds that buy growth stocks, which are prone to big price swings. Even New Economy zealots should use value to temper the gyrations in tech-heavy funds. "All of our clients, even the most aggressive, have something in value," says Ronald Roge, a financial advisor in Bohemia, N.Y.

Convinced you want to invest in value funds? Be forewarned: Fund managers don't all see value the same way. "Don't assume that because something is called a value fund it's going to be what you expect," warns Chris Traulsen, a senior analyst at Morningstar.

When conceived in the 1930s, value investing meant buying stocks that sell for less than the value of a company's tangible assets, such as its property, plants, and equipment. Typically, this yields portfolios heavy in manufacturing and natural-resource stocks. Examples are the Franklin Large Cap Value and Babson Value funds.

Later, investors such as Warren Buffett added a new twist. They recognized that intangible assets—such as famous brand names and unassailable franchises—that don't show up on balance sheets can have value, too. Buffett bought consumer companies such as Coca-Cola, which was not cheap by traditional value measures. Gabeli Blue Chip Value also invests in this manner.

The newest generation of value investors embraces the New Economy. They estimate future cash flows—a metric more common to growth managers. And if they think something is un-

dervalued, they'll buy it—even if it's a tech stock selling at prices that would make traditional value buyers cringe. The champion of the new approach, Legg Mason Value Trust, made plays on America Online, Dell Computer and Amazon.com. Not only did it blow away value peers but it has beaten the Standard & Poor's 500-stock index for nine straight years. Some other funds that take this road: Select American and Excelsior Value & Restructuring.

X-RAY VISION. Although most value funds fall neatly into one camp, a quick way to figure out where a fund stands is to look at its price-to-book ratio. If it's expensive and tech-heavy it is comparable with its peers. Take the Legg Mason Select Fund. Although its 16% in technology, tech-heavy funds still look cheap, since the average price-to-earnings ratio of value funds is 22% below that for growth and cap value funds. Its price-to-book ratio is also well below the average of 4.1.

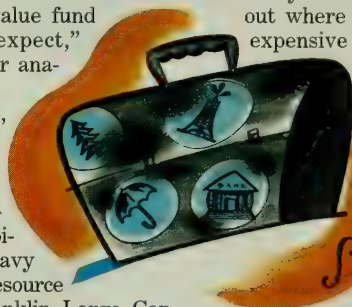
In contrast, PBHG Focus Value looks expensive. At 29.1 and 5.5, its price-to-earnings and p-b ratios are above the averages for value cap value funds of 25.3 and 5.4. It's no wonder since 32% of the fund's assets are in technology, as opposed to 14.4% for the category.

Make sure to check both a fund's price-to-earnings and price-to-book ratios. Since many beaten-down companies have losses, ratios that take only earnings into account are not always reliable. As a final check, read a prospect's annual report. It contains a snapshot of its holdings on a specific date as well as an overview of its investment philosophy.

Which type of value fund makes sense for you? It depends on what role you want it to play in your portfolio. One way to figure out what percent of your assets are in value vs. growth is to plug your holdings into Morningstar's Portfolio X-Ray feature at www.morningstar.com for a breakdown.

If you are heavily skewed toward growth, a traditional value fund—likely to be one with a low price-to-earnings ratio—is the better choice. For new value funds, with higher price-to-earnings ratios, own a fair amount of growth stocks and may duplicate what you already have in your portfolio. Indeed, since the Nasdaq peak, the most expensive third of value funds (measured by price-to-earnings and price-to-book ratios) have trailed the cheapest third.

New value funds can play a role in a portfolio, offering a middle ground between shoot-the-moon growth funds and the feeding value players. But you really need to offset a tech-heavy portfolio, nothing does it like an old-fashioned value fund.



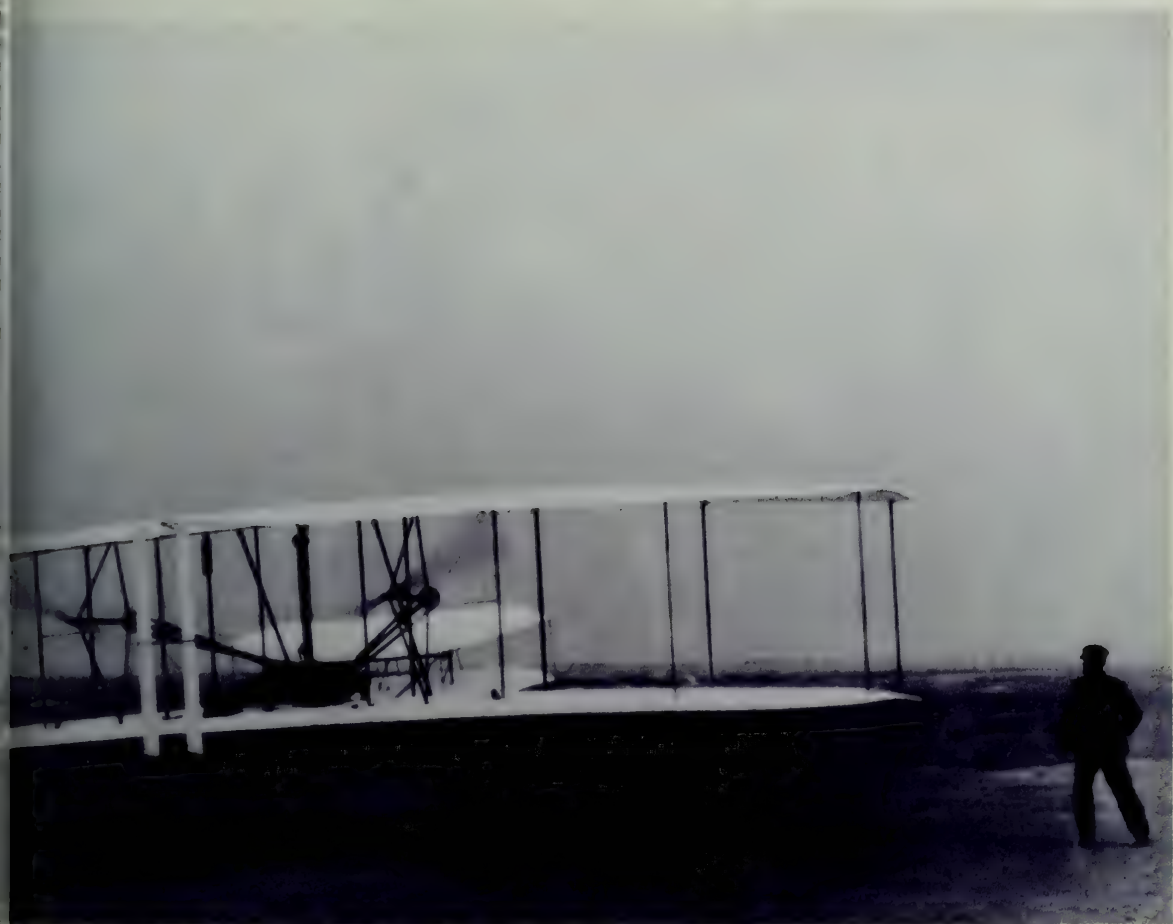
Where the Value Is

FUND	TOTAL RETURN* YEAR-TO-DATE	PRICE-TO-EARNINGS	PRICE-TO-BOOK VALUE	COMMENTS
EXCELSIOR VALUE & RESTRUCTURING	7.9%	25.7	5.8	Big bets on Qualcomm, Nokia
LEGG MASON VALUE TRUST	-0.4	24.7	6.9	Holds AOL, Amazon.com, Gateway
LONGLEAF PARTNERS	9.7	17.3	3.1	Nothing in tech
MUTUAL SHARES	10.6	19.7	2.8	Heavy in service, financial stocks
OAKMARK I	4.2	18.9	4.0	Favors consumer, industrial stocks
SELECTED AMERICAN	8.6	25.3	6.1	28% in tech, including IBM, H-P
THIRD AVENUE VALUE	20.8	27.2	2.5	Small-cap fund with 37% in tech
TWEEDY BROWNE AMERICAN VALUE	9.3	21.2	4.4	Big bets on financial stocks
VANGUARD VALUE INDEX	5.3	24.6	4.0	Tracks S&P/Barra Value Index
VANGUARD WINDSOR II	10.4	24.2	4.3	Top picks are energy stocks

* Appreciation plus reinvestment of dividends and capital gains before taxes, through Nov. 5

DATA: MORNINGSTAR INC.

Our only limits are in our imagination.



Viatel's new vision of communications doesn't begin with fiber or end at today's network edge.

Instead, we see information that flows across integrated pan-European, North American, trans-Atlantic and metropolitan networks, making local, national and regional boundaries invisible.

We see technology that moves at the speed of light today and even faster tomorrow.

We see a world of innovation — in pricing and delivery — that connects every customer and every destination.

From here to as far as the eye can see, one network, one vision.

No borders. No barriers. No limits.

Viatel from anywhere in Europe **00800.0064.4444**

Viatel in the U.S. **1.800.244.1798**

www.viatel.com



© 2000 Viatel, Inc.

Announcing...

The Tenth Annual Forum Chief Financial Officers

February 28-March 2, 2001

The Breakers, Palm Beach, FL

The Premier Corporate Finance Event

CFO as e.biz Architect



From February 28-March 2, 2001, BusinessWeek will gather together America's top Chief Financial Officers in Palm Beach, Florida for the year's most prestigious corporate finance event. ■ This private, invitation-only forum at The Breakers will focus on the ways in which CFOs can take "e.biz" to the next level, guiding their companies toward utilizing the Net's full potential for speed, efficiency and innovation.

Conducted in a retreat-like setting, the forum encourages collegial interaction so that participants may gain the well-founded knowledge that is only derived from exchanging ideas, sharing experiences, and engaging in compelling discussions. ■ Topics include: "Finding an E-Business Model that Works", "Supply-Chain Management Comes of Age" and "The Implications of Going Wireless." The Annual BusinessWeek Forum of Chief Financial Officers is an exclusive event reserved for today's elite financial leaders. ■



If you have received an invitation, we urge you to RSVP today. If you have not received one, but believe you should attend, please contact us. Simply call 212.512.6673.



IN PARTNERSHIP WITH
Zurich Financial Services

SPONSORED BY
Milliman & Robertson, Inc.

WITH SUPPORT FROM
GetThere



SPEAKER



ROBERT H. BRUST
Executive Vice President and CFO
Eastman Kodak Company

SPEAKER



THOMAS MALONE
Patrick J. McGovern Professor
of Information Systems
Sloan School of Management, MIT

SPEAKER



WARREN C. JENSON
Senior Vice President and CFO
Amazon.com Inc.

SPEAKER



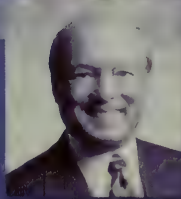
HEIDI G. MILLER
Chief Financial Officer and SEVP,
Strategic Planning and Administration
priceline.com Incorporated

SPEAKER



JERRY M. KENNELLY
Senior Vice President, CFO
and Secretary
Inktomi Corporation

SPEAKER



JAMES A. PARKE
Vice Chairman and CFO
GE Capital

QUICKEN FINALLY HITS WEB SPEED



BY ROBERT BARKER

Its free online retirement planner is a winner—but beware the pitches

Quicken's 401k Advisor

WEB ADDRESS

www.quicken.com/401kadvisor

SHORTCUT AROUND PROMO PAGES

www.teamvest.com/myadvisor/page.jsp?ID=oa_createlogan

TOLL-FREE PHONE

888 445-4015

COST OF BASIC ADVISORY SERVICE

Free

COST OF ONGOING MONITORING SERVICE

\$19.95 per month

COMPUTER COMPATIBILITY

Best with Internet Explorer, less so with Netscape and with Macs

DATA: QUICKEN, BUSINESS WEEK

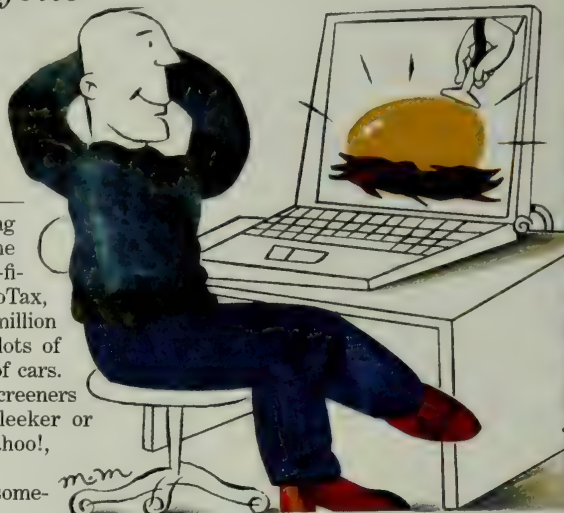
Among the many puzzles perplexing me is this: Why hasn't Intuit, the pioneer behind such personal-finance software as Quicken and TurboTax, created a killer Web site? With 6.6 million monthly visitors, Quicken.com sees lots of traffic. But Chevrolet also sells lots of cars. For such key tools as fund or stock screeners and portfolio trackers, you'll find sleeker or smarter stuff at sites including Yahoo!, MSN, and Morningstar.com.

At last, though, Quicken.com has something it can truly boast about. The new version of its 401k Advisor, introduced on Nov. 7, adds features already in competing tools from Financial Engines and Morningstar, while building on a couple of its own. These services all are designed to specify how much money you should put in each of your 401(k)'s investment choices, given your financial goals and appetite for risk. For that, Financial Engines and Morningstar are charging a minimum of \$59.80 and \$31.80, respectively, a year. Now, Quicken.com is giving away similar fund-specific advice.

You're right—there's a catch. Quicken.com offers this free advice via a partner, TeamVest, which developed the tool with Intuit. In return, the Charlotte (N.C.) investment adviser hopes to convert free users into clients who will pay at least \$239 a year for ongoing monitoring of their 401(k) accounts. That strikes me as steep for something easily done on your own, but Intuit says you can exploit the basic 401(k) checkup again and again for free.

On each page of the 401k Advisor you'll find links to live help from one of TeamVest's licensed advisers, a human touch not offered by rivals. They're available from 8:30 a.m. to 10 p.m., Eastern time, weekdays, and 9 a.m. to 7 p.m. on weekends. You can call them, or they'll call you. Or, if your modem is using your only phone line, you can chat online via a window on your screen. I tried both methods several times. Each worked well. The initial consultation is free, and none of the four advisers I "met" bugged me with a hard sell.

The service's second unique edge is its database of 1,100 employers' 401(k) plan investment choices and contribution-matching policies. This neatly eliminates the dreary but



crucial task of having to enter those particulars. That chore, demanded by rival services, can be time consuming, unless your company offers one of these tools as an employee benefit. In testing, I found Quicken.com came up with details of a company's plans, from Alcoa to Ziff-Davis, but couldn't verify the database's accuracy, a common one rival raised, but TeamVest claims to recheck each 401(k) plan quarterly. You can use the tool on other accounts, such as individual retirement accounts, and plan for such big expenses as college tuition.

CHOICES. It doesn't analyze stock holdings, yet in all I found the service rendered reasonable asset allocations and fund choices. For a moderately risk-taking fortysomething couple, it suggested 60% equities, 32% bonds, and 8% cash. It then said precisely how many dollars or shares to move and into which funds. Because it begins with beginning as well as advanced investors, the geeky financial points that I was happy to find in rival tools' footnotes are absent here. Yet, for most people, I bet, will find the guidance and educational material clear and sufficient.

Next to retirement planning features at Yahoo!, and America Online, Quicken.com has a killer tool. Does it blow away Financial Engines and Morningstar? No, not if your employer has given you free use of one of these services, each of which is getting sharper. Financial Engines just unveiled a friendlier design and new features, such as "scorecards" rating 1,000 funds. Morningstar expects to update its Core Future tool in December and January.

These rivals and more are chiefly interested in selling their services directly to employers. If they succeed, Every 401(k) plan ought to offer one of these tools. Until yours does, Quicken's free service is the one worth using first.

BusinessWeek online

For barker.online, go to www.businessweek.com/inv or AOL keyword: BW Daily



Don't move. We'll come to you.

2001
sable

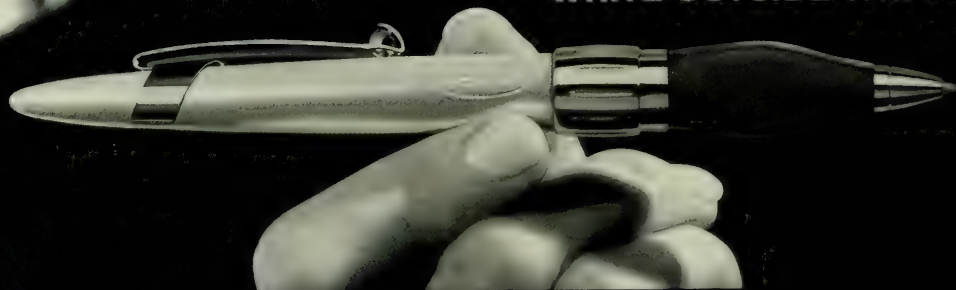
The 2001 Mercury Sable has foot pedals* that move forward or backward at the push of a button. So they're never too close or too far away. Plus a Personal Safety System™ that includes dual-stage front airbags† and energy-absorbing safety belts. How else does the Sable accommodate you? Click or call. www.mercuryvehicles.com ■ 888.566.8888



Mercury
LIVE LIFE
IN YOUR
OWN LANE

nal.
ys wear your safety belt and secure children in the rear seat.

WRITE OUTSIDE THE MARGIN

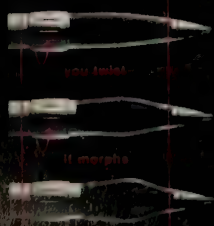


Introducing Morphi[™], the new pen from Cross. It actually transforms itself to provide unmatched writing comfort. Just twist the dial at the pen's center and it expands or contracts for the feel you want.

For an even closer look, www.cross.com lifetime mechanical guarantee. Copyright A.T. Cross Company 2008.

CROSS
SINCE 1832

MORPHI



RTZY HOTELS—CHEAP



GENE G. MARCIAL

t-Express
s shares may
the market.
-Five's liquid
al displays
to shimmer.
St. Jude has
an early O.K.
s defibrillator

Orient-Express Hotels (OEH) is all about luxury. But the shares of this Bermuda company, which went public in August on the Big Board, are anything but ritzy. Initially offered at 19, the stock is now at 20—way off its September high of 26. The company posted better-than-expected results in its first quarter.

"The stock is a terrific buy because a non-fundamental factor is pushing it down," says David Burshtan, who runs Northern Trust's Small Cap Growth Fund. Casting a dark cloud is Sea Containers, which spun off Orient-Express but still owns 60% of the stock. Sea Containers plans to unload the rest of its 17 million shares by Feb. 5. This big overhang of shares has turned off investors, but Burshtan says it creates a tempting opportunity. With Orient-Express' "irreplaceable assets" and yearly cash-flow growth of 15%, the shares are worth 40, he adds.

The company operates six Orient-Express trains but derives 95% of earnings and revenues from its 26 hotels on five continents. Orient-Express hotels are leaders in their markets—such as the Cipriani in Venice, the Copacabana Palace in Rio de Janeiro, and the Windsor Court in New Orleans.

Analyst Michael Rietbrock of Salomon Smith Barney, who describes Orient-Express as a "solid play in the luxury hotel ownership market," expects it to earn \$1.55 a share in 2001 and \$1.85 in 2002, up from \$1.40 in 2000.

THREE-FIVE SYSTEMS IS SET FOR A SHOW

Money manager Graham Tanaka has scored a feat in this tech-wreck market: His tech-heavy Tanaka Growth Fund is up more than 15% this year through Nov. 3, compared with a 2.5% loss for the Standard & Poor's 500-stock index. In 1999, the fund's first full year of operation, it gained 58%, vs. 21% for the S&P. Tanaka's ace: He invests in what he calls the "enablers and beneficiaries of the digital revolution." This "productivity-based" bull market, he argues, has years to go. One stock he thinks will be a big beneficiary: Three-Five Systems (TFS), a leader in making liquid crystal display (LCD) modules for cellular phones and



TANAKA: Go with the digital players

handheld consumer and office electronics gear.

"Three-Five is the best pure play in the handheld LCD market," says Tanaka. Its largest customer is Motorola (85% of sales), which uses LCDs in its mobile handsets. LCDs increase speeds and reduce costs in displays, says Tanaka.

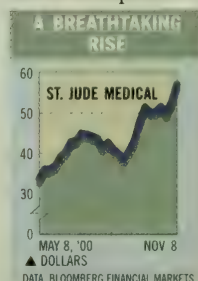
TFS is also developing liquid-crystal-on-silicon microdisplay technology, designed for such markets as HDTV, wireless Net appliances, and business projectors. It is a flat panel the size of a thumbnail. TFS has signed pacts with Nikon, Samsung, and InFocus for products with microdisplay technology. "We expect microdisplay sales of \$20 million in 2001," says Tanaka.

Three-Five stock hit 80 in May on excitement over the microdisplays. But later, worry over Motorola's delayed orders pulled the price down to 35. Tanaka thinks the problem is temporary and expects sales to Motorola to jump next year. He sees core LCD revenues growing at least 50% in 2001 and a further 30% to 40% in 2002 and 2003. TFS should earn \$1.17 a share on sales of \$280 million in 2001, and \$1.72 on \$400 million in 2002. The stock, now at 32, deserves a price-earnings ratio equal to its 35% growth rate, says Tanaka. His two-year target: 60.

QUICKENING THE PULSE AT ST. JUDE

Finally, St. Jude Medical (STJ) is getting some respect. Although the maker of cardiovascular devices is No. 1 in mechanical heart valves and No. 2 in pacemakers, St. Jude hasn't quite commanded the lofty price-earnings ratios investors have bestowed on its peers—Boston Scientific, Guidant, and Medtronic. But the Food & Drug Administration has come to St. Jude's rescue. It has given swift and early approval to St. Jude's Photon DR, a dual-chamber implantable defibrillator for the treatment of rapid heartbeats.

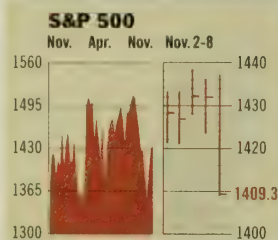
St. Jude's stock, which dropped to 33 in May, has been on the rise. But analysts think St. Jude, now at 57, deserves an even higher p-e. With the FDA's fast action, "we believe a 30 multiple, in line with the average range of the other large-cap cardiovascular companies, is reasonable for St. Jude," argues Matthew Dodds of SG Cowen Securities. That translates to 63 a share. With Photon expected to sell throughout 2001, Dodd says his overall sales estimate of \$1.32 billion and earnings forecast of \$2.10 a share for 2001 "are on the conservative side." He rates St. Jude a "strong buy."



BusinessWeek online

Watch for Gene Marcial's Inside Wall Street Online column every Tuesday afternoon at www.businessweek.com/today.htm

STOCKS



COMMENTARY

The before-and-after saga of the Presidential election seemed to throw the markets into limbo this week. Major averages had their fits and starts every other day, but wound up with neither gains nor losses: The Dow Jones industrial average and the S&P 500 both ended the week flat, while the topsy-turvy Nasdaq tech stocks posted relatively painless losses of about 3%.

Data: Bloomberg Financial Markets
Bridge Information Systems, Inc.

U.S. MARKETS

	Nov. 8	Week	% change Year to date	Last 12 months
S&P 500	1409.3	-0.8	-4.1	2.3
Dow Jones Industrials	10,907.1	0.1	-5.1	1.8
Nasdaq Composite	3231.7	-3.1	-20.6	2.8
S&P MidCap 400	522.5	0.4	17.5	25.9
S&P SmallCap 600	216.6	0.5	9.5	20.2
Wilshire 5000	13,152.6	-0.8	-4.8	3.7

SECTORS

	Nov. 8	Week	% change Year to date	Last 12 months
Business Week 50*	1125.9	-0.9	-13.5	-1.2
Business Week Info Tech 100**	774.2	-3.3	NA	NA
S&P/BARRA Growth	788.3	-1.5	-11.2	-2.2
S&P/BARRA Value	635.0	-0.2	4.0	6.5
S&P Energy	925.6	-1.6	10.9	14.6
S&P Financials	158.6	-0.4	19.2	10.5
S&P REIT	81.5	0.3	10.7	9.1
S&P Transportation	674.9	0.8	13.1	5.9
S&P Utilities	325.4	-1.9	43.2	34.8
GST Internet	342.7	0.8	-51.9	-35.2
PSE Technology	950.9	-1.4	-2.2	32.5

*Mar. 19, 1999=1000 **Feb. 7, 2000=1000

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Pollution Control	28.4	Defense Electronics 191.5
Defense Electronics	24.5	Hospital Management 70.8
Specialty Appar. Retailers	24.2	Food Wholesalers 63.5
Tobacco	20.8	Natural Gas 62.1
Hardware & Tools	18.9	HM0s 61.3

EQUITY FUND CATEGORIES

4-week total return	%	52-week total return	%
Leaders		Leaders	
Health	7.6	Health	86.6
Financial	6.3	Mid-cap Growth	34.4
Small-cap Growth	4.6	Small-cap Growth	31.4
Mid-cap Value	4.6	Mid-cap Blend	26.5
Laggards		Laggards	
Natural Resources	-4.1	Precious Metals	-22.6
Japan	-3.9	Japan	-14.2
Precious Metals	-2.6	Diversified Pacific/Asia	-9.8
Latin America	-1.7	Diversified Emerging Mkts.	-2.6

EQUITY FUNDS

4-week total return	%	52-week total return	%
Leaders		Leaders	
Nevis	18.6	Dresdner RCM Biotech. N	230.1
Orbitex Hlth. & Biotech. B	18.0	Munder Fram. Hlthcare. B	201.7
PBHG New Opportunities	16.6	Franklin Biotech. Disc. A	174.0
WM Small Cap Stock A	15.7	Orbitex Hlth. & Biotech. B	164.6
Laggards		Laggards	
Credit Suisse Inst. Jap. Gr.	-20.3	ProFunds UltraShort OTC	-63.8
ProFunds UltraShort OTC	-14.0	Apex Mid Cap Growth	-53.6
American Heritage A	-10.3	Credit Suisse Inst. Jap. Gr.	-45.6
IPS New Frontier	-9.8	U.S. Glob. Inv. World Gold	-43.4

Data: Standard & Poor's

THE WEEK AHEAD

RETAIL SALES Tuesday, Nov. 14, 8:30 a.m.

EST ► Retail sales probably rose just 0.1% in October, says the median forecast of economists polled by Standard & Poor's MMS, a unit of The McGraw-Hill Companies. Excluding vehicle sales, purchases likely grew 0.3% last month. In September, total retail sales jumped 0.9%, while nonauto sales rose 0.7%.

BUSINESS INVENTORIES Wednesday, Nov. 15, 8:30 a.m. EST ►

Inventories held by businesses likely grew 0.4% in September.

FOMC MEETING Wednesday, Nov. 15, 9 a.m.

EST ► The Federal Reserve Board's Open Market Committee will meet to set monetary policy. The S&P MMS economists unanimously project the Fed to keep its federal funds rate target at 6.5%.

INDUSTRIAL PRODUCTION Wednesday, Nov. 15, 9:15 a.m. EST ►

Output at factories, mines, and utilities likely rose 0.2% in October, the same small gain posted in September. The average operating rate likely remained at 82.2%.

CONSUMER PRICE INDEX Thursday, Nov. 16, 8:30 a.m. EST ►

Consumer prices for goods and services probably edged 0.2% in October after a 0.5% jump in September, says the S&P MMS survey. Excluding food and energy, core prices probably rose 0.2% last month and 0.3% gain.

HOUSING STARTS Friday, Nov. 17, 8:30 a.m. EST ►

Housing starts likely rose an annual rate of 1.55 million in October, from 1.53 million in September.

GLOBAL MARKETS

	Nov. 8	Week	% change Year to date
S&P Euro Plus (U.S. Dollar)	1374.8	-0.9	
London (FT-SE 100)	6477.4	0.3	
Paris (CAC 40)	6336.0	-1.1	
Frankfurt (DAX)	7008.6	-0.7	
Tokyo (NIKKEI 225)	15,399.6	5.9	
Hong Kong (Hang Seng)	15,654.1	2.0	
Toronto (TSE 300)	9552.5	-0.4	
Mexico City (IPC)	6376.8	-0.3	

FUNDAMENTALS

	Nov. 7	Wk.
S&P 500 Dividend Yield	1.12%	1.1
S&P 500 P/E Ratio (Trailing 12 mos.)	27.3	27.
S&P 500 P/E Ratio (Next 12 mos.)*	23.1	22.
First Call Earnings Revision*	-3.51%	-2.9

*First Call Corp.

TECHNICAL INDICATORS

	Nov. 7	Wk.
S&P 500 200-day average	1441.8	1441.2
Stocks above 200-day average	56.0%	53.0
Options: Put/call ratio	0.59	0.6
Insiders: Vickers Sell/buy ratio	2.17	2.1

WORST-PERFORMING GROUPS

	Last month %	Last 12 months %
Long-Dist. Telecomms.	-21.9	Long-Dist. Telecom 191.5
Communications Equip.	-16.9	Metal & Glass Con 70.8
Instrumentation	-13.4	Office Equip. & Sup 63.5
Semiconductors	-9.9	Furnishings & App 62.1
Oil & Gas Drilling	-8.2	Steel 61.3

INTEREST RATES

KEY RATES

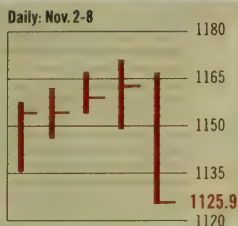
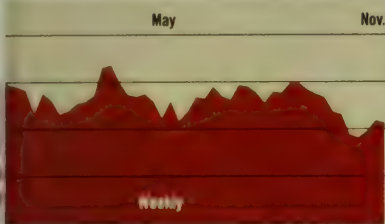
	Nov. 8	Week ago
MONEY MARKET FUNDS	6.13%	6.14%
90-DAY TREASURY BILLS	6.39	6.37
1-YEAR TREASURY BILLS	6.20	6.10
10-YEAR TREASURY NOTES	5.85	5.74
30-YEAR TREASURY BONDS	5.88	5.78
30-YEAR FIXED MORTGAGE†	7.79	7.76

†BanxQuote, Inc.

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt bonds, assuming a 31% federal tax rate.

	10-yr. bond
GENERAL OBLIGATIONS	4.79%
TAXABLE EQUIVALENT	6.94
INSURED REVENUE BONDS	4.93
TAXABLE EQUIVALENT	7.14

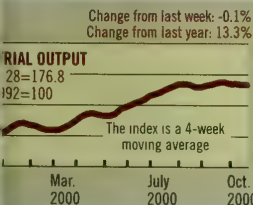


Week 50's turnout was ho-hum this week with a loss of 0.9%. A handful of stocks got socked, down 20.9% on reports that business application sales could stall. Applied Materials and Xilinx double-digits. Bright spots were Citrix Systems, up 10.7%, after analysts upgraded their pro-
 jectcomm, up 12.3%, which beat fiscal fourth-quarter earnings estimates by a penny.

COMPANY PERFORMANCE

Company	% change		Rank	Company	% change	
	Week	Since 3/1/00			Week	Since 3/1/00
Intel	-0.3	-23.5	26	Intel	-4.9	-26.3
Tribune	7.6	-1.4	27	Tribune	5.2	2.3
Xilinx	0.0	-20.8	28	Xilinx	-13.5	-21.9
Enron	-20.9	-30.6	29	Enron	-1.4	19.0
Lexmark International	-2.6	50.2	30	Lexmark International	5.0	-62.6
Omnicom Group	10.7	-75.7	31	Omnicom Group	-6.9	-10.7
America Online	-7.6	-2.9	32	America Online	8.3	-1.2
Guidant	7.4	-45.2	33	Guidant	5.8	-18.2
MBNA	5.2	-62.6	34	MBNA	0.2	66.2
Pfizer	-8.3	5.1	35	Pfizer	4.3	42.4
Solectron	-5.1	2.6	36	Solectron	-5.9	16.0
Gateway	-4.7	-48.2	37	Gateway	-5.8	-31.2
Wells Fargo	-0.9	11.1	38	Wells Fargo	1.2	35.3
General Dynamics	-6.4	-25.8	39	General Dynamics	-1.7	63.3
Texas Instruments	-0.4	-29.5	40	Texas Instruments	-9.5	-48.5
Capital One Financial	7.3	1.5	41	Capital One Financial	3.4	69.7
General Electric	-2.1	13.1	42	General Electric	0.2	24.6
Kansas City Southern Industries	2.3	14.5	43	Kansas City Southern Industries	7.2	101.4
Wal-Mart Stores	2.1	-5.3	44	Wal-Mart Stores	4.4	-0.5
Paccar	13.1	-58.6	45	Paccar	0.0	-0.7
PE Biosystems Group	-15.2	-52.9	46	PE Biosystems Group	-3.3	12.2
Merck	-2.4	52.7	47	Merck	1.2	51.4
Adobe Systems	0.6	-51.4	48	Adobe Systems	3.9	59.9
Reliant Energy	5.3	-4.8	49	Reliant Energy	-6.9	90.2
Citigroup	12.3	-50.3	50	Citigroup	2.7	37.0

PRODUCTION INDEX



index dipped slightly during the latest
 culation of the four-week moving aver-
 creased to 177.5, from 176.7. Season-
 output levels of autos, electric power,
 g, coal, lumber, and rail-freight traffic
 steel production was down sharply and
 were basically flat. For the month of Oc-
 stood at 176.8, down from September's
 of 177.7.

of the index components is at www.business-week.com
 index Copyright 2000 by The McGraw-Hill

ONLINE RESOURCES

BW50 Track the index and the com-
 panies in it all day long. Plus: our
 exclusive Info Tech 100 index.

S&P PERSONAL WEALTH Real-time mar-
 ket coverage, industry analysis, and
 personalized retirement advice.

MUTUAL FUNDS Search for funds, view
 BW ratings, and read Q&A's with
 fund managers.

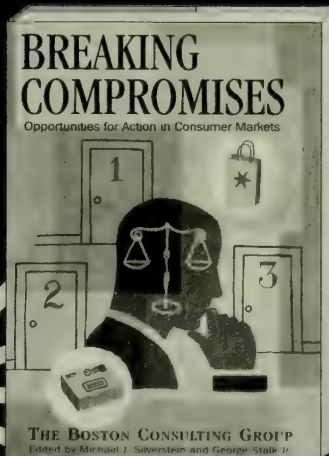
COLUMNS Hot stocks, takeover plays,
 and the latest strategies for manag-
 ing your money.

BusinessWeek online

For more investment data and the
 components of the production index, visit
www.businessweek.com.

WHO SAID THE SUPPLY CHAIN HAS TO SLOW YOU DOWN?

Rethink your
 basic assumptions
 about business.



More breakthrough thinking from
THE BOSTON CONSULTING GROUP
www.bcg.com/breakingcompromises

WILEY

Available at bookstores or online retailers

Index to Companies

This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

A

ABC (DIS) **16, 36**
Adidas **14**
Advanced Micro Devices (AMD) **51**
Agilent Technologies (A) **EB28**
Albermarle (ALB) **EB132**
Alcoa (AA) **178**
AltaVista **EB28**
Amazon.com (AMZN) **51, 52, 156, 171, EB93, EB108, EB112, EB124**
American Express (AXP) **36, 146**
American Home Products (AHP) **90**
American International Insurance **56**
American Pacific (APFC) **69**
America Online (AOL) **26, 171, 178, EB30, EB98**
Ametrade (AMTD) **EB98**
AMR (AMR) **160**
Armway **46**
Anderson **62**
Apple Computer (AAPL) **58, EB28, EB42, EB48, EB128**
Applied Micro Circuits (AMCC) **52**
Arbnet Communications **EB132**
Argus Systems Group **EB10**
Arthur Andersen **69**
Ashford.com (ASFD) **EB108**
AT&T (T) **52, 90, 160, EB22, EB30, EB40**
AT&T Wireless (AWE) **26, EB73**
Athlete's Foot **EB108**
Audi **14**
Automatic Data Processing (AUD) **EB104**
Avant **16**

B

Backflip **EB10**
Bank of America (BAC) **154, 158**
Bank One (ONE) **158**
Barnes & Noble (BKS) **EB18**
Bear Stearns (BS) **EB104**
Ben & Jerry's **EB28**
Bernstein (Sanford C.) **90**
Bertelsmann **14**
Best Buy (BBY) **EB112, EB124**
Bidcom **EB58**
BIDV Securities **57**
Bluefly (BFLY) **EB112**
BlueLight.com (KVM) **EB42, EB112, EB124**
BlueLine Online **EB58**
Blue Tooth **EB28**
Boston Scientific (BSX) **181**
Broadcom (BRCM) **52**
Buy.com (BUYX) **EB108**
Buzzsaw.com **EB58**

C

Cablevision Systems (CVC) **52**
Calpine **156**
CarsDirect.com **EB22**
Caterpillar (CAT) **EB112**
CBS (VIA) **16**
Cephren **EB58**
Chase H&Q (CMB) **EB104**
Ciena (CIEN) **18**
Circuit City (CC) **EB42**
Cisco Systems (CSCO) **52, 90, EB48**
Citigroup (C) **49, 62**
CitySprint **EB12**
ClickSlip Direct **EB124**

CNH Global **EB112**
Coca-Cola (KO) **171**
Comcast (CMCSK) **EB108**
Comerica Bank **50**
Commerzbank **59**
Compag Computer (CPQ) **16, 52**
Computech **EB42**
Continental Airlines (CALA) **52**
Continental Cablevision **74**
Credit Suisse First Boston **EB30, EB128**
Cyrix **51**
Cytac Fibrerite **134**

D

Daewoo **64**
DaimlerChrysler (DCX) **50, 89**
Daimark International (DMRK) **EB124**
De Havilland Aircraft **134**
Deere (DE) **EB112**
Dell Computer (DELL) **90, 134, 171, EB28**
Deloitte & Touche **18, EB78**
Denver Broncos **150**
Deutsche Bank (DBK) **50, 59, 90, 154, EB30**
Deutsche Telekom (DT) **EB30**
Digex (DIGX) **EB30, EB48**
Digital Island **EB48**
Donaldson Lufkin & Jenrette (DLJ) **154**
Dovebid **EB78**
Dreyfus (DNM) **156**
Driscoll-Wolfe **EB73**
Dynex **EB12**

E

Eastman Chemical (EMN) **EB132**
EastWest Capital **EB73**
eBay (EBAY) **48, EB48, EB78, EB84, EB132**
Economy.com **32**
Epinions **EB128**
Equipp.com **EB78**
Ericsson (ERICY) **58**
eToys (ETYS) **EB124**
eTrade (EGRP) **EB98**
Excite (ATHM) **EB40**
Exodus Communications (EXDS) **EB30, EB48**
Exxon Mobil (XOM) **90**

F

Farnborough-Aircraft.com **134**
Fatbrain (FATB) **EB28**
FedEx (FDX) **EB64, EB124, EB132**
Fiat (FIA) **64**
Financial Research **156**
Fingerhut (FD) **EB124**
Firefly Networks **EB42**
First Call (FT) **90, 156, EB104**
First Union (FTU) **158**
Flextronics International (FLEX) **58**
Fogdog **EB108**
Ford (F) **50, 56, EB28, EB93**
Forrester Research (FORR) **EB48, EB112**
Fort James (FI) **EB112**
Fox Sports (FOX) **EB108**
Frankfurter Sparkassa **59**
FreeMarkets **EB78**

G

Garden.com (GDEN) **EB20**
Gartner Group **EB30**
Gateway (GTW) **90, 171**

GE Capital (GE) **14**
General Atlantic Partners **146**
General Electric (GE) **90, EB78, EB128**
General Mills (GIS) **EB112**
General Motors (GM) **50, 64, 160**
Gethol **62**
Gillette (G) **171**
GlobalCenter **EB48**
Global Crossing (GBLX) **EB30**
Global Sports (GSPT) **EB108**
Goldman Sachs (GS) **90, 154, 158, EB64**
Gould McCoy & Chadick **84**
greenlight.com **EB22**
Guidant (GDT) **181**

H

Hagberg Consulting **74**
Hallmark **EB128**
Halotron **69**
Hay Group **84**
Hewlett-Packard (HWP) **EB28, EB48, EB128**
Hilco Capital **158**
Hilton Hotels (HLT) **142**
HITT Contracting **EB30**
Home Depot (HD) **62, EB18**
Honda (HMC) **89**

I

IBM (IBM) **48, 51, 58, 74, 90, 171, EB28, EB48, EB93**
IDEC Pharmaceuticals (IDPH) **156**
iMark.com **EB78**
Impulse!Buy Network (INKT) **EB42**
InFocus (INFS) **181**
Integrated Device Technology (IDTI) **51**
Intel (INTC) **51**
Intellectual Ventures **146**
Intermedia Communications (ICIX) **EB30**
International Data **EB48**
Intuit (INTU) **178**
Israel Digital Broadcasting **18**

J

Jabil Circuit **58**
Jardine Fleming Vietnam **57**
J.C.Penny (JCP) **EB124**
JDS Uniphase (JDSU) **18, 90**
Jupiter Media Metrix **EB12, EB20, EB42, EB73, EB104, EB124**

K

Kanematsu USA **69**
Klein (Calvin) **EB18**
Kmart (KM) **EB42, EB108, EB124**
Komatsu **EB112**
Kozmo.com **EB12**
KPMG **154, 158**
Krispy Kreme (KREM) **18**

L

Lam Research **156**
Lehman Brothers (LEH) **90, 154**
Level 3 Communications (LVL) **EB30**
Liggett Group (VGR) **52**
Lightspan (LSPN) **36**
Loehman's **EB18**
Lorillard Tobacco **52**
Los Angeles Lakers **14**
Loudcloud **EB28**
Louis V. Lepak Trucking **EB78**
Lowe's (LOW) **62**

Lucent Technologies (LU) **52, EB28**

M

Macroeconomics Advisers **90**
Major League Baseball **EB12**
Management Research Group **74**
MarketWatch.com (MKTW) **EB104**
Marriott International (MAR) **142**
Martha Stewart Living (MSO) **EB42**
MBNA (KRB) **EB98**
McGraw-Hill (MHP) **182**
MediaOne Group (T) **52**
Medicine Online **EB84**
Medtronic (MDT) **181**
Merck (MRK) **90**
Merrill Lynch (MER) **90, 154, EB30, EB104**
Metro Networks (MTNT) **EB73**
Micron Technology (MU) **90**
Microsoft (MSFT) **26, 52, 160**
M.M. Warburg **59**
Montgomery Funds **156**
Morgan (J.P.) (UPM) **54, EB104**
Morgan Stanley Dean Witter (MWD) **90, 154**
Morningstar **178**
Motley Fool **EB128**
Motorola (MOT) **181**
MSN (MSFT) **178**
Multinvestor (MLTX) **EB104**
MVP.com **EB124**

N

Napster **14**
National City Investment Management **74**
National Semiconductor (NSM) **EB48**
National Steel Electronics **58**
NBA **EB12**
NBC (GE) **16**
NetAngels **EB42**
NetBank (NTBK) **EB98**
NetScaler **EB48**
NetScape (AOL) **36**
Net2Phone **EB22**
Nextel Communications (NXTL) **26**
NextLink Communications (NXLK) **EB30**
Nielsen Norman Group **EB128**
Nielsen/NetRatings **EB42**
Nikon **181**
Nordstrom (JWN) **EB18**
Nortel Networks (NT) **52**
Northern Trust (NTRS) **181**
Northwest Airlines (NWA) **52**
NTT DoCoMo (NTT) **146**

O

Oakmark Fund (OAKMX) **156**
OboWerke **134**
OnStar **EB73**
Oracle (ORCL) **EB93**
Orient-Express Hotels (OEH) **181**
OshKosh B'Gosh (GOSHA) **EB78**

P

PaineWebber (PWJ) **EB48**
Palm (PALM) **EB58**
Parametric Technology (PMTCT) **156**
Pegasus Aviation **134**
Pell **74**
Penske **EB78**
Perot Systems **EB98**
Personnel Decisions International **74**

Pets.com (PET) **52, EB108**
Pfizer (PFE) **90**
Philip Morris (MO) **52**
Phone.com (PHCM) **EB73**
Plumtree **EB93**
PMC-Sierra (PMCS) **52**
PNC **93**
Polo Ralph Lauren (RL) **EB18**
Polycorn **156**
Priceline (PCLN) **48, 49, EB22**
PrintNation **EB128**
Procter & Gamble (PG) **EB93**
Prudential Securities **36**

Q

Quadrangle Group **36**
Quantum **156**
QVC (CMCSK) **EB108**
Qwest Communications (Q) **EB30, EB40**

R

Rayonier (RRYN) **EB132**
Reality Online **EB42**
RetailExchange.com **EB78**
Reuters (RTRSY) **EB42**
Rise Technology **51**
R.J. Reynolds (RJR) **52**
Robertson Stephens (FBF) **EB48, EB108**
Rolls-Royce **134**
Rubric **74**
Ryder System (R) **EB112**

S

Saks Fifth Avenue (SKS) **EB18**
Salomon Smith Barney (C) **142, 154, 181, EB98, EB104**
Samsung **181**
SAP (SAP) **EB10, EB93**
Sara Lee (SLE) **EB78**
Sass (M.D.) **36**
Schneider National **EB112**
Schroders Investment Management **90**
Schwab (Charles) (SCH) **EB98**
SCI (SCI) **50**
Sea Containers (SCRA) **181**
Sears (S) **160**
Sei Cowen Securities **181**
SiByte **52**
Sky Global Networks **160**
SmartRoute **EB73**
Softbank **EB42**
Solstrom (SLR) **58**
Southwest Securities Group (SWS) **EB124**
SpectorSoft **EB12**
Spherion (SFN) **154**
Spieker Properties **EB58**
Spinway **EB42**
Sports Authority (TSA) **EB108**
Sprint (FON) **EB30**
Sprint PCS (PCS) **26**
Stadium **150**
Standard & Poor's (MHP) **32, 156, 160, 182**
Stanley Works (SWK) **EB78**
Staples (SPLS) **EB64**
Starbucks (SBUX) **18**
Starwood Hotels & Resorts (HOT) **142**
Stephens **EB124**
St. Jude Medical (STJ) **181**
Stratigis Group **EB73**
Subaru **EB112**
SunbeltOrder.com **EB112, EB124**
SunAmerica (AIG) **36**

Sun Microsystems (SUNW) **EB128**
Sunrise Assisted Living (CS) **170E10**

T

Talbots (TLB) **EB18**
Talus Solutions **48**
Tanaka **181**
Target (TGT) **EB42**
TD Waterhouse (TWE) **EB98**
TeamWest **178**
Telebank Financial **EB98**
Tele-Communications (T) **52**
Telefonica **EB30**
Tetron (TXT) **134**
TheMarkets.com **EB104**
Thomson **EB104**
3D Training & Development **3M (MMM) EB64**
Threshold Entertainment **62**
Time Warner Entertainment (TWX) **52**
Toyota (TM) **89**
Toys 'R' Us (TOY) **EB112**
TradeOut (TOUT) **EB78**
TrafficStation **EB73**
Transmeta (TMTA) **51**
Travelocity.com (TVLY) **EB22**
Trillium Software **EB64**

U

Unisys (UIS) **134**
United Technologies (UTX) **UPS (UPS) EB112, EB124**
UrbanFetch **EB12**
U.S. Bancorp (USB) **EB104**
U.S. Wireless (USWC) **EB78**

V

VA Linux (LNUX) **52**
Verizon (VZ) **146**
VerticalNet (VERT) **EB132**
Vietnam Enterprise Investment Limited Fund **56**
Vietnam Motor **56**
Vinafood **56**
Visteon (VC) **EB78**
Vodafone Group (VOD) **52**

W

Wal-Mart Stores (WMT) **EB124**
Walt Disney (DIS) **142, EB18**
Webcor Builders **EB58**
WebMD (HLTH) **74**
Weisel (Thomas) **90**
Westdeutsche Lovelsbank **52**
Westwood One (WON) **EB124**
WinStar Communications **52**
Women.com (WOMN) **EB2**
WorldCom (WCOM) **90, EB40**
W.W. Grainger (GWW) **EB6**
Wyndham International (V) **142**

Y

Yahoo! (YHOO) **146, 178, EB48, EB84, EB93**
Yankee Group Research **62**
Yellowwave (YW) **18**

Z

Zacks Investment Research **EB104**
Zagat Survey **146**
Ziff-Davis (ZD) **178**
Zilliant **48**

Business Week (ISSN 0007-7135) published weekly, except for one week in January and August, by The McGraw-Hill Companies, Inc. Executive, Editorial, Circulation, and Advertising: 1221 Avenue of the Americas, New York, N.Y. 10020. U.S. subscriber rate: \$54.95/year. Canada \$69/year. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J. 08520.

Internet

address directory

Find these Business Week advertisers on the Web:

MRO

bnamiro.com
gilent.com
ilcatel.com
mdahl.com
can Airlines
a.com
can Express
rate Services
mericanexpress.com
irk
ramark.com
t Communications
spect.com
tt.com

vaya.com
divisors
xa-advisors.com
ystems, Inc.
es.com/
Martini
luemartini.com
Allen & Hamilton
oozallen.com
couts of America
sa.scouting.org
Stream
apitalstream.com
ler
hryslercars.com
erice One
ommerceone.com/
onfund
ommonfund.org
mpaq.com
uter Associates
ational
a.com

Computer Associates

International interbiz
www.interbiz.cai.com
Conoco
www.conoco.com
CoStar
www.costargroup.com
Credit Suisse First Boston
www.csfb.com
DATA LINK
www.data-link.com
Deloitte & Touche
www.us.deloitte.com
Deutsche Bank AG
www.db.com
Deutsche Post Danzas
www.danzas.com
Digex
www.digex.com
Digital Island
www.digitalisland.com/
Diner's Club
www.citibusiness.com
Dovebid
www.dovebid.com
e-centives
www.e-centives.com
elance.com
www.elance.com
Epicentric
www.epicentric.com
Fannie Mae
www.fanniemae.com
FedEx
www.fedex.com
FileMaker
www.filemaker.com
Five Star
www.fivestar.com
Global One
www.global-one.net
Goldman Sachs
www.gs.com

HP/PSG

www.hp.com
Hummingbird
www.hummingbird.com
iAsiaWorks
www.asiaworks.com
IBM
www.ibm.i2-ariba.com
IBM
www.ibm.com/eserver
Informatica
www.informatica.com
Informix
www.informix.com
Intel
www.intel.com/
Interland, Inc.
www.interland.net
Intermedia Communications
www.intermedia.com
iProcure, a division of
Datastream Systems, Inc.
www.iprocure.com
J.P. Morgan
www.jpmorgan.com
Jeep
www.jeep.com
Kintana
www.kintana.com
LAWSON SOFTWARE
www.lawson.com
LeadersOnline
www.leadersonline.com
Liberty Mutual Insurance
www.libertymutual.com
Locate in Scotland
www.scotcall.com
marchFIRST
www.marchfirst.com
Marriott
www.marriott.com
Merrill Lynch
www.merrilllynch.com

Microsoft Big Win

www.microsoft.com
Morgan Stanley Dean Witter
www.morganstanley.com
Motient
www.motient.com
MOTOROLA DIGITAL DNA
www.digitaldna.com
mySAP.com
www.mysap.com
National Discount Brokers
www.ndb.com
NCR
www.ncr.com
Netcentives
www.netcentives.com
Northwest Airlines
www.nwa.com
NTT DoCoMo
www.nttdocomo.com
Oracle
www.oracle.com
Order Fusion
www.orderfusion.com
Pfizer
www.pfizer.com
PHILLIP MORRIS
www.phillipmorris.com
PNC Bank
www.pnc.com
Primus
www.primus.com
Proxima
www.proxima.com
Prudential
www.prudential.com
PSINet
www.psinet.com
Quintus
www.quintus.com
Rare Medium
www.raremedium.com
Redleaf
www.redleaf.com
Register.com
www.register.com
Requisite Technology
www.requisite.com/
Robertson Stephens
www.robertsonstephens.com
Samsung
www.samsung.com

SAS

www.sas.com
Siemens
www.siemensmobilebiz.com
Silicon Graphics Inc.
www.sgi.com
SiteSmith
www.sitesmith.com
ST Microelectronics
www.st.com
Stellcom Technologies
www.stellcom.com
StorageApps
www.storageapps.com
Sun Microsystems
www.sun.com
Telstra, Inc.
www.telstra.com
The Peninsula Group
www.peninsula.com
The Wharton School
www.wharton.upenn.edu/execed
TOSHIBA
www.toshiba.com/taec
Toyota Motor Sales
www.toyota.com
UnumProvident Corporation
www.unum.com
VERITAS Software Corporation
www.veritas.com
Versata
www.versata.com
Vertical Net
www.verticalnet.com
Viatel
www.viatel.com
ViewSonic
www.viewsonic.com
Vitria
www.vitria.com/default.asp
Wall Street Journal
www.wsj.com
Williams
www.williams.com
WorldCom
www.wcom.com

BusinessWeek

Moving @ the speed of e

See and hear from the experts at
www.sas.com/webcast

The Power to Know.

sas
e-Intelligence

VOTERS' MESSAGE: GOVERN FROM THE MIDDLE

There is really only one message the electorate sent to Washington in this most dramatic Presidential election: America is too divided on the issues to provide a clear mandate to either political party. There is certainly no consensus for radical change, for going either hard right or hard left. For politicians, the implication is clear. The only extreme from which they should govern is the extreme middle of the road.

The 43rd President of the United States will be a minority President who won by a narrow margin. Given the recount of the Florida vote and the controversy around the popular vote vs. the Electoral College count, his Presidency is bound to be clouded by questions of legitimacy. Congress, too, is weakened by the election results. The Republicans still hold control, but their grasp is more fragile than ever, with a surprising number of Democrats winning Senate seats. Only 10,200 votes in Washington and Montana kept the Democrats from gaining control of the Senate entirely. Of the 11 governorships on the ballot, the Democrats picked up a gain of one, curbing Republican momentum at the state level. In short, Election 2000 made the political picture across the nation more mixed and more complicated. The lack of consensus in this election raises the fundamental question of not which mandate the new President has but "what mandate?"

BLOOD IN CONGRESS

The danger, of course, is that the winner of the 2000 Presidential election will attempt to push through legislation favored by his party's activist core. This will almost certainly lead to intense partisan bickering and governmental paralysis. Legislation pushing costly new entitlement programs or surplus-threatening tax cuts will bring blood to the floor of Congress and paralyze Washington.

Paralysis is the last thing the country needs right now. While the Presidential candidates spent the past year noisily debating such broad issues as partial privatization of Social Security or massive tax cuts, signs of a slowdown in the technology investment boom that powered the economy began to appear. This is new territory for the New Economy, which has been driven more by capital investment and productivity gains than by the usual consumer spending. There were many surprises on the upside of this fast-growth, high-tech economy—and there could easily be surprises on the downside. There is growing evidence that the U.S. high-tech slowdown is putting pressure on Asian economies and financial systems.

Attention should be paid to which policies are best designed to deal with a possible sharp slowdown in investment-driven growth. Traditional fiscal policy may not provide the right tools to address a high-tech slowdown. But neither candidate addressed it during the campaign and a divided, battling Washington may miss the problem entirely until it's

too late and the U.S. finds itself in another recession. The campaign, like so many, was a fantasy world where things economic were wonderful in the short run and problems only began to emerge decades from now. Not so.

A divided electorate and a weak Presidential mandate complicate foreign policy as well. They may tempt Saddam Hussein, for example, to risk challenging the U.S. again. The U.S. has already used the Middle East crisis to ease out of a box of restrictions placed on him after the Gulf War. That's no small matter. An invasion of Kuwait or a cutoff in oil exports from the Middle East at this point in the business cycle could send oil prices to \$40 to \$50 a barrel, seriously threatening the world economy.

HOLDING THE CENTER

Both parties have demonstrated that they know how to govern from the center if they choose to do so. While the right has dominated the House in recent years, Republican governors, including George W. Bush, have been so moderate. And while unions and minority voters still pull the Democratic Party strongly to the left, a large number of moderate governors and legislators in Congress are middle-of-the-road New Democrats. Both Vice-President Al Gore and running mate Senator Joseph Lieberman (D-Conn.) are members of the Democratic Leadership Council, a decidedly centrist organization.

Both parties should focus on potential areas of agreement, not disagreement. Right now, there appears to be common ground on legislation for a moderate patients' bill of rights that allows people to sue their health maintenance organizations, but only as a last resort. There also seems to be agreement for a healthy rise in federal spending for education that is tied to fair standards.

There is a bipartisan support on these smaller issues. But there is a divided mandate for partially privatizing Social Security, creating a huge new Medicare prescription drug entitlement, or radical changes in social policy. There is certainly a weak mandate for a \$1.6 trillion tax cut that would erase the budget surplus and stop the government from paying down its debt. A simple modest cut in marginal rates is the way to go. It gives everyone a break and allows the government to continue paying off its IOUs.

The truth of the matter is that there are few big crises facing the nation at the moment that cry out for radical action. Stronger-than-anticipated growth is making Social Security solvent for many decades to come. The economy is not desperate for massive stimulation. In fact, the Federal Reserve would probably have to raise interest rates in the face of a loosening of fiscal policy of this magnitude.

Practicing the art of the achievable makes both parties good and policy sense. It allows both parties to govern from the center. But they must choose to do so.



Can insurance be a **competitive advantage**



GENERAL LIABILITY



COMMERCIAL AUTO



PROPERTY



WORKERS COMP

Last year, we saved our customers nearly 700,000 disability days. We also helped them reduce claims by 20%. And lower cost of claims by 10%. Pretty exciting numbers for insurance. Especially when you consider the other benefits these numbers can include: higher employee morale, lower turnover and improved work quality. For us, insurance goes beyond covering you in case of trouble. As part of our unique LibertyWorks™ process, we look at your business from top to bottom and help you reduce the likelihood of trouble hitting in the first place. We call it proactive insurance. You may prefer "competitive advantage."

INSURANCE IN ACTION To learn about case histories in your industry, or for more information, call 1-800-4-LIBERTY or go to www.libertymutualgroup.com



**Liberty
Mutual**

ENTRANCE

NEW WORLD

NEW OPEN STANDARD

IBM

BusinessWeek

EMBER 27, 2000

A PUBLICATION OF THE MCGRAW-HILL COMPANIES

Electoral College
v campaigns
uld be
erent
hout it

Worker
House
Slave
labor in
Europe

Companies
ome Depot's
es
atorade's
cess
P's stumble

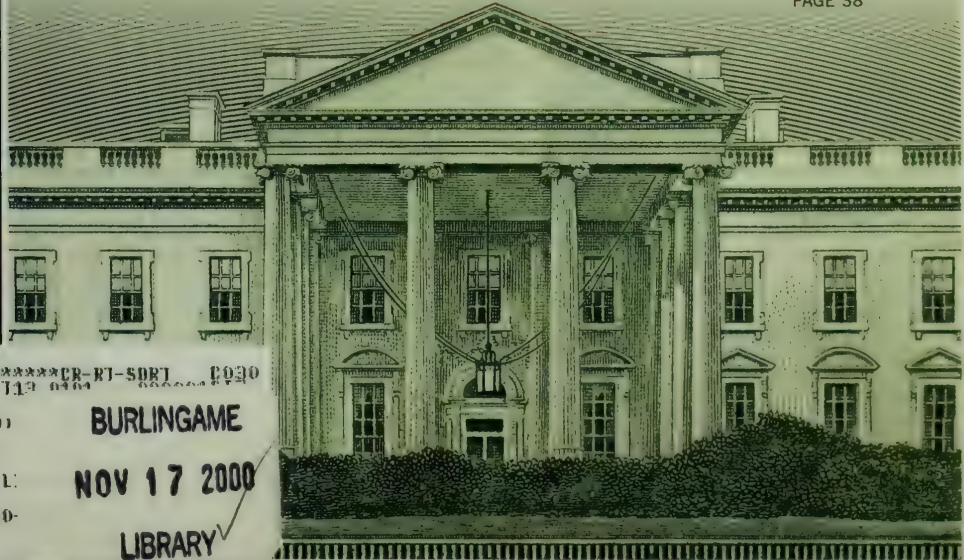
Self
er VS.
PGA



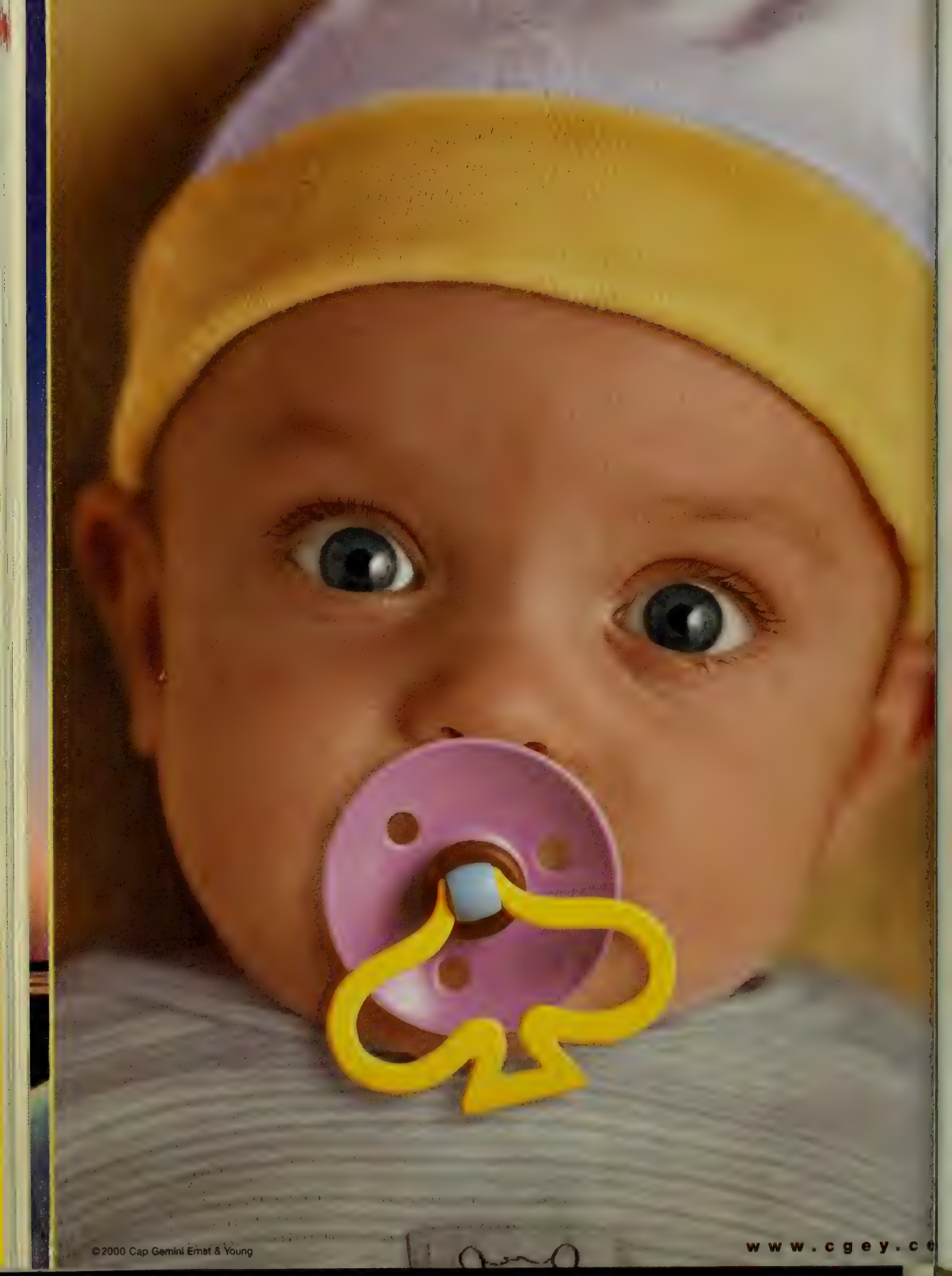
THE NEW PRESIDENT'S ECONOMY

Slower growth ahead. Weaker profits.
Possibility of recession. Welcome to
the White House, Mr. President.

PAGE 38



BURLINGAME
NOV 17 2000
LIBRARY



HONORING OUR WEB SITE

Business Week Online, winner of the 2000 National Magazine Award for General Excellence in New Media, has been honored again. BW Online is a finalist in three categories in the inaugural Online Journalism Awards, sponsored by the Online News Assn. and the Columbia University Graduate School of Journalism. These are the categories in which BW Online is a finalist:

■ **General Excellence in Online Journalism.** This category honors a site that "successfully fulfills its editorial mission, effectively serves its audience, maximizes the unique abilities of the Web and represents the highest journalistic standards." Kudos go to BW Online Editor-in-Chief Bob Arnold and his entire team, who produce original material every business day—reporting, analysis, commentary, video interviews, and live events, as well as special channels for technology, investing, global business, small business, careers, and more (www.businessweek.com).

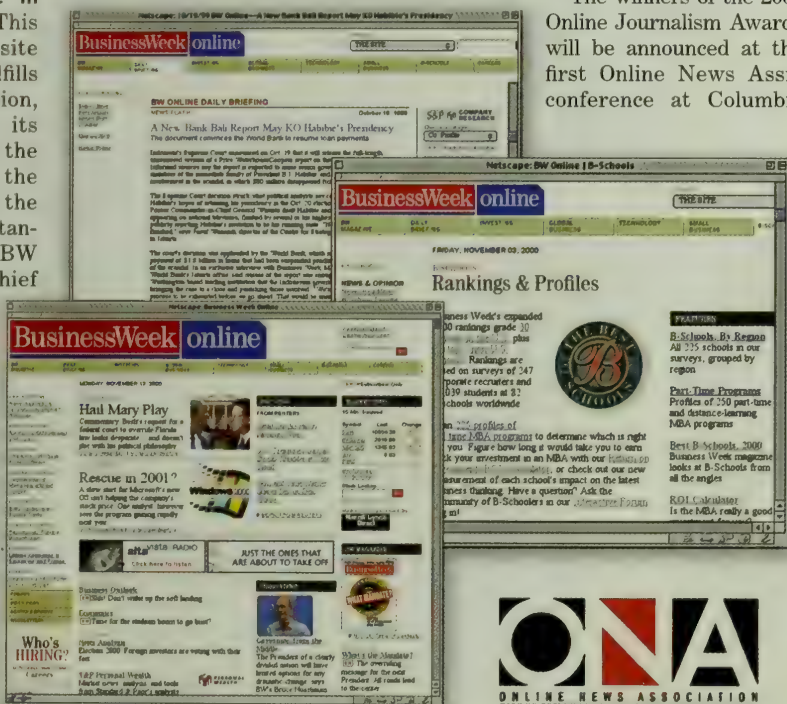
■ Breaking News.

BUSINESS WEEK Singapore Bureau Chief Michael Shari reported for BW Online's Daily Briefing the instant story of what happened in a wild 48 hours to topple Indonesia President B.J. Habibie in October, 1999, and to elect in his place Islamic cleric Abdurrahman Wahid. Earlier, Shari obtained a summary document issued to a Parliament committee of a report on the Bank Bali scandal—in which \$80 million disappeared from the bank's books—and outlined how the report might sink Habibie's presidency.

■ **Creative Use of the Medium.** Our business school channel (www.businessweek.com/bschools/) utilizes all of the interactive features of Business Week Online to provide a wealth of information for the MBA community—from applicants and students to faculty, grads, and recruiters. It's anchored by our biennial Best B-Schools rankings and profiles of

225 MBA programs in the U.S. and worldwide. Schools can be searched by criteria including location, concentrations, average GMAT, out-of-state tuition, and their BW ranking. They can also be compared side by side. The site also includes original news, video interviews with deans, an interactive forum, the journals of 23 MBA students, an MBA newsletter, and a new section focusing on part-time and long-distance MBA programs.

The winners of the 2000 Online Journalism Awards will be announced at the first Online News Assn. conference at Columbia



University in New York on Dec. 1. We salute all the finalists.

In another competition, two BUSINESS WEEK journalists have just received Front Page Awards from the Newswomen's Club of New York. Science Editor Ellen Licking was honored for magazine commentaries on biotechnology issues. And Technology Strategies Editor Marcia Stepanek was honored for Internet commentaries in her BW Online "Privacy Matters" column.

We're proud to deliver BUSINESS WEEK's outstanding journalism, in print and online, every week. The real winner is you, the reader.

Stephen B. Shepard

Editor-in-Chief



A man in a dark jacket and light-colored pants is sitting on a wooden bench, viewed from behind. He is looking out over a calm body of water towards a distant bridge. The scene is captured in a cool, blue-toned photograph. The foreground shows the wooden planks of the deck or pier.

**NO ONE EVER GOT
FIRED FOR HIRING A
WEB HOST WITH TOO
MUCH EXPERIENCE.**

You are the person charged with hiring a web hosting provider.
If you do it well, no one will thank you. If you do it poorly, everyone will blame you.
You are the unsung hero of the Internet Age. But even heroes sometimes need help.
Enter WorldCom. As the leader of the digital generation, we have the kind of web hosting experience few other companies can muster.

By teaming up Digex with our UUNET arm, we're able to offer you a comprehensive e-business solution.* Not just one of the most reliable IP networks in the industry. Not just data centers all over the world. But the far more critical, human element: an all-star team of web hosting experts that blue chip companies trust with their mission-critical applications.

All of which should alleviate any thoughts you have of being fired. And replace them with thoughts of being promoted.

For more details, visit us at www.wcom.com/generationd.

generation d


WORLD.COM



They have Houston.

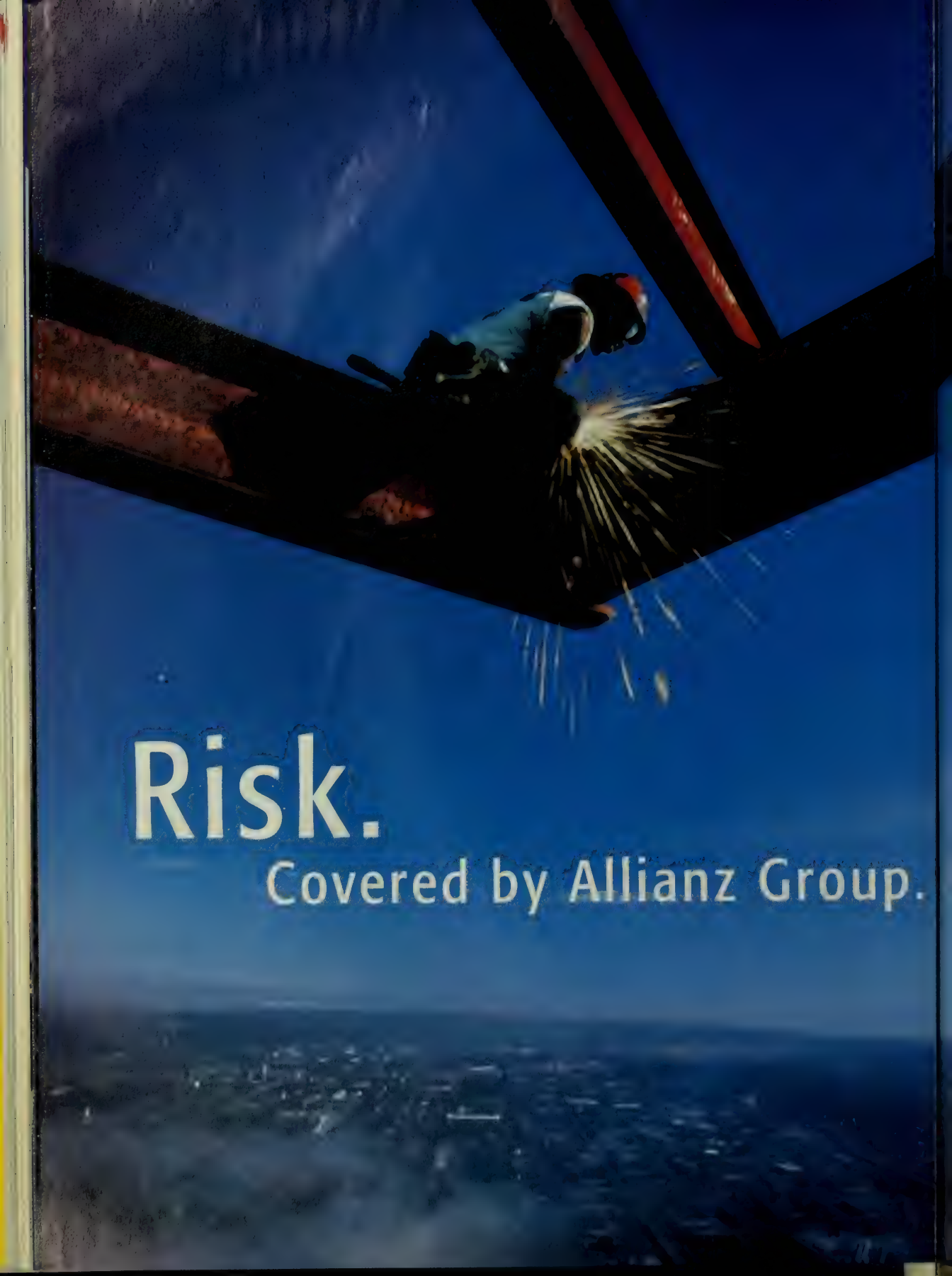
You have Commerce One Global Services.

AN E-MARKETPLACE

Commerce One is a leading provider of B2B e-commerce solutions. We help businesses connect, transact, and manage their supply chain online. Our solutions are designed to streamline business processes, reduce costs, and improve efficiency. We offer a wide range of services, including procurement, sales, and logistics. Our platform is scalable and secure, ensuring that your business data is protected. Join the Commerce One network today and experience the benefits of e-commerce.

**COMMERCE
ONE** 

MANY MARKETS. ONE SOURCE.



Risk.

Covered by Allianz Group.

Wherever you are, whenever you
need us, the Allianz Group is
always there for you.

To us, risk management means thinking the unthinkable
to prevent risk turning into loss. As one of the world's
leading insurers our financial strength and technical
expertise combine to make Allianz Group the partner
you can trust whenever and wherever you need us.

Allianz. The Power Beside You.



Allianz Group. Europe's leading global insurer
and provider of financial services.

COVER STORY

THE NEXT PRESIDENT'S ECONOMY

Whoever ends up in the White House could see the longest expansion fade just as he takes office page 38



BusinessWeek

NOVEMBER 27, 2000

Cover Story

38 THE NEW PRESIDENT'S ECONOMY

No matter who occupies the White House, there's a good chance he will face slower growth, weaker profits—and, say more and more economists, a recession threat in 2001

42 OPEC'S NEXT ACT

Why it may cut production

44 HOW WILL WALL STREET VOTE?

Analysts weigh political mayhem

48 COMMENTARY: ELECTORAL VOTE

Time to bag the Electoral College?

50 BALLOT BOX VOOODOO

Reports of vote finagling abound

54 A BETTER VOTING MACHINE

No technology is perfect

56 COMMENTARY: YOUNG VOTERS

Are they cured of their apathy? No

News: Analysis & Commentary

59 GETTING HP'S SYSTEM BACK UP

It's planning some hot innovations, but investors may not sit still

60 COMMENTARY: ACCOUNTING

Did the Big Five get outsmarted?

62 CHANGING DRIVERS AT CHRYSLER

Welcome to Detroit, Herr Zetsche

64 COMMENTARY: IBM

Lou misreads the New Economy

66 IN BUSINESS THIS WEEK

Economic Analysis

24 ECONOMIC VIEWPOINT

26 ECONOMIC TRENDS

36 BUSINESS OUTLOOK

The Corporation

70 CAN HOME DEPOT CLEAN HOUSE?

The hardware giant takes a hit

Science & Technology

76 IT'S A NANO WORLD

Manipulating molecules can create tomorrow's miracle materials

82 CRYSTAL GAZING

Zeolite crystals are a hot area in meso-scale research

85 DEVELOPMENTS TO WATCH

The Workplace

86 COMMENTARY: LABOR

What's next for pro-Gore unions?

Marketing

91 GOTTA GET THAT GATORADE

Suitors for the sports drink maker

Government

96 CORRUPTION IN PUERTO RICO

Are HUD scandals moving north?

Sports Business

102 TIGER VS. THE PGA

What Woods might want

106 TEEING OFF IN THE INNER CITY

Management

110 GE CAPITAL'S E-BIZ FARM TEAM

It draws on UConn tech whiz

Photo Essay

116 MONSTERS OF THE DEEP

Hyundai's humongous freighter

Special Report

132 ASIA'S FUTURE

The next tech-led leap forward

136 KOREA: BEYOND THE LAB

Taedok is a hotbed of startups

139 CHINA: PUTTING CHIPS ON CH

Shanghai guns it in microprocessor

140 SHANGHAI: CHASING A DREAM

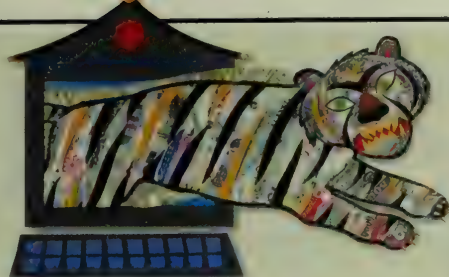
Winston Wong's \$1.6 billion plan

142 TAIWAN: MINDS OVER MATTER

It's developing an economy of the future



THE LABOR
Underground
omy grows in
pe page 146



TECH TIGERS

Asia
is set for a
burst of
tech-driven
growth page 132



SCANDALS
In Puerto
Rico, trouble
for HUD may
mount page 96



BEHEMOTHS
How Hyundai
turns out its giant
ships page 116



NANO WORLD
Making
materials
from the
molecule
up page 76



ABOVE THE FRAY
Not all tech stars have
fizzled out page 180

SINGAPORE: BIOTECH INCUBATOR
Medical R&D companies move in

Issues

WORKERS IN BONDAGE
The horrors of Europe's well-
organized ring of sweatshops
WITNESSES TO AN EXECUTION
The aftermath of a worker's death
ITALY: SLAVE TRADE CENTRAL
Is the locus for illegal immigrants

International Business

HAZARD FRERES: NEW BLOOD?
David-Weill's next succession plan
EUROPE: A TALK WITH ROHATYN
An ambassador's view of Europe
RANCE: AVENTIS
Its business strategy falls apart
JAPAN: SONY
How big a market for its robo dog?
COMMENTARY: JAPAN
INTERNATIONAL OUTLOOK

BERTY MEDIA TAKES A BEATING
John Malone's company is hit hard
OL TIME WARNER'S WORLD
That the deal means for ISPs

Information Technology

- 28 WILDSTROM: TECHNOLOGY & YOU**
The Web blew it on election night
- 180 BW INFO TECH 100**
Our semiannual checkup of the top
tech-sector companies
- 182 RATIONAL'S ROARING SUCCESS**
The software maker shoots to No. 7
- 184 SONICBLUE'S NEW SONG**
A chipmaker goes into gadgets
- 186 INFO TECH 100 TABLES**

Industrial Management

- 190 WHERE'S MY CUSTOM CAR?**
Carmakers are revising the hype
and offering alternatives

Industries

- 195 TAKEOVER FRENZY GRIPS INDIA**
The end of the Industrial Raj

BusinessWeek Lifestyle

- 212 SUVs GET COMFORTABLE**
The new crop of sport utilities have
all the comforts of luxury cars

BusinessWeek Investor

- 214 TAXED AND CONFUSED**
Capital gains or stock options could
have a tax zone all their own
- 216 A TAX CODE TANGLE**
This IRS ploy may not play out
- 218 STEVEN MILUNOVICH TALKS**
The Merrill Lynch global tech
strategist shares his views
- 222 TODDI GUTNER: HERS**
How much life insurance is enough?
- 224 THE BARKER PORTFOLIO**
Mercer Bullard, mutual-fund hero
- 225 MARCIAL: INSIDE WALL STREET**

Features

- 1 EDITOR'S MEMO**
- 12 UP FRONT**
- 16 READERS REPORT**
- 17 CORRECTIONS & CLARIFICATIONS**
- 30 BOOKS**
D'Souza: *The Virtue of Prosperity*
Ellis: *Founding Brothers*
- 226 FIGURES OF THE WEEK**
- 230 INDEX TO COMPANIES**
- 232 EDITORIALS**

BusinessWeek online

www.businessweek.com
America Online Keyword: BW

Updated every business day at www.businessweek.com



Winner of the 2000 National Magazine Award for General Excellence in New Media

VIDEO VIEWS

Original unscripted video featuring industry experts and BW editors

■ **YELLOW FEVER:** Peter Bernstein, author of *The Power of Gold*, talks about man's obsession with this precious metal



■ **LONG-TERM CARE:** The sooner you prepare, the better off you'll be, says BW's Amy Dunkin



TOOLS

■ **CAPITAL GAINS CALCULATOR:**

Here's how to figure if you should hold, or sell and reinvest



■ **MBA SEARCH:** Which is the right business school for you and your needs?



■ **SALARY SURVEYS:** How much money should you be paying your staff?



■ **YOUR PORTFOLIO:** Check on the health of your investments

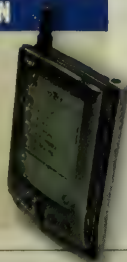


INTERACTIVE FORUMS

■ Join other readers in ongoing discussions on investing, bad customer service, info tech, B-schools—or start your own

HANDHELD EDITION

Put us on your Palm! Get news from Daily Briefing, S&P data, and more. Powered by PricewaterhouseCoopers



Find quick links to everything on this page at the Nov. 27, 2000, issue's table of contents online, or go directly to www.businessweek.com/2000/00_48/online.htm

Drama in Florida

Our coverage of the unfolding events in this historic election continues daily with political, legal, and economic analyses



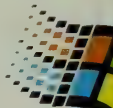
DAILY BRIEFING

Business and investing news, commentary, and analysis

www.businessweek.com/bwdaily

STREET WISE: Windows 2000's slow start isn't helping Microsoft's stock price. Can the program gain in 2001?

COMMENTARY: The Electoral College gives voters in big states more power over who's elected



INVESTING

Investing insights powered by S&P Personal Wealth

www.businessweek.com/investor

INSIDE WALL STREET ONLINE: TTR Technologies has a digital antipiracy technology that could be music to the big labels' ears

SMALL BUSINESS

A resource for entrepreneurs

frontier.businessweek.com

MANAGEMENT: The uncertain Presidency and close congressional margins spell trouble for small-biz reform



TECHNOLOGY

State-of-the-art coverage of info tech

www.businessweek.com/technology

ANALYSIS: A shot in the arm for Bluefly
PERSPECTIVE: Replacing the dot-com spin-off strategy



B-SCHOOLS

Business Week's exclusive rankings and profiles

www.businessweek.com/bschool

NEWS: Schools are going out of their way to attract and keep profitable part-time students

GLOBAL BUSINESS

In-depth coverage of Asia, Europe, and Latin America

www.businessweek.com/globalbiz

Q&A: A. Amir Alanbari, Iraq's former U.N. ambassador, talks about the ongoing U.N. sanctions, Iraq's oil policy, and U.S. politics
EYE ON JAPAN: An epidemic of social parasites?

CAREERS

Advice and tools for upper-management job seekers

www.businessweek.com/career

PROFILE: An MIT professor's system for analyzing construction-project innovations lands her at the head of a startup





What does Wall
Street know about
antivirus?

Trend Micro.

In the brokerage and financial services business, virus protection is crucial. A virus attack could cripple a network, taking the entire business offline during prime trading hours.

That's why so many leading institutions on Wall Street and around the world bank on Trend Micro. Our InterScan VirusWall® protects against viruses and malicious code at the enterprise's border—the Internet gateway—to stop trouble before it invades. It's part of a comprehensive, easy-to-manage enterprise virus solution, backed by the industry's most responsive global support team.

Before viruses threaten your investment, talk to Trend Micro. We'll show you why we're the leading choice of enterprises that know security best.

For a free copy of our "Safe Computing Practices" white paper and a free evaluation CD for Trend Micro antivirus and content-security solutions, call 1-800-228-9983 or visit www.trendmicro.com.



Up Front

EDITED BY ROBERT McNATT

AFTERLIVES

AT&T DEBACLE? WHAT DEBACLE?

AT&T LOST 40% OF THE long-distance market while Robert Allen was CEO. AT&T's stock price plummeted. And some of Allen's decisions—like buying computer maker NCR—were disastrous. But three years after leaving Ma Bell, Allen is reentering the technology world as an investor and director at WhisperWire, an Austin (Tex.) startup.

The company plans to launch a hush-hush telecommunications-software product that will help companies with sales and customer service. While mum about its exact nature, WhisperWire CEO Mike Kadyan brags about snagging Allen, who also brought along ex-FCC chief Reed Hundt as



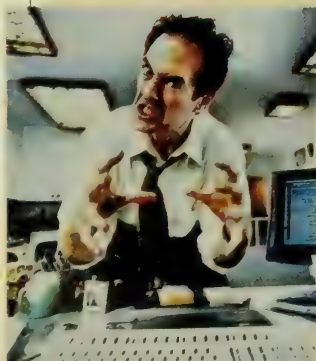
ALLEN: Back to telecom

an investor. "My opinion wasn't formed by what might have been in the press," says Kadyan of Allen's stormy tenure at AT&T. Instead, he says he relied on a recommendation from his Dad, a retired AT&T info-tech

manager, and his own positive impression after meeting Allen.

But one analyst says of Allen's new gig: "The timing is interesting. That he should appear when AT&T is facing so many incremental problems. Maybe now he feels that he is not going to be attached to the current problems." Or blamed for the old ones. *Joan Oleck*

THE LIST DESK RAGE



Analogous to road rage, desk rage can be the unsettling and occasionally dangerous outcome of office workers stressed by long hours, excessive e-mail, unrealistic deadlines, and soulless workplaces. The effects can range from mere headaches to physical violence. And office layouts don't help: 12% of workers surveyed lamented that they labor in a small cubicle "like the cartoon character Dilbert." What stressed workers experienced in the workplace:

WITNESSED YELLING OR OTHER VERBAL ABUSE	42%
YELLED AT CO-WORKERS THEMSELVES	29%
CRIED OVER WORK-RELATED ISSUES	23%
SEEN SOMEONE PURPOSELY DAMAGE MACHINES OR FURNITURE	14%
SEEN PHYSICAL VIOLENCE IN THE WORKPLACE	10%
STRUCK A CO-WORKER	2%

DATA: INTEGRA REALTY RESOURCES, OCTOBER-NOVEMBER SURVEY OF 1,305 ADULTS 18 AND OVER

TALK SHOW "If this election shows one thing, it's that every vote counts—and counts again and again and again."

—Jay Leno on The Tonight Show

ECO TRENDS

THE BIG MAC LOOKS A LITTLE GREEN

THE GOLDEN ARCHES OF McDonald's are taking on a new hue: green. The fast-food chain is in the final stage of testing an earth-friendly container for its Big Mac—the latest in a series of ecologically correct moves.

The new eco-packaging, being tested at 120 Chicago stores, is made of recycled milk and juice boxes, starch, and limestone. Although the current McDonald's boxes use recycled paper, the Earth-Shell is considered better; it uses some nonbiodegradable materials that would otherwise clog landfills. The new boxes follow two other peace offerings to environmental McCritics. Earlier this year McD's quit buying genetically

modified potatoes. Then pleased People for the Ethical Treatment of Animals by ordering its egg suppliers to house hens in bigger cages.

McD's says those moves were cost-neutral, but won't know about the cost of the new boxes until further tests are done. The



McD'S: Pleasing environmentalists

value, though, has been great. PETA has called a truce in its war on McDonald's, while Environmental Defense applauded the new box. Now if McD's could only fix its sagging stock price. *Michael Arnold*

MARKETING MADNESS

THE NAME OF THIS GAME IS—THE NAME

JUST HOW FAR WILL THE licensing thing go at Eddie Bauer? The Redmond (Wash.) retailer, whose moniker already adorns Ford SUVs, a line of wallpaper, and a few other products, will now put its name on computers, thanks to a two-year licensing deal with Compaq Computer.

The outdoorsy casual outfitter has an aggressive strategy designed to maximize consumers' exposure to the brand. This newest license is for special-edition Compaq Presario 1400 notebooks, whose prices start at about \$2,000—and sport a distinctive trim. Having the label on a computer, says Don Perinchief, an Eddie Bauer vice-president, "says that we are modern and that we're a

go-anywhere kind of brand.

But with apparel sales struggling this year, some analysts question the priority of Eddie Bauer, a division of catalog giant Spiegel. "The business has been terribly disappointing," says Jan Kloppenburg at Roberts

BAUER: Compaq deal



Stephens. "Their entire focus should be unrelentingly on their merchandise assortment." Translation: Designing computers won't help sell more clothes. *Robert Bern*

HOW TO IMPROVE YOUR CONNECTIVITY IN 2 EASY STEPS.



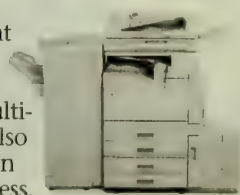
1.

2.

When it comes to advanced digital document systems, having the right connection is everything. Which is why more and more businesses are connecting to Savin.

After all, at Savin we not only connect you to the award-winning, multi-functional digital imaging systems today's networked offices require, we also connect you to smart, highly-trained Savin professionals. Men and women dedicated to making Savin the fastest, most responsive name in the business. And who are willing to do whatever it takes to give you the service and satisfaction you deserve.

To find out more about Savin's full line of black & white and full-color digital imaging systems, as well as our unshakable commitment to service, contact us at 1-800-234-1900 or www.savin.com. You'll be happy you made the connection.



savin®

WE'VE GOT WHAT IT TAKES TO WIN YOU OVERSM

SAVIN CORPORATION, 333 LUDLOW ST., STAMFORD, CT 06904

Up Front

HARD TIMES

MOVING OFF OF WELFARE—BY BUS

HERE'S A NEW WAY TO CUT the welfare rolls: Pay the welfare recipients to move away. That's the basis of a California program that gives those on welfare up to \$1,500 to



JOB BOUND: Leaving California

move to locales with labor shortages.

More Opportunity for Viable Employment (MOVE) is funded by federal welfare grants and administered by Tulare County, an agricultural

area in central California where unemployment averaged 16% this year. The county says that since 1998, MOVE has saved taxpayers \$3.3 million annually by relocating about 650 welfare recipients out of state. Marcia Whittaker, human-resources director of Cheyenne Mountain Resort in Colorado Springs, Colo., had been recruiting from as far afield as Jamaica. In October, through MOVE, she interviewed 150 locals, and hired 33. "We could not afford to relocate all of those people ourselves," she says. "It's a great program."

Three other California counties now have similar programs. Some locals do criticize MOVE, saying that it breaks up families. But MOVE Administrator Frank Escobar asks: "Who suffers if we keep people in a place with no jobs?" *Christopher Palmeri*

FASHION FRONT

THE ULTIMATE SCOOTER RETURNS

AMID THE U.S.'S SCOOTER boom, there's more good news: The Vespa is back. Those snappy scooters that symbolized Italy's pop culture in the 1950s, and developed a cult following here, will once again be for sale in the U.S.—at up to \$4,000 each.

Failure to meet pollution standards kept the fabled Vespa out of the U.S. for 16 years. But with the problem resolved, Scooter maker Piaggio, controlled by Morgan Grenfell Private Equity, launches the Vespa in the U.S. on Nov. 15. Piaggio began by awarding Vespas to the New York Marathon winners weeks earlier. But it is banking on more than just nostalgia and an association with speed to make sales.

Piaggio plans to sell its "recreational toys" through the Neiman Marcus Christmas catalogue, as well as in "Vespa boutiques" in trendy spots like East Hampton, N.Y., and Palm Beach, Fla. Forty-two boutiques, also selling Vespa clothing and accessories, are set to open by the end of 2001. Says Piaggio



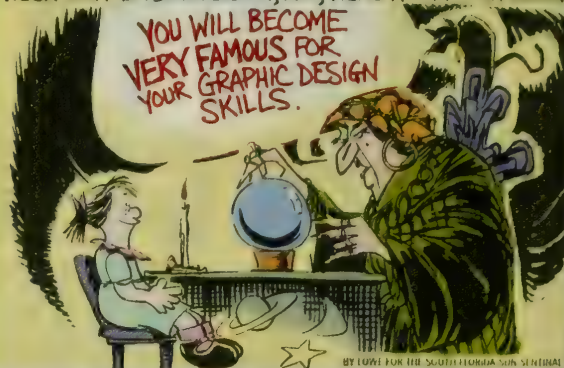
FREEBIE: Marathon winners

USA President Giancarlo Fantappie: "We're selling a lifestyle, not just a scooter."

With a seven-month wait for a Vespa, Piaggio's goal to sell 10,000 lifestyles—make that scooters—a year may yet succeed. *Monica Larner*

DRAWN & QUARTERED

AS A YOUNG GIRL, THERESA LEPORE, FUTURE ELECTIONS SUPERVISOR FOR PALM BEACH COUNTY, FLA., VISITS A FORTUNE TELLER.



BY LOUI FOR THE SOUTH FLORIDA SUN-SENTINEL

INN BUSINESS

A VIRTUAL 'VACANCY' SIGN

TAKING A CUE FROM THE five big airlines that set up the Orbitz.com reservations Web site, four large hotel chains are now moving toward an online booking supersite, honestbroker.com. The site would take reservations and also give hotels a way to sell "distressed inventory." That's industry jargon for unbooked rooms.

Hotel heavyweights Marriott, Hilton Hotels, Hyatt Hotels, and Bass Hotels & Resorts are anxious to get the site operational. "We're continuing to push the Internet very hard," J.W. Marriott

Jr., CEO of Marriott and Starwood Hotels & Resorts Worldwide, told a hotel conference. The industry thinks its Web site could attract travelers for whom discounts are more important than brand names.

But the American Society of Travel Agents has filed an antitrust complaint with the Justice Dept. against Orbitz.

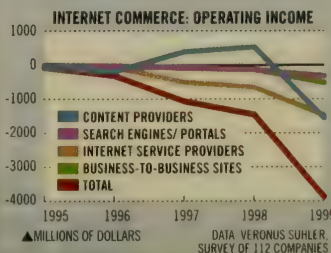


J.W. MARRIOTT

set to go live in June—and all may oppose the move, says ASJA senior veep Paul Ruden: "It involves, as Orbitz does, restricting consumer or travel-agent access to inventory then we are opposed." The Justice Dept. has not yet responded. *Dennis Blane*

THE BIG PICTURE

THE ONLINE BLUES Although a few large Internet companies like Yahoo! and AOL make money, most Net outfits have yet to become profitable. Hardest hit are content providers, many of which have closed or are looking for buyers and partners.



FOOTNOTES Median tenure of discharged managers and executives: second quarter, 1998: 10 years; 1999: 9 years; 2000: 8 years

Market summaries?
Account balances?
Trades?



It's your call.

So easy to use, so much access—so what is it? An Internet-ready phone with Schwab PocketBroker™ service.



Schwab
PocketBroker™

What can you do with it? Even when you are on the move, you can manage your accounts, get market updates, make trades and more with the power of Schwab. And you can do it all via your Internet-ready cell phone.

And as you'd expect from Schwab, PocketBroker is also available from your choice of Palm™ IIIxe or Palm Vx handhelds. And the RIM Wireless Handheld.™

With Schwab's PocketBroker you get a whole new level of convenience and control. After all, if you're a well-connected investor, you can be a smarter one.

If you already have an Internet-ready phone, you can find us on your phone's web menu or at pb.schwab.com.*

**OPEN AN ACCOUNT:
GET AN INTERNET-READY
PHONE.**

Open a Schwab account online with a minimum of \$10,000 and get your choice of an Internet-ready phone, compliments of Schwab.

Just log on to schwabwelcome.com.

Or call 1-800-3-SCHWAB or visit a Schwab branch near you.

schwabwelcome.com

where every investor is always welcome™

Charles Schwab

creating a world of smarter investors™

*Customers are subject to service levels, privacy, security, fees and usage policies of their wireless service provider.

Offer valid for new Schwab or SchwabOne accounts opened online and funded between 10/15/00 and 2/15/01. Offer does not include retirement and Schwab Institutional accounts. If you work at Schwab, a Schwab company, or service provider, another financial institution, broker-dealer, news or financial information media company, you are also not eligible for this offer. Offer is valid until 2/15/01, unless terminated earlier by Schwab. Terms and conditions apply. Please consult Schwab for details. Web phones are manufactured and supplied by independent third parties that are not affiliated with Schwab. Selection of web phones may also be limited due to market availability or compatibility requirements of the wireless service providers. PocketBroker Service, including real-time quotes, news and trading features may be delayed, limited or unavailable due to limits of wireless coverage and during periods of peak demand, market volatility, system upgrades or maintenance. Palm is a trademark of Palm, Inc. or its subsidiaries and Research In Motion. RIM and the RIM Wireless Handheld family are trademarks of Research In Motion Limited, independent companies not affiliated with Schwab. Domestic US customers only. Limit one per customer. Offers must be redeemed no later than 6/30/01. Deposits must be new to Schwab; margin loans and deposits or transfers between Schwab accounts do not qualify. Exceptions may apply. ©2000 Charles Schwab & Co., Inc. All rights reserved. Member SIPC/NYSE (1000-6562).

EDITOR-IN-CHIEF: Stephen B. Shepard
MANAGING EDITOR: Mark Morrison
CHIEF ECONOMIST: William Wolman
ASSISTANT MANAGING EDITORS:
 Joyce Barnathan, Frank J. Conney, Robert J. Dowling, G. David Wallace
ART DIRECTOR: Malcolm Frouman
CHIEF OF CORRESPONDENTS: James E. Ellis
SENIOR EDITORS: Bob Arnold (New Media), Rick Green (Frontier), Neil Gross, Mary Kuntz, Jeffrey M. Laderman, Christopher Power, Kathy Rebello, Jane A. Sasseen, Ciro Scotti, John Templerman, Lee Walczak (Washington), Elizabeth Weiner, Seymour Zucker
EDITORIAL PAGE EDITOR: Bruce Nussbaum
SENIOR WRITERS: Catherine Ernst, Robert Barker, Aaron Bernstein, Anthony Bianco, John A. Byrne, Peter Elstrom, Gene G. Marcial, Otis Port, Paul Raeburn, Gary Weiss
ECONOMICS: James C. Cooper (Sr. Economist/Bus. Outlook ed.), Kathleen Madigan, Michael J. Mandel (Economics ed.), Peter Coy, Charles J. Whalen, Gene Koretz (Trends ed.), Christopher Farrell (Contributing ed.)
INTERNATIONAL: Patricia Kranz (European, Latin America Editions ed.), Michael S. Serrill (Sr. ed.), Pete Engardio (Sr. news eds.), Rose Brady (Sr. writer), Sheridan Prasso (Asia), Cristina Lindblad (Latin America), Julia Lichtblau (Int'l. finance)
ASSOCIATE EDITORS: Dan Beckue, Diane Brady, Amy Dunkin, Mike France, Toddi Gutner, Steve Hamm, Jr., Ira Sager, Eric Schine, Fred Strasser, Marcia Vickers
PICTURE EDITOR: Lawrence Lipmann
MANAGING ART DIRECTOR: Jay Petrow
SENIOR ART DIRECTOR: Steven Taylor
INTERNATIONAL ART DIRECTOR: Christine Silver
DEPARTMENT EDITORS: Books: Hardy Green. Computers: David Rocks. The Corporation: Nanette Byrnes. E-Business: Timothy J. Mullaney. Finance & Banking: Emily Thornton, Debra Sparks, Heather Timmons. Frontier: Larry Kanter, Robin D. Schatz. Industrial Management: Adam Aston. Internet: Spencer E. Ante. Management: Louis Lavelle. Markets & Investments: Mara Der Hovanesian. Media: Tom Lowry. News: John Protos. People: Susan Berfield. Personal Finance: Susan Scherrek, Anne Tergesen. Science: Ellen Licking. Scoreboards: Frederick F. Jespersen. Technology: Strategies: Mark Stepanek. Telecommunications: Steve Rosenbush. Up Front: Robert McNaughton. Working Life: Michelle Conlin
CONTRIBUTING EDITOR: Mark Hyman (Sports business)
STAFF EDITORS: Dennis K. Berman, Lewis Braham, Jeanette Brown, Heather Green, Jennifer Merritt, Joan Oleck, Kimberly Weisel
COPY EDITORS: Prudence Crowther, Harry Maurer, Marc Miller (Deputy chiefs), Jim Taibi (Asst. chief), Tim Belknap, Aleta Davies, Jack Robbins, Doug Royalty (Sr.), Giles Bunt, Jay Katz, Barry Maggs, Anne Newman, David Pengilly, Malika Percal, Monica Roman, Lourdes Valeriano
RESEARCHERS: Maria Chapin, Gail Fowler, Ada Rosario
PRODUCTION COPY EDITORS: Lawrence Dark (Chief), Céline Keating, Robert J. Rosenberg (Deputy chiefs), Alethea Black, Sarah B. Rubin, Hallberg Hallmundsson, Robert S. Norman, David Purcell, Victoria Davis
ART: Don Besom, Alice Cheung (Assoc. dir.), Jamie Ellis, Edith Gutierrez, Peter Marshutz, Ron Plyman (Asst.). **Graphics & New Media:** Arthur Eves (Creative dir.); Joan Danaher (Graphics dir.); Rob Doyle (Deputy graphics dir.); Jamie Beauchamp, Laura D'Amico, Dan Allen, Alan Baxenden, Joe Calvino, Matthew Kopit, Alberto Medina, Ray Vella (Illustrators); Eric Hoffmann
Imaging: James Leone (Mgr.), Alan Bomzer (Asst.), Rich Michiel, Leo Nietzer, Joseph Rhames
PHOTO EDITORS: Scott Mlyn (Deputy); Ronnie Weil (Sr.); Cynthia Carris Alonso, Bettina Baudoin, Paula Gillen, Kathleen Moore, Anne Murray, Andrew Popper (Assoc.); Sarah Greenberg Morse (Asst.); M. Margarita Eiroa (Traffic mgr.); Lucy Conticello, Mindy Katzman (Researchers); Bruce Hughes (Researcher/Editorial)
EDITORIAL OPERATIONS: Susan Fingerhut (Director); Ken Lockwood (Mgr.). Karen Butcher, Francisco Cardoza, Thomas R. Dowd, Stephen R. Lebron, Jody A. LoGrasso, Jose L. Martin, Peter K. Niceberg, Jane M. Perkinson, Laura Reissman, Karen Turko, Ilse V. Walton, Barbara Wilhelm, Mark Lang
EDITORIAL TECHNOLOGY: Thomas L. Morgan (Director), Christopher Amado, David Bandler, Y. Steve Ben-Ari, Amanda Chan, Lawrence Crowe, Beth Higgins, James Kutz, Neil MacLeod, Mike Marubio, John Navarro, Juan Rodriguez, Jarko Riekkelä, Mauro Varsiano, Julian Wong
BUSINESS WEEK ONLINE: Michael Mercuro (Managing ed.), A. Peter Clem, John A. Dierdorff, John Johnson; Heather Barry, Stefania Lads, Sam Jaffe, B. Kite, Jessica Loudon, Joseph Mandel, Tzyh Ng, Patricia O'Connell, Margaret Popper, Alex Salkever, Mike Schneider, Arney Stone, Kathy Vulsanaj
CORRESPONDENTS: Atlanta: Dean Foust (Mgr.), Charles Haddad, Aixa Pascual. Boston: William C. Symonds (Mgr.), Norm Altier, Rochelle Sharpe, Geoffrey Smith. Chicago: Joseph Weber (Mgr.), Michael Arnold, Robert Berner, Roger C. Crockett, Julie Foster, Pallavi Gopal, Daniel Little. Connecticut: Pamela L. Moore. Dallas: Wendy Zellner (Mgr.). Stephanie Anderson Foster, Lori Hawkins (Austin). Detroit: Kathleen Kerwin (Mgr.). Jeff Green, Joann Muller, David Welch. Los Angeles: Ronald Grover (Mgr.). Larry Armstrong, Christopher Palmeri (Sr. correspondents); Steven V. Brull, Ariane Weintraub. Philadelphia: Amy Barrett (Mgr.). Silicon Valley: Linda Hirstein (Mgr.), Peter Burrows, Cliff Edwards, Ben Elgin, Jay Greene (Seattle), Joan O.C. Hamilton, Robert D. Hof (Sr. correspondent), Jim Kenstetter, Louise Lee, Amy Reinhardt, John Chinal. Washington: John Carey, Paula Dwyer (News eds.), Howard Gleckman, Mike McNamee (Sr. correspondents), Rich Miller (Sr. writer), Amy Borus, Dan Carney, Laura Cohn, Stan Crook, Richard S. Dunham, Paul Magnusson, Nicole St. Pierre, Christopher H. Schmitt, Stephen H. Widstrom (Tech. & You), Lorraine Woeltzel, Catherine Yang; Douglas Harbrecht (Online: Sr. News ed.), Beth Belton (Online: News ed.). Beijing: Dexter Roberts (Mgr.). Bombay: Manjeet Kripalani (Mgr.). Brussels: William Echikson, Frankfurt: Jack Ewing (Mgr.), David Fairbank, Christine Tierney. Hong Kong: Mark L. Clifford (Mgr.), Frederick Balfour, Bruce Emhore, London: Stanley Reed (Mgr.), Kerry Capell. Mexico City: Gen Smith (Mgr.). Moscow: Paul Starobin (Mgr.). Paris: John Rossant (Mgr.), Stephen Barker, Carol Matlack. Rome: Gail Edmondson (Mgr.). Seoul: Moon Ilwan. Singapore: Michael Shan (Mgr.). Tokyo: Brian Bremner (Mgr.), Robert Neff (Contrib. ed.), Ken Beison, Irene M. Kunin
EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fontaine, Andrew Palladino, Nancy Sheed. Information Services: James B. Russell (Director), Susan Rutledge (Research mgr.). John Cady (Technology mgr.), Lara Christianson, Fred Katzenberg, Jennifer Reedy, Andrea David, David Polek, Susan Zegel. **Office Manager:** Roselyn Kopit. Readers Report: Yvette Hernandez. **Reprint Permission:** Wendy Hernandez. **Special Asst. to Editor-in-Chief:** Christine Summerson

GLOBAL CAPITALISM NEEDS SOME FINE-TUNING

In "Global Capitalism," (Special Report, Nov. 6), you assert that market liberalization and more open trade, while essential for sustainable growth and the elimination of poverty, can cause severe damage to poor nations. Our view is different. We believe open trade promotes economic growth when basic institutions such as the rule of law, democracy, and sound monetary and fiscal policies are in place. Open trade can-

manner wherever they have operation and we believe that transparency and public accountability for corporate performance are essential in assessing economic, environmental, and social impacts. That's why GM's 1999/2000 Step Toward Sustainability follows the Global Reporting Initiative (GRI) Sustainability Guidelines, a generally accepted globally applied reporting framework on economic, environmental, and social issues. The GRI is voluntary—and provides a model of innovative governance for global capitalism.

Dennis R. Minar
 Vice-President for
 Environment & Energy
 General Motors Corp.
 Detroit

You raise the pertinent question: Why is it that free markets are producing such wildly different results in different countries? Indeed, the balance is far from reassuring, and

backlash due to an erosion of political support for reform cannot be ruled out. You correctly point out that, without good governance, sound economic management, and educated workers, openness to trade and foreign investment is bound to fail to translate into sustainable growth.

If reform programs are unable to deliver sustained productivity growth, erosion of popular support is inevitable. Yet, although first- and second-generation reform programs have brought along impressive strides in macroeconomic stability and better governance in a number of developing countries, many of them failed to attain sustainable growth, even in those cases where good skill base was available—think Argentina and Brazil. This has to



NICE WORK

"Workers employed by U.S. multinationals in low-income countries earn more than eight times the average per capita salary in those countries"

not work effectively in developing nations that lack these institutions. It is this shortcoming—not trade—on which we should all focus attention.

For example, one study of 150 developing countries finds that every one-percentage-point increase in the ratio of trade to gross domestic product raised income per person by as much as 2%. Another study estimates that workers employed by U.S. multinationals in low-income countries earn more than eight times the average per capita salary in those nations. The challenge is to find ways to develop the necessary economic, political, and social institutions so these nations can share in the benefits of the global trading system.

We agree that multinational corporations should act in a socially responsible

PRESIDENT & PUBLISHER: William P. Kupper Jr.

SR. VP, OPERATIONS: Gary B. Hopkins
SR. VP, ASSOCIATE PUBLISHER: Constance E. Bennett
SR. VP, MARKETING & BUSINESS DEVELOPMENT: Keith L. Fox
SR. VP, BUSINESS WEEK ONLINE: Gregory J. Zorhian
VP, CONSUMER MARKETING/CIRCULATION: Thomas Masterson
VP, U.S. ADVERTISING SALES DIRECTOR: Joanne K. Bradford
VP, STRATEGIC PLANNING & PRODUCT DEVELOPMENT: Kimberly Greer

VPS, SALES: Karen Christiansen (Southeast reg.), Robert H. Kelly (North reg.), Gary London (Midwest region), Michael Dancer (Western region), **MANAGING DIRECTOR:** Alan Lammim (Asia), Paul Maraviglia (Europe), **VP, TECHNOLOGY/NEW MEDIA:** Christopher C. Rousseau
VP, CONTROLLER: Kevin P. Pascale
VP, ADVERTISING BUSINESS & PRODUCTION: Linda F. Cavallo
VP, ACCOUNT DEVELOPMENT & RESEARCH: Charlene Trentin
VP, STRATEGIC PROGRAMS: Jim Richardson

Business Week

A Division of The McGraw-Hill Companies

NOVEMBER 27, 2000 (ISSN 0007-7135) *** 3709
 Published weekly, except for one week in January and one in August, by The McGraw-Hill Companies, Inc. Founder: James H. McGraw (1860-1948).
 Executive, Editorial, Circulation, and Advertising Offices: The McGraw-Hill Companies Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone: 212 512 2000. Telex: Domestic 127039, Int'l 2900127039. U.S. subscription rate: \$49.95 per year; 2 years, \$99.95; 3 years, \$149.95. Single copies: \$4.95. Back issues: \$5. Write for rates in other countries: Subscriber Services, 1-800-455-1300. TDD: 1-800-554-4570.
 Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 490, Hightstown, NJ 08520. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Canada Post International Publications Mail Product Sales Agreement No. 24684.

Registered for GST as The McGraw-Hill Companies, Inc. GST #R12307. Copyright 2000 by The McGraw-Hill Companies, Inc. All rights reserved. Registered in U.S. Patent Office, European Creation Center, McGraw House, Maidenhead, Berks, England. Telephone: 01628-24343; Telex: 58

Officers of The McGraw-Hill Companies, Inc.: Harold W. McGraw III, Chairman, President, and Chief Executive Officer; Kenneth M. Vittor, Executive Vice President and General Counsel; Robert J. Balaban, Executive Vice President, Chief Financial Officer; Frank D. Pergande, Senior Vice President, Press Operations.

PHOTOCOPY PERMISSION: Where necessary, permission is granted to photocopy any article from this issue for personal or internal reference use without express permission of The McGraw-Hill Companies, Inc. (provided). Address reprint requests to Business Week Reprints, 1221 Avenue of the Americas, New York, NY 10020 or call 212 512 3148. ISSN 0007-7135/00/0000-0000-0000
 PRINTED IN THE U.S.A.

ORRECTIONS & CLARIFICATIONS

A compromise from the crusader" (Finance, ov. 13) incorrectly stated that Arthur Andersen is divesting itself of its information-technology consulting practice. The firm is not selling off that practice.

The missing links in the development agenda, examined at a recent Venice meeting convened by the U.N. Industrial Development Organization (UNIDO) and attended by high-ranking representatives of the International Monetary Fund, the World Bank, various governments, multinational corporations, and academic researchers.

In a nutshell, such missing links concern the interactions between the initiative and the public-goods supply systems that fuel the private-sector-led globalization of skills, knowledge, information, and technology—a *sine qua non* for sustained productivity growth. Only as reform programs start addressing add-on these key dimensions of innovative and entrepreneurial development will the risks associated with a growing gap between developing and developed countries in export capacity and access to markets begin to be offset. Policymakers and international organizations should do well to heed this clear lesson taught by the history of successful ching-up.

Carlos A. Magarinos
 Director-General, UNIDO
 Vienna

The answer to the questions posed is that the establishment of the World Trade Organization, strongly endorsed by corporations that are engaged in international trading, took into account only the fundamental financial principle of capitalism. Neither in design nor in practice have social aspects been considered. Certainly, America has enjoyed a cornucopia of affordable goods," but where is there mention that this has been at a price: a trade deficit exceeding \$1 trillion. Given that corporations that depend internationally have strong incentives to shift production to wherever in the world costs are lowest, the deficit will continue to increase.

Robert G. Laidlaw
 Greenwich, Conn.

OPTIONAL FOOD LABELING WORKING FOR CONSUMERS

The Grocery Manufacturers of America, on behalf of the entire food industry, has asked the Food & Drug Administration to implement mandatory consul-

tation before biotech crops and ingredients can be used commercially ("After Taco Bell: Can biotech learn its lesson?" News: Analysis & Commentary, Nov. 6). We have also asked the FDA for specific guidelines on biotech labeling that would set standards for what is meant by terms such as "nonbiotech" or "biotech-free," so that we can continue the voluntary labeling system. The FDA's decision on that request is expected later this year.

Where mandatory labeling has been

tried—in Britain, for example—the practice has implied there is something wrong with biotech ingredients, forcing the foods from shelves and effectively ending consumer choice.

In the U.S., consumers have a choice. That's because while many food companies use biotech ingredients, other manufacturers, organic growers, and retailers have decided to go nonbiotech, which they advertise on labels and store signs. It would be a terrible mistake to tear down our voluntary labeling system

© 2000 The Williams Companies, Inc.



"You can't argue with 'the numbers,' Ed. We'll do better in these crazy times with Williams Communications."

We're #1. Williams offers your business the stability of America's largest next-generation network. Plus global connectivity. For ISPs, ASPs, ANY-SPs — ASAP. Even end-to-end equipment solutions.

Williams
 COMMUNICATIONS

1-800-WILLIAMS • WWW.WILLIAMSCOMMUNICATIONS.COM • NYSE: WMB & WCG



The all new LS 430.
The most inspiring automotive
experience in the world.



LEXUS THE PASSIONATE PURSUIT OF PERFECTION.

lexus.com

© 2000 Lexus, a Division of Toyota Motor Sales, U.S.A., Inc. Lexus reminds you to wear seatbelts, secure children in rear seat, obey all speed laws and drive responsibly. *Only available as part of the Ultra and Custom Luxury Selections. *Available. For more information call 800-USA LEXUS (800-872-5398).

Words on paper barely do it justice.

They do, however, give you some inkling of this remarkable machine. The new LS 430 transports you with effortless grace and speed, courtesy of the most powerful LS engine ever built. Your body will

be cradled in a temperature-controlled, aniline leather-trimmed seat* that conforms to your every curve. Dynamic

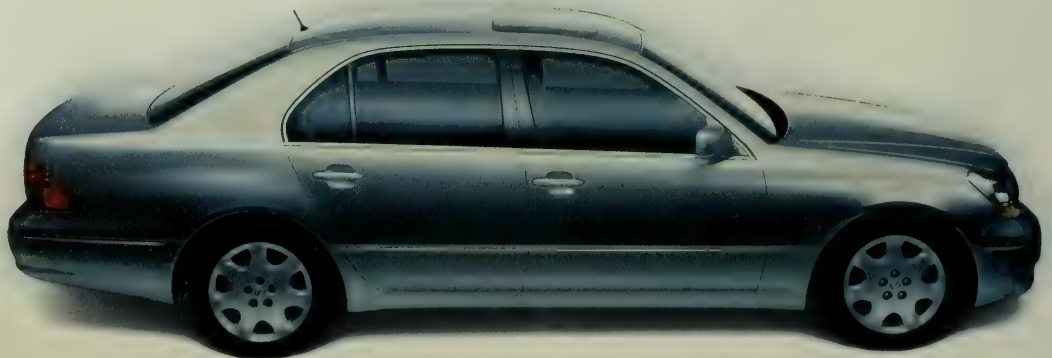


Laser Cruise Control* is ingeniously designed to help keep you an appropriate interval from vehicles traveling ahead. You will be moved by musical clarity rivaling live performances, with the world's

first Mark Levinson® audio system† designed for an automobile. The air you breathe will be cleansed by a unique Intuitive Climate-Control system with advanced filtration.* Alas, these are but mere words.

To truly understand this amazing experience, we recommend that you experience it for yourself. We cordially invite

you to test-drive the new LS 430 at a Lexus dealer located conveniently near you. One drive and we're sure you'll agree that the new LS 430 is indeed the most inspiring automotive experience in the world.



 **LEXUS** THE PASSIONATE PURSUIT OF PERFECTION.

lexus.com

Readers Report

it has given the U.S. the safest, most abundant food supply in the world.

C. Manly Molpus
President and CEO
Grocery Manufacturers of America
Washington

COMPETITION COULD ONLY PROVE PUBLIC SCHOOLS

Suppose there was just one supermarket chain ("Tim Draper's voucher issued," Social Issues, Nov. 6). No other place to buy groceries. After several years of that monopoly, what would it like to shop there? The stores would untidy, would have limited opening hours, the quality of goods would be lousy, there would be frequent shortages, prices would soar unchecked—all these for the lack of competition. You can see the parallel with our public schools. Since even among the public schools some are better than others, let's have public schools compete with each other for their customers/dollars, let the parents choose to which school they send their children. Public schools with a better reputation would attract more students (or vouchers) and would have more money to hire better teachers and to spend on extras. Better-paid teachers would be willing to handle larger classes with commensurate pay. Public schools should be forced to compete, as every individual and enterprise must.

George Seress
Port Charlotte, Fla.

It causes damage, which may or may not be repaired, and which may cause other side effects. Most ordinary folk understand that. Why doesn't he?

Whether the wilderness is attractive or not (a subjective opinion, and not usually a cost factor in an economist's equation), many of us realize that there isn't as much of it left as there used to be, and we keep finding unexpected effects the economists never included in their original analysis.

No one pretends that "environmental damage costs an infinite amount." But history shows that environmental costs are never easy to calculate in the long term, and environmental damage has unforeseen social costs that may be incalculable. Surely, it is better to err on the cautious side? If we were all starving and that Alaskan oilfield was the only thing between us and our demise, then we would probably all agree to drill. But it's not, and we're not.

Barro says Gore's views are "extreme relative to the opinions of ordinary Americans." It is head-in-the-sand conservatives like Barro who hold extreme views relative to the rest of us.

Peter Thornton
Annapolis, Md.

When economists try to make decisions about our country's wild lands, they wrongly assume that the benefit in dollar terms of leaving the wilderness untouched is zero, and that the only good wild land is that generating revenue for the human species.

Scientists, not economists, should decide the fate of our last remaining wild lands. There is scientific evidence that drilling for oil in the coastal plain of the Arctic National Wildlife Refuge in Alaska will cause irreparable damage to hundreds of wildlife species. To many, including Al Gore, the cost of destroying this last vast wilderness is too high. Regardless of how much oil (current estimates put the amount in the coastal plain at only enough to supply the U.S. for less than six months) is recoverable, there should be places that remain untouched from human destruction.

Amy Gulick
North Bend, Wash.

Barro suggests that if Alaska was opened for oil exploration, this would cause Saudi Arabia to sell more oil earlier to avoid lower prices in the future—as if the small amount of oil that would hypothetically be coming from Alaska would be able to drive oil prices down.

Secondly, I say hypothetically because this oil would probably never be pumped, given the costs of pumping it. Oil is so much cheaper to get out of the ground in Saudi Arabia that it doesn't make business sense to get oil from Alaska. It doesn't make sense, that is, without subsidies to the oil companies to offset their increased costs—something Barro conveniently forgets to mention because it would reveal the hypocrisy of his position. After all, he also argues against intervening in the markets. It's fascinating how quickly conservatives' free-market credentials fade when a chance for some tasty corporate welfare for their friends pops up.

Finally, Barro suggests that the benefits of drilling for oil in Alaska outweigh the environmental costs and cites \$9 billion per year of oil company revenues as a benefit. But since taxpayer subsidies are the only way the oil companies could realize these revenues, it's hard to see how "...the benefits extend ultimately to all users of energy." This wonderful scheme ultimately ends up being a transfer of millions or billions of dollars from taxpayers to oil company stockholders. Republicans who own oil stocks would undoubtedly call this a benefit to society, but I call it what it is: a corporate welfare boondoggle.

Robert Parker
Arlington, Va.

BusinessWeek online

The full text of Business Week, the Business Week Daily Briefing, and five years of BW archives are available on the World Wide Web at:
www.businessweek.com
and on America Online at Keyword: BW.

HOW TO REACH BUSINESS WEEK

LETTERS FOR READERS REPORT
All letters must include an address and daytime and evening phone numbers. We reserve the right to edit letters for clarity and space and to use them in all electronic and print editions.
Mail: Business Week, 1221 Avenue of the Americas, 43rd floor, New York, NY 10020
Fax: (212) 512-6458
Internet: bwreader@businessweek.com
America Online: readersbw

SUBSCRIBER SERVICES
For individual subscriptions, corporate subscriptions, renewals, changes or problems, and single copies.
Phone: (800) 635-1200 or (609) 426-7500
Fax: (609) 426-7623
Internet: bwcustsv@businessweek.com
Library fee-based services: (212) 512-6704

REPRINTS AND COPYRIGHT PERMISSIONS
For custom reprints (minimum order of 1,000) contact:
(212) 512-3148
Fax: (212) 512-2337
Internet: www.businessweek.com/reprints/
For permission contact:
Phone: (212) 512-4801
Fax: (212) 512-4938

Economic Viewpoint

GORE'S 'RECKLESS AND OFFENSIVE' MISSION FOR THE ENVIRONMENT

The recent idea in oil prices highlight an energy policy as an area of conflict between the two presidential candidates. George W. Bush favors expansion of U.S. supply, including oil exploration in Alaska. Al Gore opposes expansion in Alaska, Al Gore opposes expansion in Alaska, Al Gore opposes expansion in Alaska. He also argues that any expanded drilling would be delayed for the years and would not help the current situation. The last point is odd, because policymakers ought to value energy sources even if they

DRILLING IN ON THE ALASKAN WILDERNESS DEBATE

I read "Gore's reckless and offensive mission for the environment" (Economic Viewpoint, Nov. 6) with amazement and horror. Thank heaven the economists aren't running the country. Contrary to Robert J. Barro's arguments, most ordinary people have a grasp of the real costs as well as pure economics. Somewhere does the professor take these to account. He glibly dismisses them with his note of "hypothetical damage to vast wilderness that is not especially attractive." Drilling isn't hypothetical.

A man in a dark sweater sits at a desk, looking down at a small object. A large, polished wooden leg of a chair or table dominates the foreground, partially obscuring the view. The background shows a wall with papers and a desk lamp.



WEB HOSTING FOR A YOTTABYTE WORLD

@business hosting

IBM E-BUSINESS HOSTING™ IS NOT LIKE WEB HOSTING AS YOU KNOW IT. WE HAVE STRESS-TESTING LABS THAT SIMULATE A SITE'S CRITICAL PEAK LOADS - ENSURING A SMOOTH RIDE WHEN IT GOES LIVE. WE HAVE SCALABLE STORAGE AND NETWORK SOLUTIONS TO KEEP PACE WITH YOUR GROWING REQUIREMENTS. AND WE HAVE E-BUSINESS HOSTING CENTERS AROUND THE WORLD TO HELP YOU MANAGE IT ALL. E-BUSINESS HOSTING. ONLY FROM IBM.

Call 1 800 IBM 7777, ask for host or visit ibm.com/e-business/hosting

BY GARY S. BECKER

RESIST THE PRESSURE TO SPEND THE SURPLUS



CONTROL:
Voters can keep down budget outlays by punishing politicians who increase spending instead of cutting taxes

Gary S. Becker, the 1992 Nobel laureate, teaches at the University of Chicago and is a Fellow of the Hoover Institution. He is a winner of the National Medal of Science.

During the Presidential campaign, Governor George W. Bush and Vice-President Al Gore offered different visions on how to manage budgetary surpluses generated by a strong economy and rapidly rising tax revenues. Whoever wins will face strong political pressures to spend most of the surplus on the expansion of existing domestic and military programs as well as on the creation of new ones. The truth is that few politicians, conservative or liberal, are able to resist the pressure to spend applied by constituent groups.

Such groups usually are able to increase their governmental subsidies when tax revenues are abundant and the economy is expanding. My colleague Casey Mulligan and I studied public spending in many nations that have enjoyed unexpected tax-revenue windfalls, and we found that regardless of the political system, government spending usually rises, absorbing about two-thirds of any new surplus.

For example, when the price of oil was high in the 1970s and early 1980s, major oil-producing nations, including both dictatorships, such as Saudi Arabia, and democracies, such as Mexico, poured their surpluses into large spending increases on military hardware or social programs. This will happen again in these countries if oil remains above \$30 a barrel for an extended period.

Particularly relevant for understanding the pressures that will confront the U.S. President-elect is the growth in federal spending after 1995, the year that budget projections turned from budget deficits to large surpluses. This is an apt example, because the Republicans controlled Congress from 1994 to 2000, and the Contract with America announced by Republican congressional leaders in 1994 called for a scaled-down federal government.

The contract may have been effective at first, considering that both defense and nondefense spending fell in 1995 and 1996, even though the national budget was still in deficit at that time. But while outlays on defense remained flat for a while, spending in other areas began to take off in 1996, long before the campaign rhetoric heated up. Spending on domestic activities grew more rapidly each succeeding year, as did expenditures on the military after 1998.

In fact, even excluding outlays on the military and entitlement programs, such as Social Security and Medicare, spending levels approved for fiscal 2000, when combined with last year's increases, will amount to an annual two-year average growth of 5.2%, the fastest growth rate

since 1974. The Republican desire to be the party of small government could not defeat powerful political interests.

Some argue that congressional Republicans slowed down the growth in spending, compared with what could have happened. That is probably true. Nevertheless, Republicans as well as Democrats were eager to go on a spree once released from the shackles of budget deficits.

One telling piece of evidence is that the number of lawmakers of either party who voted to cut federal spending fell to under 400 in 1997, after rising to over 500 in fiscal years 1995 and 1996. In 1998 and 1999, the number supporting cuts fell to negligible levels. To avoid offending important constituencies, the Republicans have been exceedingly receptive to the large increases in domestic spending proposed by President Clinton for fiscal year 2000. Indeed, the Republican-controlled Congress exceeded the President's budgets on numerous programs, including federal support to education, housing, agriculture, and transportation.

PUNISHMENT. Some conservative think tanks have accused the Republican leadership of throwing away a golden opportunity to stop the growth of the federal budget. Although these critics have a good point, the leaders' response to a growing surplus is "normal" politics, whatever one may think of that. Regardless of the political leaders' governments in all political systems usually cannot resist spending most of what is collected in tax revenues.

The only way for the electorate to control the growth of government spending is to punish politicians who increase spending instead of reducing taxes. Voters need to offset the appeal of powerful blocs by putting their own pressure on legislators and other government officials to cut income and other taxes, especially when budgets are running surpluses. A bipartisan Congress under the leadership of President Reagan did implement major tax reforms in the 1980s that were popular with voters, despite budget deficits.

However, I am pessimistic about the current prospects of holding the line on spending when so many special- and general-interest groups want ever bigger government subsidies and grants. So, while stable spending and a major tax reduction such as that promised by Governor Bush or a large debt reduction as advocated by Vice-President Gore are possible, it will take skilled and dedicated leadership to enact such reforms—as well as a lot of luck.

23:00
00:00
01:00
02:00
03:00
04:00
05:00
06:00
07:00
08:00
09:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00

the global e-solutions team

**"Being global in the new economy is like an inside joke.
You have to be there to get it."** — Patrick Litré, CEO



BUSINESS INVENTION

BRANDING/DESIGN

TECHNOLOGY SOLUTIONS

PROGRAM MANAGEMENT



headstrong

Strong opinions. Strong results.

www.headstrong.com

BY GENE KORETZ

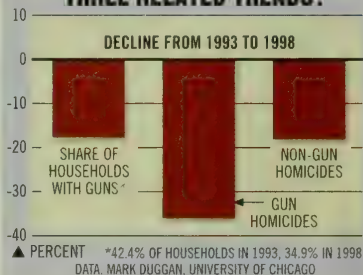
NEW AMMO IN THE GUN DEBATE

Yes, ownership does foster crime

The U.S. has the highest gun ownership rate in the world and the highest murder rate. Although those facts are enough to convince many observers that guns breed violence, firearms owners and manufacturers have long argued that the opposite is true—that lawful possession of a gun tends to deter crime.

That argument has sparked a hot debate among economists. Most concur with the views of gun critics, contending that greater gun availability means that more weapons fall into the hands of criminals.

ARMS AND VIOLENCE: THREE RELATED TRENDS?



But others find that increased gun ownership results in less criminal activity. Indeed, *More Guns, Less Crime* is the title of a controversial book published two years ago by then-University of Chicago economist John R. Lott Jr. (now at Yale University). Lott found that violent crimes dropped significantly in a number of states after laws were passed allowing citizens to carry concealed weapons.

The latest entry in the debate is a forthcoming *Journal of Political Economy* study pointedly titled "More Guns, More Crime." Authored by another University of Chicago economist, Mark Duggan, the study addresses a serious problem with past studies of the issue: Because guns aren't registered in most areas of the country, researchers have had to rely on highly imprecise indicators to estimate levels of gun ownership in different geographical areas.

To solve this problem, the study relies on a unique data source. It uses detailed state and county data on the circulation of one of the nation's largest gun magazines from 1980 to 1998. These circulation data are an excellent proxy for

gun ownership levels and shifts, Duggan notes, because they are highly correlated with a number of ownership-related trends—from local gun-accident death rates and the annual number of local gun shows per capita, to National Rifle Assn. membership levels and household surveys relating to gun possession.

Duggan finds a strong positive relationship between changes in gun ownership in an area and future changes in gun homicides. In contrast, changes in ownership rates had no effect on homicides where other weapons are used (which account for a third of all murders)—a finding that underscores the substantial impact of ownership on gun murders.

Duggan also reports two results that undermine the notion that allowing citizens to carry concealed arms reduces crime. He finds no evidence that gun ownership went up in states passing such laws. And, in such states, counties with high levels of legal gun ownership did not experience larger declines in crime than counties with low ownership levels.

From 1993 to 1998, a period when most crime rates were falling, the share of U.S. households with at least one gun dropped from 42.4% to 34.9%. At the same time, the number of gun homicides fell 36%, exactly twice as much as homicides committed with other weapons.

Duggan's analysis attributes a third of the greater decline in gun murders in this five-year period to the decrease in gun ownership, with the biggest impact in states with the biggest ownership drops. "The idea that increases in gun ownership reduce crime," he says, "just doesn't square with the facts."

REDEFINING CORE INFLATION

New measures cause more worry

What, me worry about inflation? In both Europe and the U.S., consumer inflation has picked up steam this year, running at least a percentage point higher on a year-over-year basis than 1999. The markets, however, prefer to focus on so-called "core" inflation, which excludes volatile food and energy prices and remains relatively low. But economists at Lehman Brothers argue that this measure may not be the best definition of core inflation, which is supposed to reveal the underlying trend. Rather than fluctuating randomly, for example, food prices have generally moved in line with real economic activity in recent years.

As it happens, statisticians over the

years have proposed alternate definition of core inflation that they claim are better at reflecting basic inflation trends. In general, such measures are constructed by placing less weight on those items that are farthest from the average or that exhibit the greatest price variability.

Using several of these alternate measures of core inflation, the Lehman economists find that they all are still running lower than overall consumer inflation in both Europe and the U.S. Unlike the traditional core definition, however, these measures have also accelerated sharply and are tracking much closer to consumer prices in general.

The implication is that the pickup in consumer inflation may be more durable than many expect. Indeed, Lehman notes that households' inflation expectations in Europe are also up sharply this year.

STARTUPS: WHERE THE ACTION IS

Communications is the hot spot

The number of business startups in the U.S. rose sharply early in the current expansion, leveled off in the mid-1990s and has since fallen to its lowest level since the 1980s. But that doesn't necessarily mean the entrepreneurial spirit is weakening. The information technology sector is still in a "vibrant growth phase," reports Dun & Bradstreet Corp., which keeps tabs on business births.

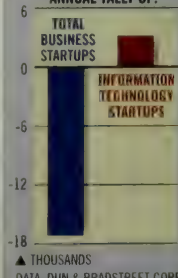
Although the annual number of startups fell 10.2%, to 151,016, from 1995 to 1999, the number of IT starts jumped 42%, to 10,795. Meanwhile, the average number of jobs created by an IT start rose to 8.5, vs. 6.1 created by new ventures in general.

Not all IT startups are setting new records, however. D&B reports that startups in computer-related industries—hardware, software, and data-processing

services—have plateaued since 1997, while communications-related industries are still spawning new ventures at a sharply rising rate. Last year, startups in the latter sector, which includes both communications equipment and services, created an impressive 10.6 jobs per venture.

CREATIVE CROSSCURRENTS

CHANGE 1995-1999 IN ANNUAL TALLY OF:



INSTRUMENTS FOR PROFESSIONALS™

THE PRINCIPLES OF AVIATION

In the demanding world of aeronautics, every single component must be officially approved and certified. We apply the same principle to the manufacturing of our wrist instruments.

Our movements meet all the precision and reliability criteria required to obtain chronometer certification. Moreover, every last detail of our watches is designed for intensive use.

One simply does not become an aviation supplier by chance.



ADLER'S

3501 Veterans Blvd, Metairie, Louisiana 504-568-0610
722 Canal Street, New Orleans, Louisiana 504-523-5292
Oakwood Mall, 197 Westbank Expressway, Gretna, Louisiana 504-362-5969

FOR A CATALOG PLEASE CALL 800/641 7343

www.breitling.com

THE ESSENCE OF BREITLING

CHRONOMAT. Selfwinding chronograph. BREITLING's leader model, created in cooperation with the Italian *Frecce Tricolori* elite flight team.



BREITLING
1884

BY STEPHEN H. WILDSTROM

tech@you@businessweek.com

THE ELECTION: HOW THE WEB BLEW IT



Slow-loading sites, stale info, built-in glitches—the Net's big night was a big bust

Election night and the long morning after should have been the World Wide Web's finest hour. But much of the opportunity created by the Web's unique ability to make vast amounts of information available on demand was squandered by lack of imagination, the usual technical glitches, and sloppy quality control. Web sites gave political junkies the opportunity to check on the odd House race in Idaho, but didn't add all that much.

I spent election night perched in front of a TV with a computer on my lap. As I flipped from channel to channel, I checked out the Web sites of ABC News, CNN, MSNBC, and, for results of local elections and ballot propositions, the *Washington Post*. (I quickly abandoned the inferior CBS News site.)

Early on, MSNBC—which served as the Web presence of NBC News—seemed the most promising. Its pages were attractive and well-organized. And if you wanted to track a local election in Wilkes-Barre, Pa., or Grand Rapids, Mich., MSNBC offered links to the Web sites of TV stations in each state. But as the result flooded in and the tension rose, MSNBC's site bogged down. By 10 p.m., pages were taking so long to load that the site was effectively unusable, and for the rest of the night I could get information from MSNBC only sporadically.

SUPERFICIAL COMMENTARY. As the night wore on, ABC became my favorite. The best feature was a U.S. map on their Presidential results page. Hold the cursor over any state, and a little box popped up reporting the latest vote count. Although the feature broke down briefly a few

times, it worked well on the whole. The CNN site was a lot like the network: solid but unspectacular. It offered a good map with color-coded Presidential results, but clicking on a state didn't take you to a detailed page. And a feature that offered custom local results only went down the ballot to House races, which wasn't worth the trouble.

In commentary, the Web sites consistently lagged behind the networks, and the content was superficial and often confusing. At one point, for example, a CNN headline read "Ensign picks up fourth open seat for Democrats," but the story began, correctly: "Republican John Ensign...defeated Democrat Ed Bernstein in Nevada." At MSNBC headline read "Networks retract Florida projection," but for about half an hour, clicking on it produced a story that read "Al Gore won three critical battle ground states Tuesday, taking Florida, Michigan, and Pennsylvania..."

The Florida retraction was a good example of the Web's failure to add much value. The retraction of the Florida call late in the evening was one of the most confusing events of a baffling night. On the air, the networks left the odd—and erroneous—impression that they had been bullied into the change by the Bush campaign, and none of their Web sites clarified the matter. Only the *Washington Post* came up with a story explaining that there were serious problems with exit polls.

Some of the Web's election night problems



are inherent in the technology. Browser pages are not automatically updated when the information on the Web site changes. To see the latest information, you had to follow ABC's advice and "continuously reload this page." To make matters worse, using the back button or a bookmark to return to a page viewed before will almost always bring up an old copy from memory, not a fresh version from the site.

One of the advantages of Web publishing is that mistakes can be corrected immediately, but MSNBC still managed a version of "Dewey Defeat Truman." I went to bed about 1 a.m. and when I checked back at 6 a.m., MSNBC's site declared "Bush Apparent Winner." The MSNBC Web crew did a story after all the networks blew their Florida calls for the second time, then called it a night. The story was posted at 3:45 a.m., just about the time that everyone else retracted their Florida call. The declaration of Bush's could still be right, but the MSNBC story was an embarrassing end to a night when the Web fell well short of its promise.

Rating the Election Sites

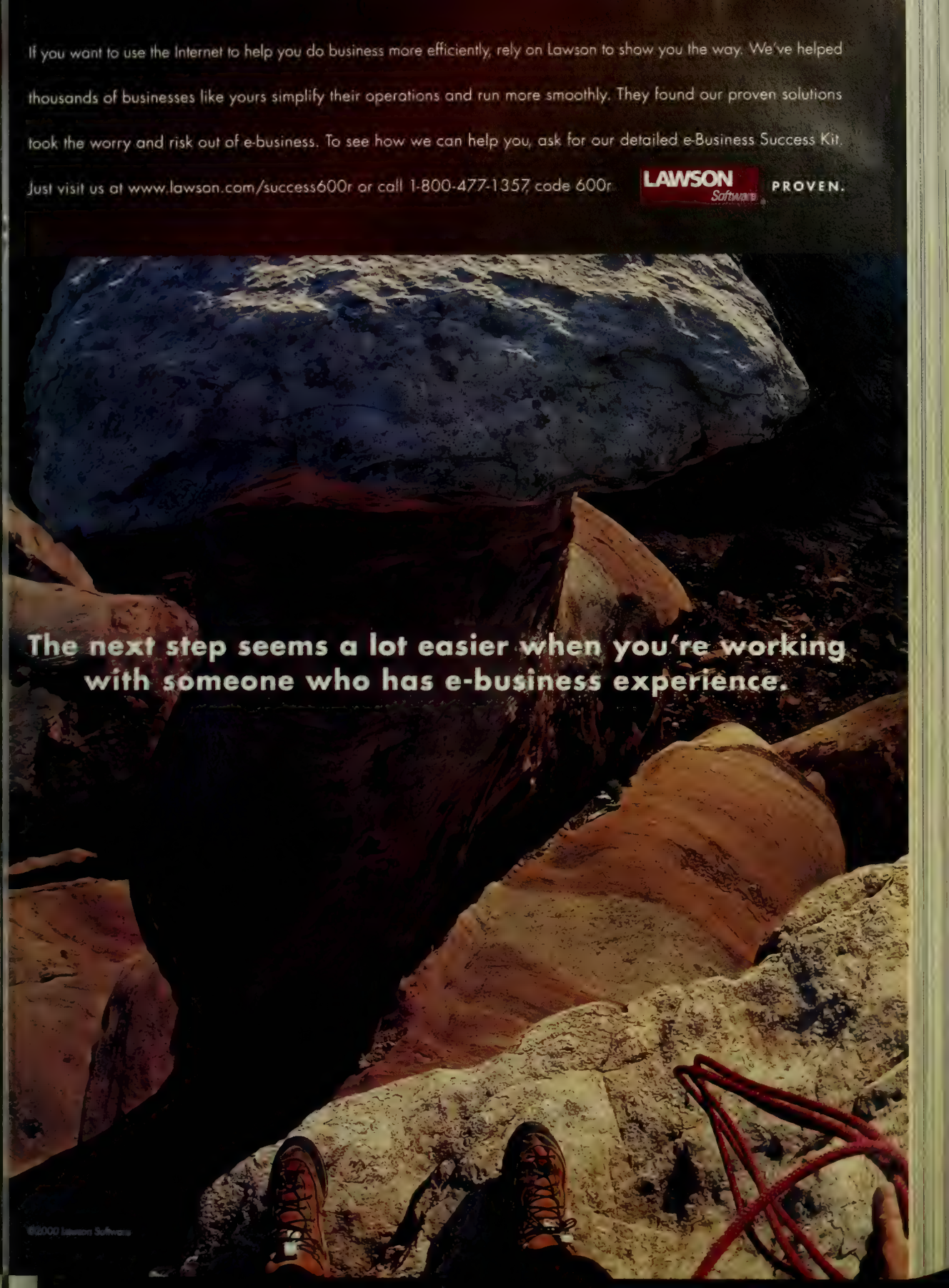
SITE (IN ORDER OF PREFERENCE)	ELECTION DAY TRAFFIC (IN MIL. OF VISITORS)	COMMENTS
ABC.COM	1.21	Timely, easy to get crucial information
CNN.COM	3.52	Like the network: Solid but unspectacular
MSNBC.COM	2.64	Disappointing. Slow, not updated regularly

DATA: MEDIA METRIX, BUSINESS WEEK

If you want to use the Internet to help you do business more efficiently, rely on Lawson to show you the way. We've helped thousands of businesses like yours simplify their operations and run more smoothly. They found our proven solutions took the worry and risk out of e-business. To see how we can help you, ask for our detailed e-Business Success Kit. Just visit us at www.lawson.com/success600r or call 1-800-477-1357, code 600r.

LAWSON
Software

PROVEN.



The next step seems a lot easier when you're working with someone who has e-business experience.

THE VIRTUE OF PROSPERITY

Finding Values in an Age of Techno-Affluence

By Dinesh D'Souza

Free Press • 284pp • \$26

THE MORAL PERILS OF PERMANENT PLENTY

Every once in a great while, perhaps once or twice a century, the established economic order is overturned as a result of technological advances and organizational innovation. From the 1760s to 1830s, steam engines and textile mills propelled the Industrial Revolution. A second industrial revolution of 1880 to 1930 was shaped by the spread of electric power and mass production. Today, the Internet and knowledge-based businesses are combining to create a New Economy.

Such rapid economic changes also reshape culture, politics, and everyday notions of right and wrong. An enthusiasm for the methods of science and for the very idea of progress gained widespread acceptance during the first Industrial Revolution. And it's no coincidence that the early 20th century movement toward mass democracy gained momentum with the spread of mass production. What about now? How will the Information Economy change the rules of the political game, influence visions of a just society, and shape new ethical dilemmas? These are the ambitious matters Dinesh D'Souza, a research scholar at the American Enterprise Institute, struggles with in *The Virtue of Prosperity*. The author asks the right questions, and I found many of his answers provocative. Yet by the time I finished this book, I was deeply disappointed.

D'Souza doesn't doubt that there is a dazzling New Economy, reflecting the global triumph of capitalism, the rise of the digital entrepreneur, and the spread of the Internet. Unlike many other New Economy books, his doesn't dwell too much on the forces propelling what he calls "techno-capitalism." Instead, he concentrates on fathoming the implications for American society—the New Economy's epicenter.

As D'Souza sees it, we are experiencing two fundamental breaks with the

past. For one, thanks to techno-capitalism's unprecedented wealth-generating capacity, we are entering an era of permanent prosperity. "The problem of scarcity, which has plagued our species from the dawn of mankind, is vanishing before our eyes," says the author. What's more, D'Souza believes, biotechnology will soon change everything. It will make it possible for mankind to eliminate disease, and, on the dark side, to create "designer children." We may even merge with computers. "It is the ability to will our future as a species—a power conferred by these new technologies—that separates our predicament from that of every generation that has come before us," he says.

These two developments—universal prosperity and genetic engineering—will, he says, shape America's moral dilemmas and political struggles in the coming years. Traditional divisions between Democrat and Republican, liberal and conservative, will dissolve as citizens instead coalesce either as techno-capitalism optimists or pessimists. Some questions before them: Is life losing its meaning with affluence? Is it right to eradicate childhood diseases through genetic engineering? How about tweaking the genetic code to reduce violent impulses?

This is undeniably heady stuff. And, much like the books that followed the cloning of Dolly the sheep, D'Souza offers some provocative nuggets. Yet this book is disappointing on many levels. Many of the author's claims are too broad. Few economists, including ardent New Economy boosters, would endorse his vision of the end of scarcity. And his willingness to hurtle so far into

the biotech future, along with vagueness about how long it will take for dramatic developments to occur, makes one question his prognostication.

The way in which D'Souza handles time is also worrisome. He uses long-run forecasts to dismiss short-term concerns—and vice versa—even though it's unclear what he means by short-term and long-term. For example, he asserts that inequality is a short-term phenomenon, overcome by the "egalitarian benefits of technological capitalism [that] are achieved only in the long run." As John Maynard Keynes famously remarked, in the long run we are all dead.

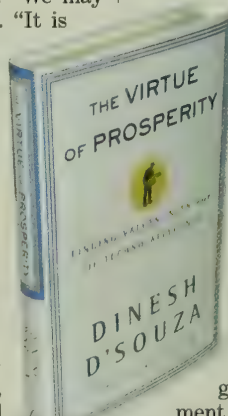
Even less convincing is D'Souza's blithe dismissal of government as little more than a spectator and a nuisance in the New Economy. Its proper role is to keep taxes low, monetary policy stable, and borders open, he says. "If the new president changed into his pajamas every afternoon and took a long nap, like Calvin Coolidge, this would probably be good for the market and good for the country," he writes. Really? That's not what most people who went to the voting booths on Nov. 7 believed. Government is vital to promote global environmental progress, intellectual property rights, financial stability, international trade, and more. And in a democracy struggling over such troubling questions as genetic engineering, government must be a vital player.

Indeed, technology comes across as an unstoppable force. D'Souza seems to think little can be done to prevent some horrifying developments other than offering exhortations to private virtue. Yet Americans have been willing and able to restrain technology, from containing nuclear power to shunning eugenics. But D'Souza doesn't like such a balanced approach—nor any kind of subtlety. His is a world of extremes.

Don't get me wrong. D'Souza has picked the right topic. The New Economy will shape us in unexpected ways. It's just that his discussion falls far short of his ambitions.

BY CHRISTOPHER FARRELL

Farrell is a contributing economic editor.



UNIVERSAL WEALTH AND BIOTECH MIRACLES ARE TOSSING UP CHALLENGES TO OUR CULTURE

Drink what
your heart
tells you to.



The great taste you love features a surprising benefit.

Did you know that one in four American adults suffers from high blood pressure? And leading health authorities now agree that diets containing foods that are good sources of potassium and low in sodium, like Tropicana® Pure Premium®, may reduce your risk for both high blood pressure and stroke. So go ahead, enjoy more of the great taste you love and help protect your cardiovascular health while you're at it.



For more information, visit www.tropicanahealthnews.com



Make more of your leisure.



Digital solutions that make more of life.

It's a jungle out there. To stay on top, you have to put out 110% all the time. Late nights, weekends, extended business trips—they all come with the territory. So your leisure time is more precious than ever. Toshiba understands, and responds with a range of digital products that make so much more of entertainment at home. Take our HDTV. With its astonishing picture resolution, Dolby® Digital Audio Outputs and 16:9 wide screen format, Toshiba HDTV turns watching a movie into an unforgettable experience. And our leading role in the development of DVD—for which we received an EMMY®—is reflected in the superior picture and sound quality of our DVD players. It's just part of what we do at Toshiba to help you make more of life.



Demand More

In Touch with Tomorrow
TOSHIBA

For more information, visit www.toshiba.com/tacp

FOUNDING BROTHERS
The Revolutionary Generation
 By Joseph J. Ellis
 Knopf • 304pp • \$26

WHEN EGOS DEFERRED TO DUTY

Political reputations hung in the balance last week. Few fared as poorly as the Founding Fathers, whose electoral college was portrayed as a crude, destabilizing anachronism. And yet, in the suspenseful days following Nov. 7, respect for the rule of law and the peaceful transfer of political power only highlighted the strength of the institutions these men forged. In any one of dozens of other countries, party leaders might have dispatched tanks, not ex-Secretaries of State, to settle the dispute.

In his suddenly newsworthy book, *Founding Brothers*, Joseph J. Ellis sets out to explain the wellsprings of this remarkable political durability and flexibility. He unearths no new historical evidence, but it would be unfair to fault him on such academic grounds. As in *American Sphinx*, Ellis' National Book Award-winning study of the enigmatic Thomas Jefferson, *Brothers* takes on timeworn topics and leavens them with telling details and even psychoanalysis. What emerges are bustling stories that achieve Ellis' goal of describing how our early republic "looked and felt."

Ellis works here from a weaker thesis than in his previous books. In fact, it's not so much a thesis as it is a narrative setup. He begins by pointing out that Americans now view the success of the nation as a "foreordained unfolding of God's will," then demonstrates that nothing was certain in the chaotic decades after the Declaration of Independence. America could have easily splintered into regional republics or fallen to the killing machine of the British military. The country, says the Ford

Foundation Professor of History at Mount Holyoke College, was "an improvisational affair, in which sheer chance, pure luck... and specific decisions" determined not just the country's survival as a fledgling, but the institutions and character that make it the world's longest-running republic.

To illustrate this, Ellis tunnels deep into the historical record, ignoring discussions of political philosophy and even the role of everyday citizens. He delights in describing the day-to-day worlds of eight Revolutionary-era leaders. The group is now amorously tagged the Founding Fathers, but their allegiances and rivalries make them the passionate, combative pack of *Founding Brothers*. The cast of characters: John and Abigail Adams (essentially as a team), Aaron Burr, Benjamin Franklin, Alexander Hamilton, Jefferson, James Madison, and George Washington.

Ellis' lucid style helps capture the essence of these men and that of their young country. In six 30-40 page vignettes, he describes how each weighed his or her own ego against duty to the new country. Take one of Ellis' early installments. During a private dinner party hosted by Jefferson, the then Vice-President convinces rivals Treasury Secretary Alexander Hamilton and Virginia congressman James Madison to compromise on two crucial issues: Hamilton agrees to the establishment of a capital, Washington, D.C., on a plot in the Virginia wilderness. Meanwhile, Madison consents to Hamilton's demands that the states' old debts be assumed by the national government. While neither side was happy about the pact, Ellis says it

helped create financial legitimacy for the nation while mollifying the linchpin state of Virginia during a period of fragile unity.

This is extremely well-trodden territory. But Ellis has such command of the subject matter that it feels fresh, particularly as he segues from psychological to political, even to physical analysis. In the course of a few paragraphs, Ellis describes Jefferson's lingering migraine headaches, breakdown the national debt, and provides an analysis of Madison's political journey from supporter to detractor of Hamilton.

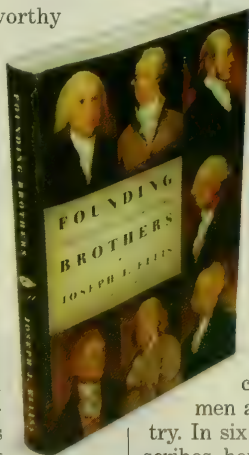
The author's diverse skills are especially evident in his retelling of the infamous morning duel between Alexander Hamilton and Aaron Burr. Ellis gives a detailed account of the confrontation, and seems to get at the political and personal enmities that probably played out in the duelists' minds. He is less successful in describing some of the written records of the period, such as the correspondence between the aged Jefferson and Adams.

The author sheepishly concedes that his method may seem quaint to some readers. He takes a head-on, almost reverential approach to Great Men in an era that favors "outsider" history, consisting mainly of accounts of economically marginal groups. As the author of several books on the Revolutionary era, he retains the right to rummage among the American patriarchs. Unfortunately for that same reason, some of his material on Jefferson and Adams may feel stale to those who have read *American Sphinx* or *Passionate Sage*, his study of John Adams. *Brothers* carries a bit of a commercial taint, like a rock album in which old songs have been repackaged with new cover art and some spare B-sides.

Never mind. As the country endures its first political crisis of the 21st century, Ellis' storytelling helps us more fully hear the Brothers' voices. Standing out is none other than Jefferson. Describing the dinner-table compromise brokered but loathed, he realizes "the necessity of yielding for this time... for the sake of the union, and to save us from the greatest of all calamities."

BY DENNIS K. BERMAN

Berman studies the history of technology as an e-business reporter.



ELLIS DESCRIBES THE PATRIARCHS WHO MADE THE FIRST CRITICAL COMPROMISES

BY JAMES C. COOPER & KATHLEEN MADIGAN

THIS POLITICAL SHOCK WON'T UPSET THE SOFT LANDING

But a prolonged squabble could unnerve the markets—and consumers

U.S. ECONOMY

Oil shock? Market shock? Up to now, neither has been strong enough to wreck the economy. Now let's try political shock, as the U.S. fumbles its way toward electing its 43rd President. Will the failures of the electoral system bring down the economy in the next few months? Don't bet on it.

First of all, people don't seem to mind the election delay, judging from a *New York Times*/CBS poll. Indeed, if households and businesses didn't flinch at a shutdown of the federal government or even an impeachment, then little delay in deciding on the next President is unlikely to ruffle their feathers. Once the winner is determined, the economic outlook will return to business as usual—meaning, back to the fundamentals.

So far, those basics add up to nothing worse than a soft landing, almost exclusively as a result of the less accommodative financial conditions wrought by the Federal Reserve. Stingier banks, tighter credit markets, and costlier equity financing are already starting to temper the recent booming growth in both consumer spending and business

investment in new equipment. In particular, households bought fewer cars in October, and overall retail sales began the fourth quarter on a soft note (chart). Political shock itself only becomes a problem if it seriously affects the stock market, which has become a key determinant for the strength of domestic demand in its expansion. Most likely, any damage to stock prices will be transient. And so far, the electoral mess only seems to be exaggerating ongoing market concerns over profit expectations in a slowing economy.

Moreover, the expected post-election gridlock in fiscal policy will more likely do more good than harm. In the absence of any major fiscal stimulus, the markets know that the Federal Reserve will remain firmly in control of the economy.

THE FED SEEMS CONTENT that the slowdown is leading toward the desired soft landing, although policymakers are still not convinced that the threat of rising inflation is abating. After hiking its overnight rate from 5.5% in June, 1999, to 6.5% in May, 2000, the Fed at its

Nov. 15 policy meeting continued to leave interest rates unchanged. The Fed admitted that the economy could slow to a pace even below its long-run trend, generally taken to be 3.5% or so. However, it said that the slowdown in demand to date has not been sufficient to alter its view that the risks in the outlook are weighted toward conditions that could generate higher inflation.

The Fed faces a rough road, though. Because consumer spending is the source of the excess demand that is straining the economy's productive resources, and because monetary policy is a blunt instrument, the Fed must tame consumers without killing off capital spending, which has been a key engine for growth and has provided key benefits for productivity and inflation.

So far, policymakers are succeeding. Thanks chiefly to Fed tightening, the wealth effect on consumers is diminishing, yet there are no signs of any sudden retrenchment in capital spending. The broad Wilshire 5000 stock index is down 12.6% from its March peak, and that measure of equity value is no higher than it was a year and a half ago (chart).

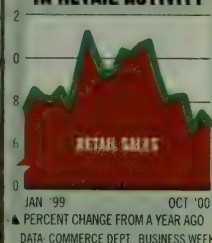
At the same time, labor markets remain solid, and income prospects still look bright. Election uncertainty won't last long enough to disrupt spending patterns.

EVEN SO, THE CONSUMER OUTLOOK is where political uncertainty could come into play. Household outlays had grown two percentage points faster than income, because of the wealth effect from ballooning stock prices. Market volatility this year—which started long before Americans heard the terms “pregnant chad” and “hand recount”—has curbed the wealth effect, and consumer spending is already slowing more in line with income growth. A continuation of that trend is the main reason to expect slower overall economic growth in 2001.

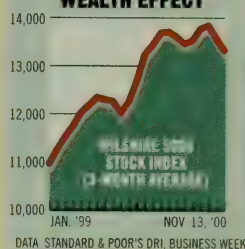
The immediate risk is that prolonged political uncertainty, especially in the form of a major legal challenge to the Florida results, will roil the financial markets. That could further erode consumer confidence and spending. A key piece of data to watch will be the Conference Board's November consumer confidence index, due out on Nov. 28.

Nonetheless, even the recent mild consumer slow-

A SHARP SLOWDOWN IN RETAIL ACTIVITY



THE WANING WEALTH EFFECT



Business Outlook

down comes at an inopportune time for retailers gearing up for the important holiday-buying season. Retail sales in October posted a tepid 0.1% gain from September, and the growth rate from a year earlier is slowing. Clothing shops, department stores, and building-supply businesses posted gains that were offset by softer sales elsewhere.

Car buying fell back noticeably in October, and excluding autos, retail sales rose 0.4% in the month. Unit sales of cars and light trucks dropped to an annual rate of 16.7 million from 17.8 million in September. However, manufacturers are offering new incentive programs in November, which should lift sales.

HIGHER ENERGY COSTS are another depressant on consumer spending, and the impact seems likely to continue a while longer. On Nov. 14, OPEC decided against boosting oil production, fearing that prices could fall sharply next year as economic growth slows. Crude-oil prices averaged almost \$33 per barrel in October, and in mid-November they are running about \$34. That's up nearly \$10 from a year ago, an increase estimated to cut about ½ of a percentage point off economic growth.

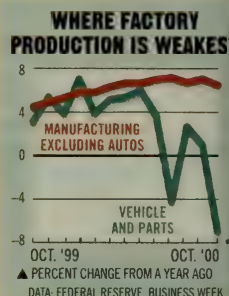
While holiday sales may not be booming, they are not likely to be extremely weak. Consider that retail sales began the quarter well ahead of the third-quarter average. Excluding cars, sales are already growing at a 3.7% annual rate vs. last quarter, when they increased

at a 5.8% pace from the second quarter. Based on preliminary data, overall real consumer spending seems on track to rise at an annual rate of about 3% this quarter, although weekly surveys of buying activity in early November look relatively soft so far.

At the same time, outside of autos, the manufacturing sector appears to be stabilizing after a soft period this summer. Industrial production in the factory sector was flat in October, but most of the industrial sector's weakness has been concentrated in the auto industry in recent months, reflecting both temporary and fundamental factors (chart).

Excluding motor vehicles, manufacturing output increased a solid 0.5% in October, putting nonauto production well above its third-quarter level.

The bottom line is that, yes, the economy is slowing as the Fed's efforts to pull off a soft landing bear fruit. And little indicates that this nation's ongoing political shock will rattle the economy, especially since the fundamentals remain quite sturdy. The Greenspan Fed pulled off a soft landing in 1994, and it will very likely succeed again in 2001—regardless of how long it takes to elect a President.



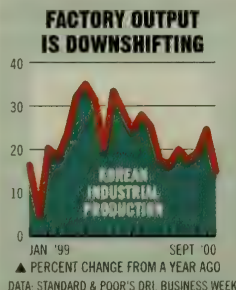
SOUTH KOREA

THE PAIN MEANS REFORMS ARE KICKING IN

Korea has shifted its reform effort into a higher gear. The Nov. 8 bankruptcy of Daewoo Motor Co. makes that clear, especially since it closely followed a listing by lenders of 52 credit-strapped companies, 29 of which were labeled nonviable. Eighteen of those companies are now targeted for closure. The short-term pain of reform will depress economic growth beginning this quarter and into next year.

Spillover effects will hit at a bad time. Economic growth is already slowing, as oil-driven inflation erodes consumer buying power. Both household and corporate outlays are sure to slow further, even as export demand is cooling off. For-

foreign shipments of electronic components and motor vehicles have been central to Korea's recovery from its 1998 recession. However, output of both semiconductors and transportation equipment has fallen sharply in recent months.



The Korea Labor Institute estimates that the jobless rate will rise from 3.6% in September to 4.7% by February, as companies close and workers are laid off. Private economists think the rate could go higher, especially given Daewoo's extensive network of suppliers and subcontractors, many of which will be left out in the cold.

After posting Asia's fastest growth rate in 1998, 10.9%, Korea

is expected to grow 8.9% this year and in the 5%-to-6% range next year, according to the country's central bank. Third-quarter growth is expected to look strong, but given recent weakness in industrial production and retail sales, in addition to rising inventories, fourth-quarter growth is looking much weaker. September industrial output plunged 4.3% from August, and the growth rate compared with a year ago is falling (chart).

For next year, crucial factors in the near-term outlook will be the performance of global demand and the speed of reforms, especially the resolution of the problems at debt-ridden Hyundai Engineering & Construction Co. The government has vowed to complete this latest round of reforms by the end of the first quarter of 2001.



Behind every successful visionary is a team with 20/20 vision.

How do you identify the most promising technologies, communicate them to investors and sustain market interest throughout the business life cycle? We've been helping clients do just that since before the advent of "high tech." Among our tools: award-winning research, unparalleled financing acumen and unequaled depth of experience. At Goldman Sachs, clients gain access to a network of financial and intellectual resources that consistently deliver results. So put Goldman Sachs on your team. And let the world see you in a new light.



UNRELENTING THINKING

www.gs.com

THE ECONOMY: PASSING A DIMMER TORCH

The next President will likely have to deal with a fading expansion

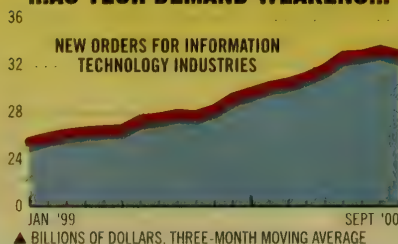


TROUBLE ON THE HORIZON

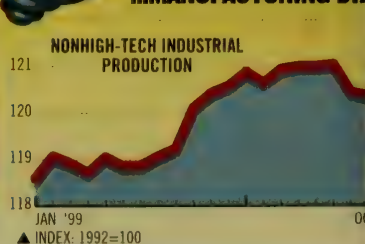
GROWTH SLOWS...



...AS TECH DEMAND WEAKENS...



...MANUFACTURING DIPS



ELECTION 2000 THE ECONOMY

Al Gore's Nov. 15 bid to end the rhetoric and squabbling in Florida gave hope that eventually this election will be over. The counts and recounts, the suits and the counter-suits will become yesterday's news. Butterfly ballots will fade into the history books, people will forget about chads, and a new President will take office on Jan. 20. And that's when a new issue will leap to the top of the agenda: the economy. Its performance is taken for granted when times are good but becomes a national fixation when it falters. And such a time might not be far off. In the face of six interest rate hikes by the Federal Reserve, high oil prices, a falling stock market, and a tech boom that seems to be losing some steam, the supercharged U.S. economy may finally shift out of overdrive.

No matter who occupies the White House, there's a good chance he will pre-empt over the sputtering of the longest economic expansion in U.S. history—one that started under the elder George Bush in 1991 and accelerated through two terms of Democrat Bill Clinton. All signs point to slower growth, and a growing number of economists say a recession in 2001 is a distinct possibility.

While a troubled economy is never easy for a President to deal with, let alone a newcomer to the White House, this time may be even trickier. The ebbing of the New Economy boom will occur in a political climate that could remain poisoned by the bitter wrangling over the Presidential election. At the same time, the specter of conflict in the Mideast poses economic and political threats.

Right now, the consensus forecast for

next year is for 3% growth, the slowest pace since 1995 and a sharp drop-off from the 5% that 2000 is likely to show. Profit growth will probably slide even more, especially if wage and health-care costs continue to rise. Economists at Morgan Stanley Dean Witter, not generally known as a pessimistic bunch, are projecting only a meager 0.9% gain in aftertax corporate profits, compared with a 15% projected increase this year. That translates into a 4% to 5% increase in earnings per share for the Standard & Poor's 500-stock index in 2001, down significantly from the much faster pace of recent years. "It's a soft landing for the economy, but a hard landing for earnings," says Richard Berner, chief U.S. economist for Morgan Stanley.

SKITTISH INVESTORS. Moreover, things could get even worse between now and the midterm election two years hence. In one scenario, the slowdown in corporate profits could send the stock market plummeting as skittish investors pull out. That would drag down consumer spending, greatly reduce capital investment,

and choke off investment in the young companies that are an essential part of the New Economy. The first signs of this process are already occurring: The falling Nasdaq is stalling initial public offerings and forcing many dot-coms to close up shop.

Historically high levels of corporate and consumer debt, meanwhile, could be-

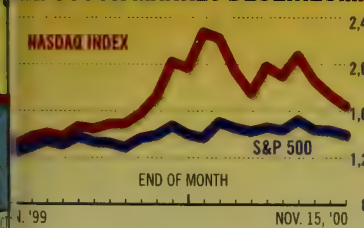
Cover Story

come increasingly onerous as growth slows (chart). Add in a slowdown overseas and the possibility of even higher oil prices (page 42), and the downside risks to the economy increase. "We're headed for a year of 2% or less real gross domestic growth," says James W. Paulsen, chief investment officer of Wells Capital Management in San Francisco. Adds Nicholas S. Perna, president of Perna Associates in Ridgefield, Conn.: "I think the odds now of a recession sometime within the next 12 months are up around 30%."

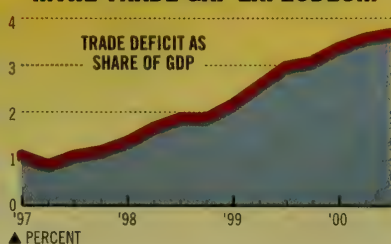
Before Election Day, Wall Street was cheering the prospect of a divided government. The theory was that political paralysis would prevent the Republi-



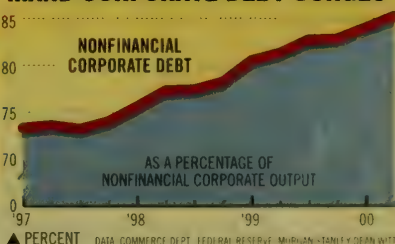
THE STOCK MARKET DECLINES....



...THE TRADE GAP EXPLODES...



...AND CORPORATE DEBT SURGES



cans from pushing through a dangerously large tax cut while stymieing Democrats' plans for lavish spending. Meanwhile, the Fed would take care of steering the economy.

Now, however, there's a growing fear that residual rancor between the parties could prevent Washington from dealing swiftly with the sorts of problems that

Cover Story

can occur when the economy slows: a stock-market crash, a plunge in the dollar, a cascade of corporate bankruptcies, or trouble in the banking system. Such crises as the savings and loan bailout of the '80s or the Asian meltdown require the White House and both parties in Congress to be able to work together.

But this new President can expect neither an economic nor a political honeymoon—or much goodwill on the other side of the congressional aisle. "It's going to be as difficult as any two years we've seen, from government's point of view," says Representative Michael Castle, (R-Del.). "Whoever is going to be President is going to be vilified by almost 50% of the country."

SCALING BACK. What could go wrong? While there is still plenty of strength in the tech sector there are signs that the tech boom is beginning to unwind. In the U.S., tech orders seem to be weakening, with the third quarter average barely above the second quarter (chart, page 38). The Nasdaq has lost almost 40% of its value since March as company after company has lowered growth forecasts for the coming year. One dose of pessimism came from Dell Computer Corp., which on Nov. 9 announced a lower-than-expected forecast for sales growth in the coming fiscal year. "There's no question the economy is slowing," says Chief Executive Michael Dell.

That's got many smaller businesses starting to scale back. Marc Ferguson, chairman of Cofiniti, an Austin (Tex.) developer of software for financial planners and managers, isn't optimistic about next



LAYING FIBER-OPTIC CABLE: Some of the worst news has come in telecom, where

year's outlook. His company, which has 148 employees and is in the process of raising a \$25 million round of venture capital, has begun pulling back on hiring and capital spending. "We've cut back on the fringe R&D that was futuristic but wasn't going to end up in a product any time soon," says Ferguson.

The story is the same at larger companies. Execs at Cambridge (Mass.)-based Polaroid Corp., for example, say the 2001 budget will be more conservative on spending, expenses, and capital expenditures. "We're preparing for slower economic growth next year," says Gary T. DiCamillo, Polaroid's chairman and CEO. "We're still investing for the digital future, but at a slower rate."

Some of the worst news has come in the telecom industry, where big spenders such as AT&T and WorldCom have been struggling with lower-than-expected sales. The troubles are hitting smaller players

even harder. One sign: On Nov. 14, IC Communications, a once high-flying Colorado-based telecom, filed for Chapter 11 bankruptcy.

Nor have Old Economy industries been exempt from the slowdown. Non-tech manufacturing output has fallen at an almost 2% rate in the third quarter led by a 32% decline in the production of appliances and a 25% decline in truck production. Meanwhile, car sales have been softening. "Total demand in the American auto market has been declining since September," says CEO Takashi Sonobe of Mitsubishi Motors Corp.

Any slowdown is going to be aggravated by historically high levels of corporate and consumer debt. On Nov. 13, Bank of America announced that fourth quarter losses from bad loans would be more than \$870 million, double the third quarter figure. Corporate debt has been rising by 13% over the past year, fa

TURBULENCE AHEAD

As growth slows, the odds of an economic or financial crisis requiring decisive government action go up. Here are some potential problems ahead that the new President and Congress might face:



UNEXPECTED FALL IN THE BUDGET SURPLUS

A slowdown will hold down tax revenues, giving the Congress and the President a politically difficult choice between cutting spending to match revenues, or cutting taxes to stimulate the economy.



PLUNGING DOLLAR

With the U.S. trade deficit at record levels, a slowdown could lead foreign investors to abandon the dollar. Such a plunge could force the Fed to raise rates, leaving it to fiscal policy to stimulate the economy.



A FRAGILE STOCK MARKET

A sharp fall in stock prices would pull down consumer spending and business investment. Interest rates would help cool a slowdown. But there might be a need for Congress and the Administration to boost spending

faster than the growth of GDP. Consumer debt has been soaring as well. "Leverage among low income households is high and rising fast," says Mark Zandi, chief economist at Regional Financial Associates.

Signs of a day-to-day squeeze are showing up in retail sales, which rose only 0.1% in October. "I can see that people are being more frugal with their purchases," says Rafael E. Cuellar, CEO and president of Eco & Sons Inc., a privately held holding company for President Supermarket in Passaic, N.J. "A year ago, they were purchasing more expensive cuts of meat like filet mignon. Now they're buying chuck steaks."

Increasingly, consumers are finding themselves squeezed by rising fuel or rising prices. "Rents are skyrocketing to the extent that we can't spend more on the holidays," says Lisa M. Gorski, senior research scientist at the U.S. Agriculture Dept. in Albany, Calif. "Those numbers are tempering all of our spending, including buying a car, going on vacations, or holiday shopping." Others are hurt by the stock market. "The market tanked, and my portfolio went with it," said Rick Dunham, a 33-year-old consultant from Atlanta, who is sharply cutting his holiday spending.

WORRIES OVERSEAS. With consumer and business spending slowing in the U.S., economists had hoped that foreign economies would pick up the slack. Instead, projections of European growth for 2001 are being ratcheted down. Signs of weakness abound. West European new-car sales fell by 4% in October com-

pared with a year earlier. Meanwhile, German retail sales fell in September for the fourth time in five months. "The U.S. remains the lynchpin of the global economy," says Peter Hooper, chief U.S. economist for Deutsche Bank. "Europe just isn't moving ahead strongly enough to pull the world economy with it." In Asia, there are similar signs of weakness. Industrial production fell sharply in September in both Japan and Korea. And the bankruptcy of South Korea's Daewoo Motor may trigger massive layoffs in that country and hamper growth.

Of course, the Federal Reserve has shown itself capable of coping with many economic problems, both domestic and international. Notes Melvyn Bergstein, CEO of e-business consultants Diamond Technology Partners in Chicago: "It's hard for me to believe that Greenspan is going to allow the economy to slip into hard times."

But there are plenty of problems that Greenspan can't address alone or that will require cooperation between Congress and the Administration. If the U.S. is hit by both slow growth and rising inflation, or "stagflation," the appropriate remedy is tight monetary policy combined with fiscal stimulus, as in the early '80s. Similarly, a stock-market crash may send the dollar plunging as foreign investors flee the country, forcing the Fed to raise rates to protect the currency even as the economy slows. Once again, fiscal stimulus would be essential.

Moreover, the Fed can't handle international financial and trade problems by itself. The Asian bailout, for example, required both quick action by the Treas-

ury and congressional approval for funds. And bringing down the huge trade deficit, now at almost 4% of GDP (chart, page 39), needs a government that can negotiate trade agreements.

The expectations of a large surplus next year may make it easier to cut taxes or boost spending if needed. But the problem is that slower growth will also reduce the surplus significantly. That could make it hard to get a consensus for fiscal stimulus. "We need to continue to pay down the debt," says Representative Connie Morella (R-Md.), part of the

group of moderate Republicans who could play a critical role in the new Congress. "We have to be careful how our money is spent." In the event of a slowdown, business "should not look to Washington to act," adds Representative Amo Houghton (R-N.Y.), another moderate Republican.

Even if the parties agree on the need for fiscal stimulus, arriving at the exact form may be difficult. "You could visualize a situation in which, because of partisan conflicts, each side stands on its version of what tax cuts are appropriate, and nothing gets done, or it gets unduly delayed," says

Albert M. Wojnilower, senior economic adviser at private investment firm Monitor-Clipper Partners.

Political gridlock could slow the response to a financial crisis in a nation like Argentina, which is struggling to meet some \$20 billion in debt due next year. An international bailout, if needed, might be difficult to cobble together, if it goes beyond what the IMF can afford. "This policy is where the hands of the U.S. Treasury could be somewhat tied by the outcome of the election," says Renato Grandmont, Latin America equity strategist for Deutsche Bank.

An economic slowdown and rising unemployment might lead to a renewed outcry against imports. In that case, politicians looking for an edge might be tempted to fan protectionist sentiments, rather than pushing for free trade and open markets in other countries. "There is a protectionist problem that could arise that might be made more difficult because of the closeness of things in Washington," says Jim Leach (R-Iowa), chairman of the House Banking & Financial-Services Committee.

And then there are the problems



The consensus forecast for next year is 3% growth, the slowest pace since 1995 and a sharp drop-off from the 5% expected in 2000

WAR IN THE MIDDLE EAST

Conflict between Israel and Arab nations will drive oil prices higher. Ending suchilities could require a U.S. leadership, and troops for an national peace-keeping force.



GLOBAL ECONOMIC TURMOIL

The Asian countries are still financially fragile. A slowdown in the U.S. could send them tumbling back into recession again, requiring another round of international support.



CORPORATE DEBT

Corporate borrowing has far exceeded the pace of economic growth, leaving businesses vulnerable to a slowdown. An unexpected wave of big bankruptcies would lead to a call for government action.

that no one foresaw. Virtually no one expected the collapse of the Mexican peso in 1994 and 1995 or the meltdown of the Asian economies, and the 1998

Cover Story

implosion of Long-Term Capital Management came completely out of the blue. A huge wild card now is the possibility of conflict in the Mideast. "The

one big risk in the economic arena is a disruption of world oil markets at a time when everything is very tight," says Barry P. Bosworth, a senior fellow at the Brookings Institution. "And for that you might need the ability to act quickly and strongly."

To be sure, in a real crisis, people tend to put away partisan differences. "Always in the past, America has rallied behind our leader, no matter how small a mandate he had in the election," says

Neil Flanzraich, vice-chairman and president of IVAX Corp, a Miami pharmaceutical company. Still, the enmity generated by the election may linger. Adds Leach: "The odds are we'll unite around the next President. But if this goes on much longer, that will be much more difficult. And it will be much more dangerous for the economy."

By Michael J. Mandel, with Peter Coy, in New York; Lorraine Woellert in Washington; and bureau reports

THE ALAN GREENSPAN OF OPEC?

ELECTION 2000 THE ECONOMY

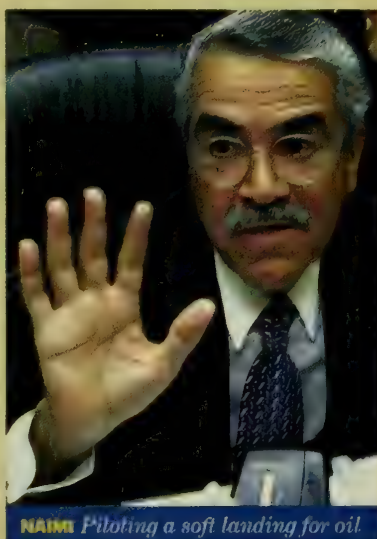
Saudi Arabia's oil minister, Ali I. al-Naimi, was clearly enjoying his weekend in Vienna for the OPEC meeting that ended Nov.

13. And why not? With prices stuck in the low-to-mid 30s, Saudi Arabia and the other OPEC countries are having their best financial years in two decades. Saudi Arabia alone is likely to earn \$89 billion this year from oil.

To guarantee those profitable revenues, OPEC is contemplating production cuts to make sure prices don't drop too sharply. Sure, Naimi says, he would eventually like to pilot OPEC in for a smooth landing at the \$25-a-barrel level. But for now, OPEC is in wait-and-see mode. "We have already made four increases," Naimi says. "Indications are that inventories are going to build very fast."

Naimi is trying to be a kind of Alan Greenspan of the oil market, hoping to stabilize prices by matching supply to global demand and growth. Saudi Arabia is the only country with significant enough spare production to play that role. So even though he's worried that \$30 per barrel will slow the world economy, killing demand for oil, he would prefer to err on the side of higher prices than oversupply. It was only two years ago that crude prices hovered in the low teens and Saudi oil earnings plunged below \$40 billion. **NO PLUNGE.** That may seem odd to Western consumers still facing high gas and fuel oil prices; U.S. inventories of crude and refined products remain very tight. Indeed, on Nov. 15, U.S. Energy Secretary Bill Richardson was in London warning that "crude and heating oil inventories remain alarmingly, stubbornly low."

But the OPEC ministers meeting in



NAIMI Piloting a soft landing for oil.

Vienna made it clear that increasingly, they are more worried about the potential for a glut. Their main fear is that the 3.7 million barrels of production they have added in the past few months will swamp the markets.

OPEC's ministers even scheduled a follow-up meeting for Jan. 17 in case production cuts are quickly needed. "The key thing on OPEC minds right now is making sure there is no precipitous fall in prices next year," says Raad Al-dadiri, an analyst at Petroleum Finance Co. in Washington.

The cartel's current projections indicate that global supply and demand are in fairly close tune. Longer term, traders seem to agree prices will fall as supply overtakes demand. The futures market sees an average of about \$25.50 per barrel next year

from a current \$34.88 for West Texas Intermediate crude.

So why haven't production hikes brought prices down already? Naimi insists that current pricing results from factors OPEC can't control—refining bottlenecks in the U.S., in particular. And to some extent, he has a point. Although U.S. crude inventories are now some 6% below last fall's levels, U.S. refineries are running flat out. They couldn't make use of greater supply. A major reason: Since 1980 the U.S. oil industry has cut refining capacity by 5%.

Moreover, some OPEC insiders are beginning to doubt that \$30-per-barrel oil is so poisonous for the world economy. "Even at a price of \$30, we see demand growing," says a Saudi economist.

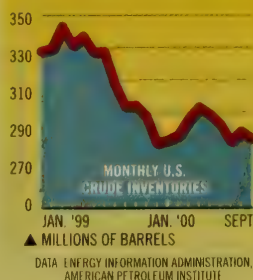
BAD GUESS. The danger is that Naimi and his colleagues will get things badly wrong. While OPEC worries about a hypothetical glut next year, consumers remain vulnerable to unusually cold weather this winter or political shocks in the Middle East. Either could quickly lead to more price spikes.

But if OPEC is losing any sleep over these concerns, there was no sign of it in Vienna. That may yet come. High prices will eventually lead to more efforts by the U.S. and others

to find new, non-OPEC crude reserves. And even if high prices don't send the world into recession, they'll drag down economic growth, cutting demand for OPEC oil. The question is which trend is likely to hit first.

By Stanley Reed in Vienna, with Chris Palmeri in Los Angeles

FILL'ER UP



While it's impossible to childproof the entire world (that would require a lot of rubber corner-bumpers and outlet covers), you can keep your children out of harm's way (and out of trouble) in a secure, reliable Odyssey. Protective parents will be pleased to know that the Odyssey did well on its report card.

PROTECT YOUR CHILDREN FROM THE OUTSIDE WORLD.
AND VICE-VERSA.

It earned an impressive quadruple Five-Star Safety Rating*—the highest rating possible.

Even more reassuring, it comes equipped with childproof door locks, 3-point seat belts for all seven passengers and other features



to help keep your kids under control. Which makes the world a safer place for all of us.

The Odyssey





Cover Story

CAN THE MARKET REGAIN ITS BALANCE?

Investors will likely face more volatility and downward drift, even after the political dust settles

ELECTION 2000 THE MARKET

has become a more perilous pursuit.

Since Election Day, the tech-laden Nasdaq has tanked 7%. On Nov. 13, it closed under 3000 for the first time in over a year. The Dow Jones industrial average is down 2%, the Standard & Poor's 500-stock index 3%. And with less than two months before yearend, the likelihood that indexes will finish with a gain is vanishing fast.

While the country remains sharply divided over the election, there's one thing pretty much everyone agrees on: investing in stocks

In sharp contrast to a handful of Wall Street strategists who call this a buying opportunity, most say the market could get worse before it gets better. Even when the punch-ballot chads settle, there are key factors that will likely cause continued volatility and a drift toward the downside.

The outlook for 2001 is better, considering that the Nasdaq has already had most of the steam taken out of it and price-earnings ratios have come back to earth. Still, the market will probably harken back to a more normal era when returns were in the single digits. And the fact that there is a mandate for the next President at

here is a narrow split between congressional Republicans and Democrats could be a plus for the market next year. Neither side will be able to push through extreme proposals for big tax cuts or excessive spending.

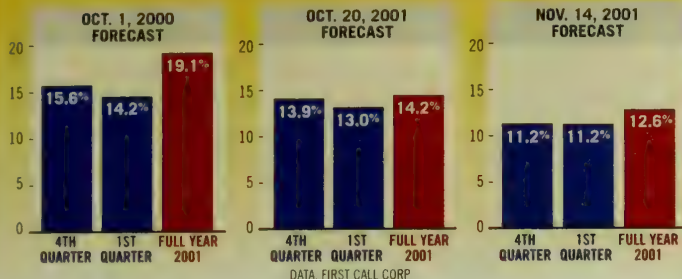
But right now, it's the economy that matters most. "Politics is an interestingideshow, but once this is over it will all come down to the velocity of the economy—its slowing and effect on profits," says Thomas Galvin, chief equity strategist at Credit Suisse First Boston. Fourth-quarter earnings preannouncements, where companies disclose any material information that may affect the price of their stock, have started to come in at unprecedented levels. So far, 243 companies have issued preannouncements (and no one on Wall Street has asked for a recount). That's compared with a total of only 233 for the entire fourth quarter a year ago. Of these, 9.7% have been negative, according to earnings research firm I/B/E/S Inc. Bestbuy, Sprint, WorldCom, Priceline.com, and Altera are just a few that have recently issued negative preannouncements.

The bigger story may be in earnings revisions. Analysts continue to slash earnings estimates for the fourth quarter and the first quarter of 2001. For the fourth quarter, estimates are projected to come in at 11.2% over last year's same quarter. That's down from an estimate of some 15.6% a little more than a month ago. For all of 2001, analysts predict earnings will grow only 2.6%, compared with a projected 19.1% for 2000, according to First Call. Even Charles Hill, First Call Corp.'s director of research, concedes that may be overly optimistic and that growth may end up in single digits. A shortfall in tech earnings is affecting the market the most. As earnings prospects for the tech sector are revised downward, that creates substantial valuation-related issues, which tend to exacerbate the selling pressure," says Tom Farsico of Marsico Capital Management.

With earnings in question, strategists say that any stock rally before yearend is likely to be shortlived. It would be derailed

SCALING BACK EXPECTATIONS

EARNINGS ESTIMATES FOR THE STANDARD & POOR'S 500



by proliferating negative preannouncements and the actual earnings season, when more shoes will drop," says Douglas Cliggott, U.S. equities strategist at J.P. Morgan & Co.

Don't expect the Federal Reserve to help matters. The Fed decided on Nov. 15 to leave interest rates and its anti-inflation bias unchanged, so the market won't get any boost from Chairman Alan Greenspan, though the Fed's stance does increase the likelihood of a continued soft landing. In fact, even if the Fed does eventually change its bias to "neutral," some say that won't be enough to set the stage for a raging comeback, as other negatives, like the highest oil prices in a decade and a weak euro, continue to hurt the economy. "In a tightening cycle when things start to perform poorly, you have to cut rates not just once, but twice, to get any real effect in stocks," says Tim Hayes, global equity strategist at Ned Davis Research Inc. in Venice, Fla.

History is also not on the side of the bulls. In the four-year election cycle, post-election years tend to show the weakest gains of all. And although there is often a post-election rally, this year is an anomaly. "We usually have a Presidential honeymoon after the election, but this may be one of those years when there's no honeymoon because you

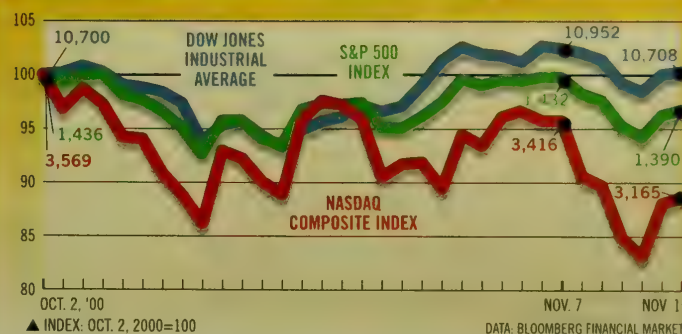
hates, it's uncertainty," says Credit Suisse First Boston's Galvin.

"PERFECT ENVIRONMENT." Some pros are saying this is a buying opportunity. "Political uncertainty does not negate the fact that the investment environment remains perfect—with low inflation, continued profit growth, and a budget surplus," says Edward Kerschner, chief global strategist for UBS Warburg and PaineWebber. And Goldman Sachs & Co.'s strategist Abby Joseph Cohen contends that equity valuations are the "most attractive they have been all year." She says the S&P 500 is about 15% undervalued on a 12-month view.

Another good sign for the market that is often overlooked: Individual investors tend to increasingly buy and hold their stocks for the long run. According to a recent survey of 600 investors by the American Association of Individual Investors, their average asset allocation—71% in stocks, 9% in bonds, and 20% in cash—has not shifted significantly in over two years.

Even so, bad news of any sort is sending stocks south as fast as Sunbelt snowbirds in late autumn. Institutional investors are now quickly dumping their positions in any tainted stock or sector. On Nov. 13, Hewlett-Packard Co. stunned the market with an earnings shortfall that sparked the Nasdaq to tumble as much as 5.6% during the day (page 59) as investors questioned the technology sector's growth rate. Other companies like Morgan Stanley Dean Witter and Nortel Networks Corp. have reported similar shortfalls that have clobbered their respective sectors. "One company misses any of their presumed objectives and it shakes confidence in the whole sector. And when it's a

LOSING THE INVESTOR VOTE





“Equity valuations are the most

attractive they have been all year. We believe that the S&P 500 is about 15% undervalued on a 12-month view.”

— ABBY JOSEPH COHEN,
Chief Financial Strategist,
Goldman Sachs & Co.



“As earnings prospects for the

technology sector are revised downward, that creates substantial valuation-related issues, which tend to exacerbate the selling pressure.”

— TOM MARSICO,
Marsico Capital Management



“This is an environment where

knowing companies inside and out in order to accurately assess their earnings potential is critical.”

— ROBERT STANSKY,
Portfolio Manager, \$103 billion
Fidelity Magellan Fund



“The U.S. has been seen as a safe

haven, but because of the election and the slowing economy, foreign investors might simply feel better keeping money close to home.”

— WILLIAM GROSS,
Portfolio Manager, Pimco Funds

tech stock, it hurts the entire market,” says Prudential’s Stovall.

The Presidential pandemonium is scaring off foreign investors, say experts. In the futures pits at the Chicago Mercantile Exchange, foreign investors are making “Sell America” trades, where they wager that U.S. stock and bond markets will falter because of the political uncertainty.

Cover Story

“There’s a major repatriation of funds back to Europe. One investor told me that it’s disappointing when the U.S. election process is less solid than in Yugoslavia,” says Laszlo Birinyi, president of Birinyi Associates Inc. Asian investors have been spooked, too. “When you invest in a country you also invest in its leader,” says Ray Weng, president of the Chinese Securities Assn. Weng has already pulled some money out of U.S. holdings. Some say skittishness on behalf of foreigners is particularly worrisome since overseas investment in U.S. equities has added to the market’s oomph in recent years. According to the Federal Reserve, foreigners own \$1.6 trillion, or some 8.3% of all U.S. securities. And some 80% of the net savings in the world is invested in the U.S., say economists. Says William H. Gross, managing director at Pacific Investment Management Co.: “Foreign investors might simply feel better keeping money close to home.”

“FORGET AMAZON.” And although U.S. investors may have stronger stomachs than their foreign counterparts right now, many are simply waiting it out or putting new money into fixed-income. “Forget Amazon. And anyone who owns AT&T or Lucent thinks 7% on a certificate of deposit is an attractive

investment now,” says Joel P. Bruckenstein, a financial planner with Global Financial Advisors Inc. Bruckenstein also likes “safer and overlooked” value stocks. While the S&P 500’s technology sector has declined 40% from its March peak, classically defensive stocks in areas like health care, consumer staples, and utilities have posted positive returns from nearly 12% to more than 33%. “Beaten-down companies that have more market share, better pricing power, and no debt are going to be the winners,” says Bruckenstein. He likes home builders like Fleetwood Enterprises Inc. and retailers like Federated Department Stores.

It’s unlikely that the technology sector will suddenly come roaring back, say analysts. “There’s a generational change taking place in tech. The leaders of the past decade—PC stocks, database stocks, cellular stocks—are unlikely to be the leaders of the next big wave,” says Roger McNamee, founding partner of Integral Capital Partners in Menlo Park, Calif. And with 70% or more of the market capitalization in old-guard tech stocks like Microsoft, Intel, and Dell Computer, says McNamee, it will be difficult for tech stocks in the aggregate to remain market leaders in the next two to three years.

Even financial stocks, which have

gained 15% for the year, may be starting to slump. Earnings at brokerage are predicted to grow by only 9% in 2001, compared with a 28% rise this year, according to First Call. “We’re taking a more subdued view than six months ago or even a few weeks ago,” says Henry McVey, securities industry analyst at Morgan Stanley Dean Witte. McVey recommends financial service outfits like Merrill Lynch & Co. and Citigroup that are diversified enough to grow despite slowing underwriting fees and brokerage commissions.

That’s not stopping some from buying beaten-down techs and financial. “We’ve recently bought companies like Micron Technology, Siebel Systems, and Altera,” says Timothy Ghriskey, senior portfolio manager at Dreyfus Corp. But just because a stock has been punned doesn’t make it a good buy. “This is an environment where knowing companies inside and out in order to accurately assess their earnings potential is critical,” says Robert Stansky, manager of the Fidelity Magellan Fund.

Once the Presidency is decided, no doubt investors will also be tempted to pick up “Bush” stocks in areas like energy, pharmaceuticals, aerospace and defense or, conversely, “Gore” stocks in areas like agriculture, the environment, and technology. But don’t expect those to rally much. “Given the circumstances, it’s not a mandate for either party to make sea changes in fiscal policy or anything else, and that’s good for the market,” says Nick Sagen, global market strategist at J.P. Morgan.

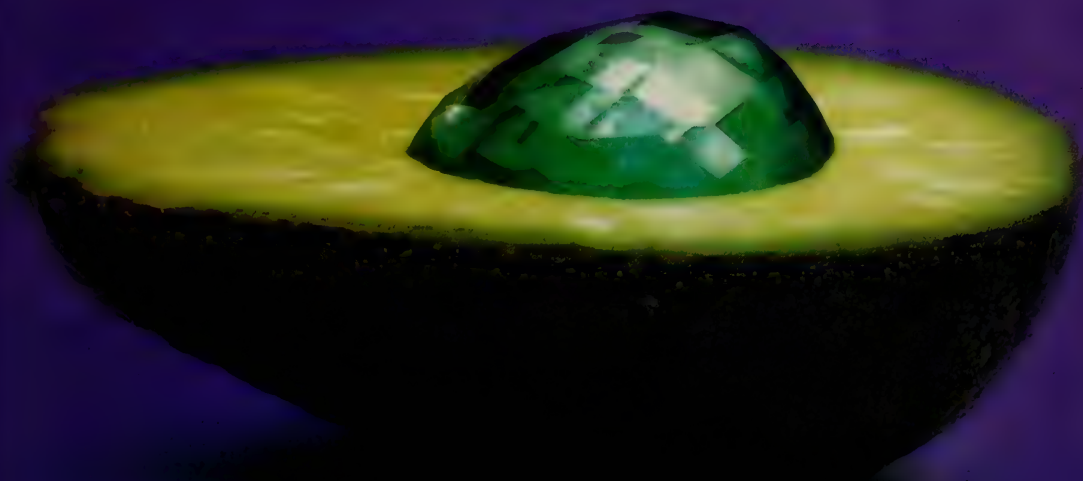
That may be the only good thing that has come out of this election mayhem.

By Marcia Vickers in New York, with Mara Der Hovanesian, Debra Spark, Emily Thornton, Heather Timmons and bureau reports



The Presidential pandemonium may be scaring off foreign investors

A fabulous surprise in every pack.



Buy the complete version of Adobe Acrobat and discover features you never knew existed.

Adobe® Acrobat® Reader™ is such an ideal way to view and print documents, you may think that's all there is to it. But Acrobat Reader is a small part of an even more dynamic program — Adobe Acrobat. With the full version of Acrobat, you can create your own Adobe PDF files. Then you can send them almost anywhere, knowing they'll look and print just as you intended. Acrobat also allows you to work with others to mark up, highlight, underline and annotate documents. What's more, it comes with security features such as password protection and digital signature technology. Take a closer look at Adobe Acrobat at www.adobe.com/fullacrobat. You'll be pleasantly surprised.



Inspiration becomes reality.™



COMMENTARY

By Paula Dwyer and Paul Magnusson

THE PITFALLS OF ONE PERSON, ONE VOTE

ELECTION 2000 ELECTORAL COLLEGE

Hillary Rodham Clinton is for it. Bill is not so sure. But in the wake of the Great Florida Stand-off, support for scrapping the Electoral College is growing. Senator-elect Clinton says she'll start the legislative ball rolling next year. And according to new polls, she'll have company: 65% of Americans back a constitutional amendment providing for direct election of the President. But before lawmakers rewrite the Constitution, they should remember the law of unintended consequences.

Consider this fanciful but not totally far-fetched scenario: It's Nov. 8, 2004, and Democratic nominee Hillary has just won 40% of the Presidential popular vote by pursuing a "tri-coastal" strategy concentrated on harvesting votes in the megastates of California, Florida, and New York. Clinton remains slightly ahead of her nearest opponent, GOP Senator Kay Bailey Hutchison of Texas, who has won 35% of the vote with her "magnolia method." She focused on her home state, the Carolinas, and a half-dozen other Southern states.

But Hutchison refuses to concede because no candidate has won 50% of the vote, and the constitutional amendment that deep-sixed the Electoral College also gives her the right to demand run-off elections until someone gets a majority of the popular vote. The good news for Hutchison is that 37 minor parties will be stricken from the new ballot, as will the mayor of Toledo and Teamsters President James P. Hoffa, both of whom have pledged to back Hutchison in exchange for prominent jobs in her Administration. No matter who ultimately prevails, the inauguration will be delayed by at least two months. The result: *Presidentus interruptus*.

Sound unlikely? Perhaps. The Elec-

toral College system has been around since 1787, and changing it would require an all-but-impossible two-thirds vote in Congress—plus ratification by three-fourths of the states. And the Electoral College has generally fulfilled its original purpose: Ensuring that smaller states don't get cut out of the selection process, holding down the number of minor-party and favorite-son candidates, and providing winners with big, mandate-building victories.

But this year's election has thrown the Electoral College into disrepute and led to calls for reform. Trouble is, such ideas often have unintended consequences. Among them:

■ **Megastates Rule.** Under a direct-elect-

tion system, campaigns would no longer have the remotest interest in respecting state boundaries. Instead, they would concentrate on densely populated areas where candidates could get the most bang for their buck.

According to many political experts, candidates might divide the country into 10 major media and cultural markets (map). The largest of these centers would be the population centers surrounding the Great Lakes, where direct appeals could be made to some 10 million residents. The second-largest region would center on New York City and include the western half of Connecticut and northern New Jersey. Other strongholds would include Nor-

WHERE THE VOTES ARE

Under the popular vote system, candidates would concentrate on densely populated urban areas and regions studded with cities and suburbs—while ignoring wide swaths of the country. About 50% of the population lives in these 10 shaded areas.

PACIFIC
NORTHWEST

5.3 MILLION

NORTHERN
CALIFORNIA

8.8 MILLION

SOUTHERN
CALIFORNIA

18.1 MILLION

SALT
LAKE
CITY

DENVER

LAS
VEGAS

PHOENIX

WESTERN CITIES

7.6 MILLION

TEXAS

12.3 MILLION

DATA: BUSINESS WEEK, CENSUS DATA

uthern Califor-
e Pacific North-
he I-85 corridor
ting North and
Carolina and
a, the Mid-At-
states, southern
New England,
e most populous
s of Florida.

se nodes would
pass some 135 million people, or
half the U.S. population. But
ould cover no more than 10% of
d mass. The vast interior would
luded, from the western half of
a down to the Gulf Coast and
the Midwest into the Mountain
That means farmers and ranch-
the Nowhere Zone would get
hrift for their concerns—and
see a Presidential prospect. Can-
"wouldn't need to worry about
nuclear waste in Nevada," says
Frank, president of the National
ition of Republican Assemblies, a

NO ELECTORAL COLLEGE

*Who would
be most
affected by
a popular-
vote system*

WINNERS

- Interest groups (such as religious conservatives)
- Labor unions
- Minor parties
- Large ethnic groups

LOSERS

- Farmers and ranchers
- Rural voters
- Small states
- Swing voters

DATA: BUSINESS WEEK

conservative grass-roots group. Adds Scott Reed, who managed Bob Dole's 1996 bid for the White House: "You'd be hunting ducks where the ducks are, and leaving large swaths of the country essentially untouched."

■ Interest-Group Politics on Steroids.

Since turnout is everything in the new era, candidates would be even more obliged than they are today to corral voting blocs and interest groups whose partisans go to the polls in higher-than-average numbers. Anti-abortion protesters, religious conservatives, gun owners, civil-rights organizers, and environmentalists would all be courted in the name of turnout. The pricetag: special-interest groups with more power than they have today because of the ability to reach across state lines and mobilize members to vote en masse; further balkanization and division in the country; and a plethora of side-deals

not necessarily good for the electorate at large.

■ **Dems Get an Edge.** The redrawn map would favor Democratic candidates,

whose strength is in and around big urban cores with heavy concentrations of racial, ethnic, and religious minorities, such as Jewish voters, and unreconstructed liberals. "Rally the base" would be the battle cry, says Bill Carrick, a Democratic strategist. "You'd be a lot more concerned with turning out voters who are predisposed toward you, without respect to state lines." Paul Begala, a Clinton adviser, agrees that candidates would no longer have to try to be all things to all people. "Both parties would just try to run up the score," he says.

■ **Home-State Heroes.** Because it would be so important to start a Presidential quest with a big bloc of assured votes, the bias in the nominating system would be toward big-state candidates. Forget Arkansas and Tennessee. Candidates from California, New York, and Texas would dominate. University of Akron political science professor John C. Green says he can even see prominent business leaders, such as Microsoft Chairman Bill Gates, emerging as can-

didates because of their home-state popularity.

■ **Fragmentation.** Minor-party candidacies would also proliferate, since the prospect of each candidate getting an assured slice of the vote—which they could parlay into a voice in a future coalition Cabi-

net—would be a magnet to fringe parties. "There would be a party for every cause," says Green. Adds Walter Berns, author of a book on the Electoral College: "The current system discourages minor-party candidates by telling people not to 'waste' their vote in a winner-take-all system." Thus, Green Party nominee Ralph Nader might have fared much better under a popular-vote scenario.

Cover Story

■ **The Thermo-Nuclear Ad Strategy.** As campaigns refocus on a relative handful of core states, ad strategies would change as well. While today's campaigns eschew buying national ads on network or even cable television in favor of targeted media buys, the candidate chasing popular votes would have to concoct expensive regional campaigns that cut across multiple media markets. Says former Gore campaign manager Tony Coelho: "You'd go for the big kill with a big media budget."

■ **Endless Recounts.** Forget about this year, which was an exception. The Electoral College setup, by counting each state's vote separately, discourages recounts because margins of victory are seldom narrow enough for a new tally to make a difference. But in a popular election, every vote would be equal, and losers in a close race would demand a nationwide recount. "What's playing out in Florida now would happen in every county in America," says E. Joshua Rosenkranz of the Brennan Center for Justice, a nonpartisan think tank at the New York University Law School.

In the end, electoral reformers aren't likely to risk these consequences in the name of democracy and the hallowed principle of "one person, one vote." As the chaos in Florida shows, democracy can be a messy business. But it could get a lot messier if Hillary and those other constitutional second-guessers start tinkering.

*Washington bureau News Editor
Dwyer and Correspondent Magnusson
write about Presidential politics.*

GREAT LAKES
26.2 MILLION

NEW ENGLAND
8.2 MILLION

NEW YORK AREA
19.9 MILLION

MID-ATLANTIC
10.5 MILLION

I-85 CORRIDOR
8.5 MILLION

FLORIDA
11.6 MILLION



Cover Story

SLEIGHT OF HAND AT THE POLLS

Florida isn't an exception. Reports of abuse—from purged voter rolls to intimidation—abound

ELECTION 2000 THE BALLOT BOX

This was an Election Day that Dane W. Dingerson will never forget—and not just because of its cliffhanger finish. When the 51-year-old businessman went to vote at Oakwood Manor Elementary School in suburban Kansas City, he saw a Christian Coalition voting guide on a table next to the voting machine. The self-described independent, who backed Republican Bob Dole in 1996, was shocked when his complaints led one election official to

tell him: "God wants you to vote for George Bush. God wants Bush to win. [Democrat Al] Gore kills babies."

Dingerson, who wound up voting for Gore, is hardly the first American voter to face such annoying interference in the simple act of casting a vote. Although Florida's botched ballot count and other voting irregularities have attracted most of the public's attention, the reality is that electoral misconduct goes on in every American election. The abuses range from minor infractions like Dingerson experienced, to serious offenses such as ballot stuffing and intimidation of minority voters. "We have a time-honored tradition of vote manipulation and irregularities and larceny bordering on illegalities," says University of Texas political scientist Bruce Buchanan. "You can't design rules that people can't game if they want to."

The difference this year: The Presidential election is so tight that it has exposed voters to the warts that usually go unnoticed when candidates win by big margins. And another round of questions could be set to explode. As the disputed Florida vote appears headed for the final tally, that state's absentee ballots will play a key role in deciding the outcome. Yet absentee ballots have long been considered one of the aspects of U.S. elections most open to abuse. "The election of 2000 is no different than any other—except that the Presidency of the United States hangs in the balance," says Robert Hogan, a political scientist at Louisiana State University.

Of course, there have been close elections in the past. And American history is replete with tales of election fraud that may or may not have swayed elections. In 1948, Lyndon Johnson won



Why align your

and

business strategies?

For starters, it can mean an **effective** tax rate up to 3* percentage points lower than your competitors*.

That's what you would call a step up. Ernst & Young professionals leverage their industry knowledge and experience to help you develop innovative tax strategies to accelerate your cost savings. That way you can grow value more quickly, giving you a competitive edge in the New Economy. Isn't it great when everything comes together?

newrules
neweconomy™



ey.com/thoughtcenter



ERNST & YOUNG

FROM THOUGHT TO FINISH.™

Senate seat when dozens of dead Texans voted in alphabetical order for their man in one South Texas county. Many historians believe that Chicago Mayor Richard J. Daley stole the 1960 election for Democrat John F. Kennedy by stuffing ballot boxes in Cook County. In Louisiana, they bury the dead above

Cover Story

ground, the saying goes, so they'll have a shorter walk to the polling place.

This time around, ward heelers worked their toxic magic in a dozen different ways, from unduly influencing voters to manipulating the final count with bogus votes. In Wisconsin, a Gore backer was caught on tape trying to influence voters by offering homeless people cigarettes if they would cast absentee ballots. And in Georgia, Bush loyalists tried to increase turnout by raffling off a gun to those who had voted. A more sophisticated, and potentially far more effective, tactic took place in New Jersey. Millionaire Democratic Senate candidate Jon Corzine gave roughly \$100,000 to churches and other politically influential groups through his charitable foundation.

Ironically, many allegations of irregularities made this year are tied to recent changes designed to simplify voter registration and absentee balloting. With each reform—like instant voter registration on Election Day—there is a risk that operatives will try to stack the deck.

BULLYBOYS. No tactic seems more odious than outright intimidation. Civil rights leaders such as the Reverend Jesse Jackson have alleged a Florida Highway Patrol's "safety checkpoint" on Election Day 2000 caused traffic tie-ups in a Tallahassee-area precinct with a substantial minority population, resulting in a lower turnout. It wouldn't be the first time such tactics have been used to depress minority turnout. In 1988, Orange County (Calif.) Republicans posted security guards at 20 predominantly Hispanic precincts. A lawsuit alleged that the blue-uniformed guards were told to "demand documentation of citizenship" from "voters who looked Hispanic" and to "take down license plate numbers of the vehicles of Hispanic voters." The result: lower turnout in those

precincts and the narrow election of a Republican state assemblyman. GOP officials later apologized and settled the case for \$400,000. California law now bars uniformed poll watchers.

A far more common, if less egregious, violation of election law is overt partisanship within polling places. One Milwaukee voter, Francisco Rios, said a Democratic precinct election judge told him he was not permitted to split his ballot between Republican Bush and Democratic candidates for House and Senate. According to the retired school security officer, 67, the election official "took my ballot...cut it into pieces and threw it in the wastepaper basket." Rios eventually got to cast his ballot—voting a straight Republican ticket. But Wisconsin GOP officials say thousands of other voters also encountered Democratic election of-

Heard enough? Then consider this as Election 2000 finally draws to a close: Analysts say the fastest-growing area of vote fraud is manipulation of absentee ballots. Unlike ordinary ballots, absentee tallies are filled out in private and far from the watchful supervisory machinery in normal precinct polling places. In 1998, a Florida state court overturned the Miami mayoral contest after finding that backers of Xavier Suarez submitted absentee ballots on behalf of nonresidents and dead people.

The Miami race was hardly an isolated event. A study by the Florida Dept. of Law Enforcement found six other cases of absentee ballot fraud since 1988. Nor is the problem confined to Florida. Last year, a court in Alabama reversed the outcome of a sheriff's election because the victor benefited from illegal

absentee ballots. "Most of the reported cases of election fraud in contemporary times involve absentee ballots," says James R. Sutton, former general counsel for the California Republican Party. "If you want to stuff a ballot box, this is the way you do it."

NEW RULE. Absentee ballot manipulation often occurs at nursing homes, where staffers or local polls "help" voters fill out forms. "There's a definite potential for mischief," says Commissioner Bob Rackleff, of Leon County, Fla., which now limits helpers to witnessing no more than five absentee ballots.

Will the Florida debate spur solutions? "I think there's any silver lining

TRICKS OF THE TRADE

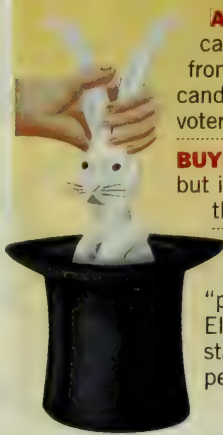
An inside look at how polls work the votes on Election Day:

INTIMIDATION Having police or uniformed security guards stationed around voting polls can depress turnout in poor neighborhoods.

ABSENTEE BALLOT MANIPULATION Because absentee ballots are filled out away from supervised voting places, it is possible for candidates to bribe, "instruct," or even invent voters.

BUYING VOTES It's illegal to sell your vote, but it's not against the law to entice someone to the polls with handouts of gifts and prizes.

THE NAME GAME The most common election irregularity: election officials "purging" voters' names from the official Election Day list. On the other extreme, some states, such as New Hampshire, have dead people listed on the voter rolls.



officials who tried to improperly influence votes inside polling places by urging voters to back Vice-President Gore.

Another favorite gimmick of political partisans is to "purge" the rolls of political opponents, usually voters who haven't been to the polls for several years. Such tactics were behind the Election Day chaos this year in St. Louis, as thousands of citizens with valid voter registration cards found themselves missing from the official rolls. Most were Democrats, and nearly 200 won court orders permitting them to vote. When a Democratic state judge extended poll hours, Republicans accused the other party of trying to steal Missouri's close Senate and gubernatorial races. Similar problems with "purged" voters were reported from Florida to New Mexico this year.

to this episode, it would be a nationwide movement to update voting procedures," says Claremont McKenna College political scientist John J. Pitney Jr. Among the likely reforms: new state laws—or even possible federal guidelines—on the counting and recounting of absentee ballots. Also, more states are likely to require voters to present positive ID before registering or voting. And election veterans predict that punch-card voting is on the way out. Such changes might make American election a bit cleaner, but don't expect much. Political shenanigans are as American as apple pie.

By Richard S. Dunham in Austin, Tex., with Ann Therese Palmer in Chicago, Dan Carney in Tallahassee, Jennifer Merritt in West Palm Beach, Fla., and Mike France in New York

What do **you** want the Internet to be?"

"A POWERFUL
ALLY IN THE GLOBAL
BATTLE AGAINST AIDS."

Elton John, Founder, Elton John AIDS Foundation

"In lieu of a promotional fee paid to Elton John, Nortel Networks has made a donation to the Elton John AIDS Foundation."

Optical
Internet

Never before has the Internet been more uniquely poised to make a difference. That's why Nortel Networks™ is building the new, high-performance Optical Internet with 99.999% reliability and a design that offers a higher level of quality and

speed. As a result, the Internet's ability to raise awareness, educate, and share experiences and scientific data is unprecedented. Our optical solutions will enable people to collaborate, giving them even more power to exchange information in record time – a valuable commodity in the race to save lives. So come together, right now with Nortel Networks. And make the Internet whatever you want it to be. nortelnetworks.com

NORTEL
NETWORKS™

Nortel Networks, the Nortel Networks logo and the Globemark are trademarks of Nortel Networks. "What do you want the Internet to be?" is a service mark of Nortel Networks. ©2000 Nortel Networks. All rights reserved.

IS THERE ANY HELP FOR THE 'HANGING CHAD'?

Punch cards are troublesome, but Internet voting could be, too

ELECTION 2000 THE TECHNOLOGY

One person, one vote. Each vote counts. That's the bedrock of democracy. So it came as a rude shock to most Americans to learn that thousands of votes in Florida and elsewhere weren't tallied correctly, or at all—and that the glitches may forever cast doubt on who won the Presidency. With so much at stake, can't a nation capable of sending rockets past Saturn and reading humanity's genetic code accurately count the votes of its citizens?

The answer: Not as accurately as we want. While it's possible to solve some of the problems that occurred, election experts say, replacing Florida's infamous punch cards with newer technology—whether touch-screen machines or the Internet—isn't going to give us defini-

And the tighter the race, the more likely errors are to trip political chaos.

In principle, today's voting technology is a match for the challenges of an election. The most commonly used machines are punch-card readers, optical scanners that tally arrows or filled-in ovals on paper ballots, and electronic touch-screen devices. In tests under ideal conditions, these devices are all accurate to within 6 votes in 10 million. But in practice, a

workers' cars be counted. And potential frauds are a constant shadow. Put millions of voters and polling workers together, says San Mateo's Slocum, "and there are bound to be glitches." Adds R. Doug Lewis, director of the nonprofit Election Center in Houston: "We've had these problems in state and local races forever. We've just never been exposed to them in a Presidential race before."

Still, better technology can eliminate some of the bugs. Banning butterfly ballots and other designs that confuse voters would be a step forward. Also, instead of shipping punch cards to another place to be read, more precincts can install readers right in the polling place. Where state law permits, the reader can then spit out ballots with over-votes—and give voters who punched two holes by mistake another chance. Similarly, optical readers at the polling place can reject paper ballots on which voters failed to connect the arrows or fill in the ovals correctly.

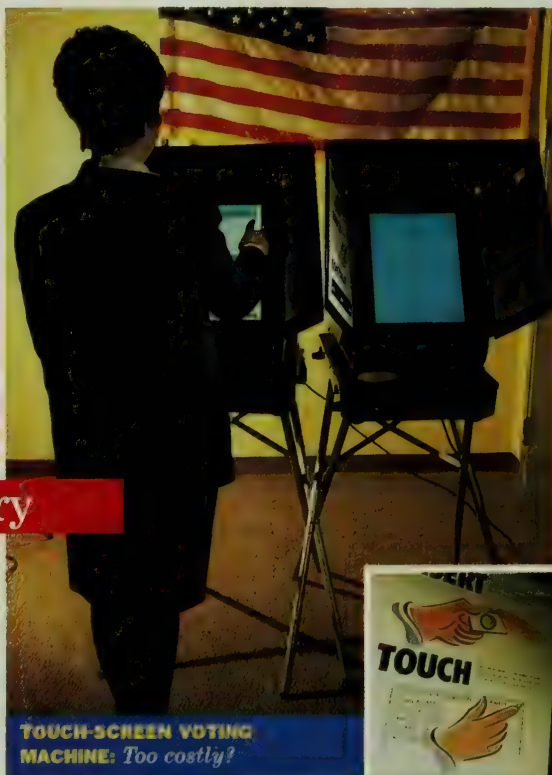
SECOND CHANCES. Optical readers also solve the "hanging chad" problem of punch-card systems—the fact that punching doesn't always fully remove the paper when voters make a hole. That's why optical systems have become the fastest growing voting method in the U.S.

New touch-screen systems made by Sequoia Pacific Systems, ES&S, and others, which record votes electronically represent a higher-tech approach (see page 225). If voting machines were secure computers, "a lot of these little problems—which happened to be big problems in Florida—would be eliminated," says David Jefferson, technology committee chair of California's Internet Voting Task Force and a senior researcher at the Compaq Systems Research Center.

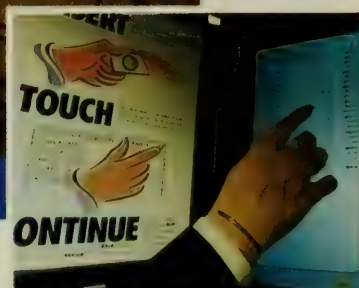
But electronic systems come with their own set of problems. One is cost. To avoid long lines at polling places, counties need a lot of the machines instead of just a few punch-card or optical readers. And at more than \$3,000 each, that's big bucks. California's Riverside County spent \$14 million on its new system, which

saves Riverside \$600,000 per election in ballot-printing costs. Still, outfitting a 3,066 counties in the U.S. would cost tens of billions of dollars up front—and most election officials are already perennially short of funds.

More fundamentally, "once you go to an electronic system, in essence you are trusting the computer program," says Hoffman. But what if the machine has been tampered with? Who would ever



TOUCH-SCREEN VOTING MACHINE: Too costly?



Cover Story

tive answers. "There is no perfect voting system," says Warren Slocum, chief elections officer of California's San Mateo County.

The truth is, "everything we are doing has some margin of error," explains computer-security expert Lance J. Hoffman of George Washington University. How much? "I'd be surprised if the error rate was less than 1% nationwide," estimates Bill Welsh, chairman and CEO of Election Systems & Software Inc., in Omaha. That means 1 million potentially questionable votes in this Presidential election—far more than Al Gore's slim overall lead in the popular vote. Trying to do much better with any election system "is like trying to weigh subatomic particles on a bathroom scale," says Mark Strama, vice-president of Election.com.

change in humidity might cause a punch card or paper ballot to misfeed, or a power surge could erase a vote.

But these errors are minor compared with those caused by human foibles, such as Palm Beach (Fla.)'s unfortunate ballot design. Even when ballots are crystal clear, election officials say, many voters don't follow instructions, circling a candidate's name on a paper ballot, for instance, instead of connecting an arrow. Nor can ballots left in polling



LOOK AT SALES.

LOOK AT INVENTORY.

LOOK AT PROFITABILITY.

REALIZE YOU HAVE
THE POWER TO
OWN THE MARKET
AND ACHIEVE GLOBAL
DOMINATION.

LIE IN WAIT.

COGNOS®



ou live for this moment. When your business vision becomes sharply focused and you find a new source of value staring you in the face. At Cognos, our mission is to deliver this moment again and again. We call it The Cognos Moment. And it happens in thousands of companies every day, driving their e-business strategy and success. Our world-leading business intelligence software solution gives you an immediate, enterprise-wide view of your business. Which everyone in your organization can use to create strategic business value, instantly. If you'd like to see how to experience a Cognos Moment, visit cognos.com/moment today. After all, the world is out there for the taking.

know? A recount won't answer the question because the system for storing electronic ballot "images" could be flawed as well, just as the old-fashioned lever machines still used in New York can be rigged. "Only a few computer scientists would be able to go in and say, 'Yes, the computer did the right thing,'" says scientist Aviel D. Rubin of the Secure Systems Research Dept. at AT&T Labs. That's why many county officials have opted to stay with paper-based systems. "A certain level of integrity comes from being able to do a manual recount in a close election," says San Mateo's Slocum.

So what about Internet voting? Using encryption technology and secure Net-connected terminals at polling places,

Cover Story

startups like VoteHere.net are convincing experts that such a system could be made safe from hackers. They point out that, as it is, some touch-screen systems transmit encrypted vote counts over telephone lines.

MAIL FRAUD. The real attraction of the Web, though, is that it would allow citizens to vote from home. But that increases the potential for disaster, computer-security experts say. First, it raises all the existing, thorny problems with old-fashioned remote voting by mail, from vote selling to outright fraud. "There is something to be said for showing up in some physical location and saying who you are under penalty of perjury," says Kim Alexander, president of the California Voter Foundation.

Second, when you factor in the porous, ad-hoc nature of the Internet, the chances of abuse rise exponentially. Attack programs could take over people's machines and steal their votes. Viruses could knock out voters' computers on Election Day. Network assaults could slow the Web enough to discourage participation. "My nightmare is that there would be a security disaster where some foreign power interferes with a U.S. election—and we find out only after the fact," says Compaq's Jefferson. For now, Internet voting is only a viable option for elections at private organizations.

The bottom line is that a big change in technology could bring as many headaches as solutions. "The current system is not really broken, Florida notwithstanding," concludes Jefferson. Sure, we can do a little better. But in close races, politicians will probably want to do manual recounts anyway. And in the case of photo finishes like Election 2000, we may have to accept that we'll never really know for sure.

By John Carey in Washington

COMMENTARY

By Dennis K. Berman

THE YOUNG AND THE (STILL) LISTLESS

ELECTION 2000

THE YOUTH VOTE

Somewhere, your old social studies teacher is smiling. After enduring decades of rolled eyes, shrugs, and "whatevers" from students, the 2000 election has become the telegenic civics lesson of a lifetime. And for the first time since these two less-than-dazzling candidates began their quest for the Oval Office, it has captured the rapt attention of teenagers and college kids.

Introductory government at Kirtland Community College in Roscommon, Mich.

Even before the election, polls showed that young voters remain deeply suspicious of politicians. It didn't help that both the Bush and Gore camps paid scant attention to the under-25 set during the campaign. Now, with the legal wrangling stretching on well past a week, chances are young voters' disenchantment with politicians will only increase. "Young adults are more susceptible to being

turned off...than other generations," says Russ Freyman, director of a project at Third Millennium, a youth advocacy group.

Beyond that, peacetime and a strong economy don't leave too many issues for young voters to get all that exercised over. Other than a small but vocal group inflamed over anticorporate and

environmental issues, young voters remain mostly disengaged, according to Richard Prosser, executive director of Junior State of America, a nonpartisan government organization for 100,000 high school students.

The only candidate who did resonate with voters under 25 was Green Party nominee Ralph Nader, who got his strongest support—5%—from 18- to 24-year-olds. "With Gore and Bush, it's just money, money, money," says 20-year-old Nina N. Mehlhaf, a junior at the University of Oregon who supported Nader but ended up voting for Gore.

Next time around, whoever the Presidential candidates are, they may want to pay more attention to such disaffected voices. Maybe then more young adults will vote—and help make a difference in a tight race.

Staff Editor Berman, 26, played Walter Mondale in his elementary school mock election.



SUSPICIOUS STUDENTS: *Disenchanted with politics*

"I guess I could have made a difference," says Henry C. Brown, a 23-year-old geography major at New Mexico State University.

Could have, but didn't. Brown never bothered to register this year. And Brown has plenty of company among his peers. Among 18- to 29-year-olds, who make up 22% of the total voting population, just 38% of those eligible actually voted on Nov. 7. That compares to about 51% for older voters.

So will the interest generated by the nail-biting, knock-down post-election fight between George W. Bush and Al Gore bring an end to the political ennui among young adults anytime soon? Don't count on it. Even though college kids have been glued to CNN, the unparalleled drama of this wackiest of elections seems unlikely to generate any lasting engagement by young voters. "It's just a spontaneous thing, and when this is all over, it's going to die down," says Sinan Toprak, who teaches in-

When it was new it was a benchmark for other new cars.

It still is.



At three years old, a Certified Pre-Owned BMW is still setting standards for many other new cars. Of course, its affordable price makes it even harder for most new cars to compete. The Certified Pre-Owned BMW is only available at an authorized BMW center - or find yours at bmwusa.com. Take one for a test drive and see for yourself. A Certified Pre-Owned BMW doesn't just stand the test of time. It triumphs over it.

Certified Pre-Owned

insured by BMW



Certified
by a
trained
BMW
technician



Extensive
Inspection



Protection
Plan*:
Up to
100,000 miles
or 6 years



Available
Leasing and
Financing



Affordability



BMW
Roadside
Assistance



Only
at your
authorized
BMW
center



The Ultimate
Driving Machine™

Browse the full selection at bmwusa.com

*Protection Plan provides coverage for up to 2 years or 50,000 miles (whichever comes first) from the date of the expiration of the 4 year/50,000 mile BMW New Vehicle Limited Warranty. See participating BMW centers for details. For more information, call 1-800-334-4BMW, or visit bmwusa.com. ©2000 BMW of North America, Inc. The BMW name and logo are registered trademarks.

Test drive a Certified Pre-Owned BMW. Only available at your authorized BMW centers.



Server content
distribution
from
Marimba.

Yes, it's causing
quite a buzz.

The premier solution to distribute your rapidly changing content
in a widely distributed server environment is here. Let's get busy.

marimba[®]

www.marimba.com/timbale1

© Copyright 2000 Marimba, Inc. All rights reserved. Timbale and Marimba are registered trademarks or trademarks of Marimba, Inc.

STRATEGIES

CAN FIORINA REBOOT HP?

The new chairman's restructuring raises expectations, as the company seems to falter

Carleton S. "Carly" Fiorina has received plenty of accolades for breathing new life into Hewlett-Packard Co. since taking over the computer and printer giant in mid-1999. But on Nov. 13, such talk seemed a distant memory. After she announced fourth-quarter earnings of 41¢ a share, 10¢ below expectations, the stock skidded 14%, to less than \$34. And while news that a proposed \$18 billion purchase of consultants PricewaterhouseCoopers had been canceled brought relief to investors, it was a big blow to Fiorina's makeover.

So how did Fiorina respond? She shocked analysts by raising revenue-growth projections for next year from an ambitious 15% to 17%. "We have issues, but we understand them and will deal with them," she explains.

Is this the sign of a supremely confident CEO—or one who is riding for an

even greater fall? Fiorina sees something analysts and investors don't—and for now, there's no doubt inside. "The board totally supports her," says ex-Chairman Richard A. Hackborn, who handed Fiorina the title just weeks ago.

Fiorina argues that the recent earnings surprise will be just a bump in her plans to transform the workaday maker of PCs and printers into a leading light of the Internet. The question, though, is whether the potential rewards from her ambitious plans will materialize quickly enough to give revenues such a boost—and whether HP can keep delivering earnings as it stretches to meet her top-line goals. "I don't see how she can do both," says Salomon Smith Barney analyst John B. Jones.

NET-POOR. The new forecasts certainly seem a stretch. Most of HP's growth is coming from low-margin consumer businesses that are slowing. Almost none of it stems from the lucrative Net-related markets she covets, such as servers, storage, e-business software, and services. According to Sanford Bernstein, sales of printers and PCs account for some 73% of the company's \$49 billion in sales. Servers, storage, and the like make up just 13%. "The fear is that she's asking too much of the company," says Jones.

In part, that stems from worries that Fiorina is spending too much time overhauling HP's broad structure, and not enough attending to nitty-gritty operations problems. The earnings shortfall resulted from myriad operational issues,

including higher expenses as well as losses related to currency and dot-com investments. Costs, for instance, jumped in part because of cushy new sales commissions designed to galvanize a sluggish North American sales staff. While that paid off in revenue growth—the

company delivered brisk 17% sales gains—there was a price. Salesmen hit quotas by focusing on lower-margin products. Now management is recalibrating commissions to drive higher-margin goods such as software.

Moreover, the company is just finishing an enormous restructuring. Its 83 formerly fiercely independent units have

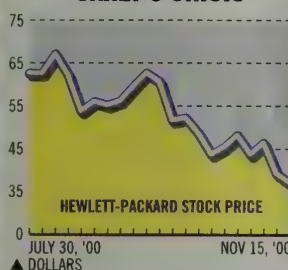
been combined into four basic groups: consumer products, such as PCs and inkjet printers; consumer sales and marketing; and two similar groups for the corporate world. Arguably, the streamlining should aid decision-making. But for now, it continues to be a logistical nightmare. Managers have only recently gotten a sense of their new roles amid the shifting organizational sands. And as of Nov. 1, they also have to get used to a new financial reporting system.

Larger strategic challenges loom, too. Sure, HP deserves credit for perfecting the art of selling PCs: With 40%-plus sales growth in recent quarters, it has even outpaced Dell. But unless it can finally make good on promises to gain share in more lucrative e-business markets, it may find itself as king of a commoditized market not worth owning.

To be sure, there's time to get things right. A six-month-old, 12-person strategy council is reining in Hewlett's fragmented efforts to make a big splash in key markets. Fiorina has injected renewed life into a disillusioned sales and R&D corps. And new high-end servers should help as well. "I didn't take this job thinking it would be quick or easy," says Fiorina. "But I know what we're doing is right." At this point, fewer people are taking her word for it.

By Peter Burrows in San Mateo, Calif.

CARLY'S CRISIS



DATA: BLOOMBERG FINANCIAL MARKETS

HEWLETT-PACKARD'S FIORINA



COMMENTARY

By Mike McNamee

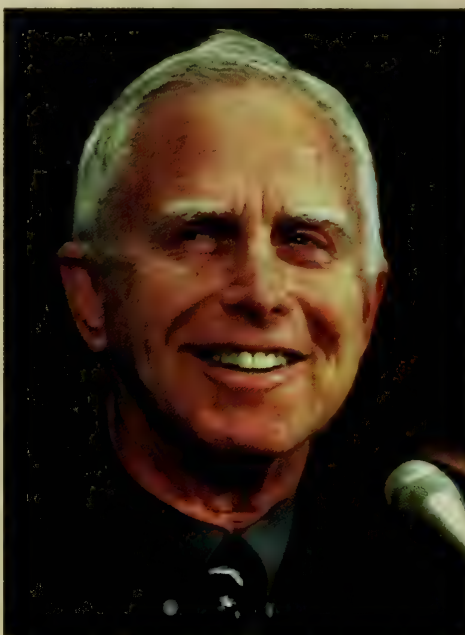
HOW LEVITT WON THE ACCOUNTING WARS

Last June, when Arthur Levitt Jr. proposed strict limits on auditors who also consult for their clients, accounting firms screamed. One of their complaints: The Securities & Exchange Commission chairman was overriding hard-won reforms to beef up corporations' audit committees. Levitt had insisted that those panels of independent directors should be investors' first line of defense against financial shenanigans. So why, the accountants asked, didn't he rely on them to police conflicts that arise when auditors also bid to install computer systems for a client?

Message to the Big Five: Be careful what you wish for. The final rules approved by the SEC on Nov. 15, with the 11th-hour acquiescence of four of the Big Five firms, appear far weaker than the ban on mixing auditing and consulting that Levitt originally sought. But by putting the burden on corporate audit committees—which now must tell shareholders how they decided that hiring the same firm to do auditing and consulting won't compromise the auditors' objectivity—the SEC chief may get the same result in the end.

EXTRA HURDLE. Long after Levitt's departure, expected early next year, the accountants will face unrelenting pressure to prove their independence—or get out of consulting. Many at the SEC believe the new rule will sharply limit the non-bean-counting work that the Big Five can do. Audit committee members will give such proposals "a long and hard look," says a top official. So instead of having the inside track on lucrative consulting jobs, a company's auditors will now face an extra hurdle.

Is that fair? Yes. Corporate boards are the right place to balance investors' interests in unbiased financial statements against the Big Five's need to develop their businesses. The accountants get what they say they need most: They can con-



SEC BOSS: *The new rules are his parting shot*

tinue to consult on information technology, the most lucrative of their services and the key to building the expertise needed to audit New Economy companies.

For all its advantages, the deal almost didn't happen. On the evening of Nov. 13—just 40 hours before the SEC was to vote on the new rules—Levitt and his negotiators met in the

SEC's Washington office with the CEOs of Arthur Andersen and Deloitte & Touche, two of the three firms battling the SEC. The heads of KPMG and the American Institute of Certified Public Accountants were on speakerphone.

After nearly two hours of discussion, the Big Five executives retired to a nearby room for a 45-minute caucus. When they returned, they told Levitt they couldn't accept his deal. Around 8:15 p.m., eager to catch the last shuttle back to New York, the executives left. "Here's my home phone number," Levitt told them. "Call me if you change your minds." No one did.

The next morning, though, Joseph F. Berardino, head of Andersen's auditing practice, picked up the phone. Without a deal, he and his colleagues knew, the SEC would impose its original plan to ban auditors from installing IT systems for clients. And the political climate had changed. The

three firms had fought to delay any SEC action until next year, when a GOP Congress, perhaps with President Bush, could force the SEC to back down. But GOP losses on Nov. 7 and the ambiguous Presidential outcome made that strategy dicey.

After six furious hours of phone calls, the deal was done. Andersen, Deloitte, and the AICPA joined PricewaterhouseCoopers and Ernst & Young—which had both backed the SEC from the start—in accepting the new rules. KPMG withheld its support: "Nobody's signing until we see all the language," says Stephen E. Allis, head of KPMG's Washington office.

The deal ends one of the nastiest regulatory fights Washington has seen in years. It won't end the decades-old battle over how to ensure that auditors remain unbiased guardians of investors' interests. But, in his parting shot, Levitt has won much of what he wanted all along.

WHAT LEVITT GOT

TIGHTER RULES FOR AUDITORS

- Audit firms may only do IT and other consulting if company board audit committees justify their hiring
- Auditor independence will be judged by whether a reasonable investor would see conflicts
- Auditors can't do more than 40% of a client's internal audit work
- Companies must disclose what they pay auditors for audits, consulting, and tax services

DATA: SECURITIES & EXCHANGE COMMISSION, BUSINESS WEEK

McNamee covers finance from Washington.



SUPPOSE

we increase
your productivity **AND** cut
your printing costs?

Sure, we pioneered digital copiers.
And yes, we're the fastest growing maker of
network printers in key markets.
But what keeps our customers coming back
in more than 120 countries is our uncompromising
dedication to individual output needs.
Talk to us.



We're in your corner.

RICOH®
Image Communication

www.ricoh-usa.com



DAS BOOT
CEO Holden (top)
is replaced by
Zetsche, a
Stuttgart import

AUTOS

DAIMLER'S DESIGNATED DRIVER

Can Dieter Zetsche clean up the mess at Chrysler?

It was a short, bitter stretch at the top for James P. Holden, Chrysler Group's chief executive. After presiding over a disastrous year at the battered carmaker, the 49-year old sales and marketing veteran was forced out on Nov. 17 by an impatient boss, DaimlerChrysler CEO Jürgen E. Schrempp. Now it's up to Dieter Zetsche, a trusted Schrempp deputy, to stem the flow of red ink at what had been the world's most profitable carmaker just two years ago.

But there's more at stake than just saving Chrysler. The poor performance from Detroit is weighing down profits at the entire company. Now Schrempp's credibility—and maybe even his job—is on the line. "If Chrysler turns out to be a complete disaster, there has to be a price to pay," says Deutsche Banc Alex. Brown analyst Rod Lache. "He's definitely under pressure."

BLINDSIDED. So far, Schrempp hasn't come close to proving the merits of the 1998 union of Daimler-Benz and Chrysler. Promised synergies haven't materialized. Chrysler lost \$512 million in the third quarter, thanks to its heavy use of incentives. That sent Daimler's own operating profit down a sharp 79%, to \$477 million. And its stock has slid to \$45 from a high of \$108 in early 1999.

Nor is a quick fix likely. Zetsche takes over a rapidly deteriorating unit whose forecast only gets gloomier.

Chrysler is now expected to lose as much as \$300 million in the fourth quarter. "Analysts are telling us now that we'll see no earnings from Chrysler next year," says Klaus Martini, chief of European equities at Germany's biggest investment fund, DWS Investment.

A growing sense that Chrysler's problems continued to deepen finally cost Holden his job. Just a year ago, Schrempp was high on the affable exec. But as Chrysler's revenues flagged, Holden blamed a tough U.S. market that required heavy incentives and the high cost of factory changeovers for new models. Sources close to Schrempp say he felt Holden was hiding bad news and that Holden didn't have a good handle on problems.

The last straw came in late October when Schrempp was blindsided by news that an inventory buildup would force Chrysler to idle seven factories, at a cost of some \$350 million. That came just days after Holden's assurances that Chrysler would turn a fourth-quarter profit of \$100 million.

Can Zetsche get things back on track? The 47-year old exec is well-re-

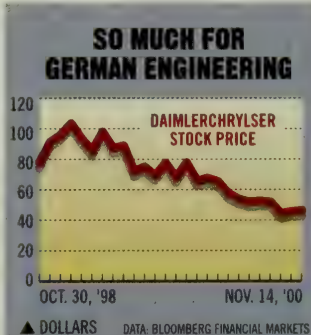
spected by managers at both Daimler and Chrysler for his solid results. He led a turnaround at Daimler's U.S.-based Freightliner truck unit in the early 1990s. Later, as head of DaimlerChrysler's truck business, he held profits steady despite an industry glut. Moreover, he's bringing a team of executives from Germany, including new Chief Operating Officer Wolfgang H. Bernard, an engineer who worked for the consultants McKinsey & Co.

But turning Chrysler around will take far more than cost-cutting. Zetsche will have to bridge the cultural divide and mistrust that has developed between Daimler and what remains of Chrysler's American management. Furthermore, Zetsche has no experience in the mass automotive market. True, he briefly ran worldwide sales and marketing for Daimler. But he didn't get

much experience managing consumer incentives, which will play an increasingly important role in the slowing U.S. car market. And Chrysler's unions are likely to be wary. While Zetsche was head of DaimlerChrysler's commercial truck unit, Freightliner engaged in a bitter battle to keep out the United Auto Workers.

After two years of failure, however, Zetsche may be Schrempp's last hope for making the Chrysler merger pay off. With a direct line to Stuttgart, at least headquarters shouldn't be in store for any more surprises.

By Joann Muller and Jeff Green in Detroit, with Jack Ewing and Christine Tierney in Frankfurt



Feeding a growing e-business made easy.

Building an e-business isn't easy. But Dell can make it a lot easier.

We've had the experience of growing

to \$15 billion a year in e-commerce. That's why we know what it takes: infrastructure like our reliable, rack-mountable,

scalable Dell PowerEdge™ servers and PowerApp™ appliances. They can grow as easily as your e-business grows.

We also make it easier with everything from custom integration of your operating system options online to

service centers that let you test your solution before you buy. Not to mention our on-site service and pre-failure alert program.

All of which is why companies like Monster.com and NaviSite are powered by Dell PowerEdge servers with Intel® Pentium® III Xeon™ processors.

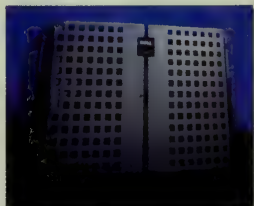
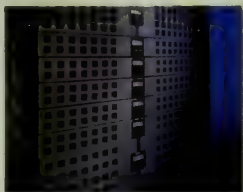
Why not make the care and feeding of your e-business a lot easier?

PowerEdge™ 2450
Rack-dense,
highly available
application server



PowerEdge™ 6450
Mission-critical
e-business server

PowerApp™
Turnkey web
& cache
appliance servers



PowerEdge™ 8450
Back-end
database server

800.501.DELL www.dell.com



Dell offers a complete line of Intel® processor-based systems. Expand your e-business with robust Dell PowerEdge servers based on the Intel Pentium III Xeon Processor, including the PowerEdge 8450 with up to eight processors and expandable to 32GB RAM.

Intel, the Intel Inside logo and Pentium are registered trademarks, and Pentium III Xeon is a trademark of Intel Corporation. Dell, PowerEdge, PowerApp and the Dell logo are registered trademarks of Dell Computer Corporation. Dell E Com is a trademark of Dell Computer Corporation. These devices have not been approved by the Federal Communications Commission for use in a residential environment. These devices are not, and may not be, offered for sale or lease, or sold or leased for use in a residential environment until the approval of the FCC has been obtained. ©2000 Dell Computer Corporation. All Rights Reserved.

COMMENTARY

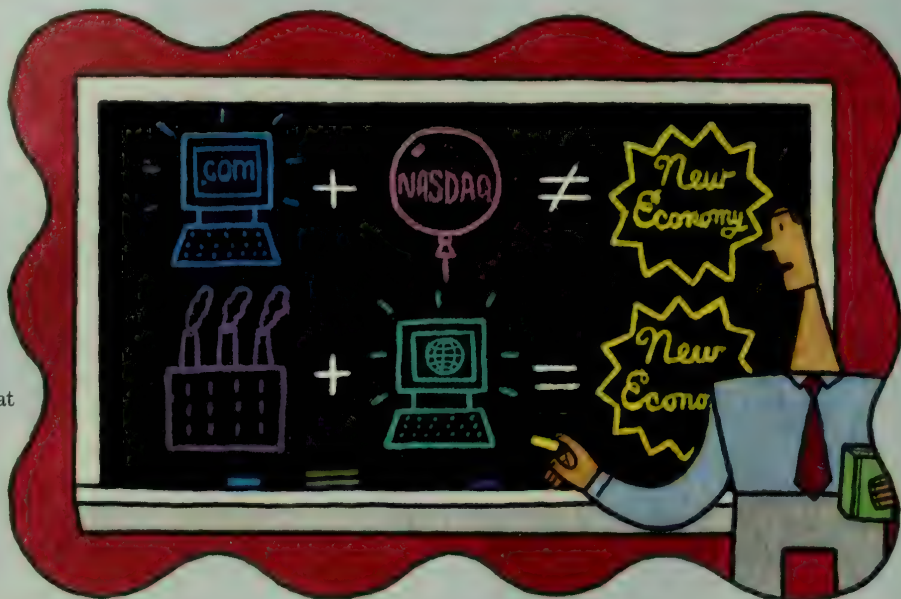
By Michael J. Mandel

YOU'VE GOT THE NEW ECONOMY ALL WRONG, LOU

Turnabout is fair play. During the soaring years of the Internet IPO boom, it was fashionable among the digerati to dismiss large companies such as IBM as dinosaurs, ill suited for the Internet Age. So in the wake of the dot-com meltdown, it's only natural that IBM CEO Louis V. Gerstner Jr. would indulge in a few shots of his own. "The startups were fireflies before the storm," he told attendees at IBM's analyst meeting on Nov. 8. In his words, the new companies are now "dot-toast."

Fair enough. But Gerstner went further, taking to task the whole notion of the New Economy. "Despite the hype of the media, there is no New Economy," he said. "The Internet is not about the creation of new industries and new institutions." The real story, he says, is the way established institutions and companies can use the new technology to transform themselves in pursuit of competitive advantage. Observed Gerstner: "The wars haven't changed, it's just that somebody has invented gunpowder."

REBUILDING. But Gerstner misses the point about the New Economy. For one, the spread of new technology to existing companies, rather than being antithetical to the New Economy as Gerstner seems to believe, is central to it. A key characteristic of the New Economy, as *BUSINESS WEEK* has used the term, is an accelerated rate of productivity growth—and that wouldn't be possible unless companies large and small across the country were using information technology to cut costs, increase output, and generally rebuild the way they are doing busi-



ness. So in fact, IBM's customers—many of them the established companies Gerstner refers to—epitomize the New Economy.

And Gerstner glosses over another key factor. The New Economy is not just about technological innovation—it's about financial innovation as well.



THINK AGAIN
Gerstner fails to credit New Economy companies with spurring growth and financial innovation

In particular, the easy availability of venture capital and IPO financing—something no other country has—greatly accelerated the speed at which new technology leapt from the drawing board into the marketplace. Indeed, the Internet revolution would have proceeded far more slowly if it had been led by IBM and AT&T

rather than Amazon, Cisco, and Netscape, all venture-funded.

Certainly, too many outrageous claims were made by dot-com proponents. And there's no doubt that the New Economy can still have recessions, just as the Old Economy did.

But just as the widespread use of gunpowder weapons in the 15th century fundamentally altered the nature of warfare and the balance of power, the combination of financial and technological innovation has dramatically altered the competitive landscape. The past decade has brought an astonishing number of new players on the scene. And Gerstner fails to note that one reason large companies jumped so quickly into e-business is that they were scared of losing business to nimbler competitors.

There is no doubt that Gerstner is right in one sense: IBM and its large customers, rather than becoming extinct, are crucial to future economic growth. But that's no reason to rewrite history. The New Economy is reality, not hype.

Mandel is economics editor at *BUSINESS WEEK*.

excellent

performance

Our benchmark: improved customer value through greater innovation.

We already offer innovative, custom-made solutions that provide competitive advantages for our customers. Going forward, we will also extend our ability to provide greater added value and strengthen our partnerships with customers. Further we are implementing eBusiness in all company processes to create new market opportunities for our strategic market segments.

Our goal: a continuous increase of shareholder value.

Celanese AG. A global leader in the chemical industry. www.celanese.com



EDITED BY MONICA ROMAN

VERIZON SEES BLUE SKY AHEAD

DOES VERIZON WIRELESS CEO Dennis Strigl know something about the stock market that others don't? On Nov. 15, Strigl agreed to acquire Price Communications Wireless, a Southeastern mobile-phone operator, for slightly more than \$2 billion. But Strigl made the deal contingent on Verizon Wireless' ability to complete its initial public offering, which he delayed in October. Strigl is betting that the stock market—or shares of mobile-phone companies—will recover enough over the next year that he can take his company public. Verizon Wireless is expected to raise \$10 billion to \$15 billion in the largest IPO

in U.S. history. If it doesn't happen by Sept. 30, 2001, Strigl's deal for Price is off.

MP3.COM SIGNS A PEACE TREATY

NAPSTER'S NOT THE ONLY digital music renegade to embrace a legal business model. On Nov. 14, online music site MP3.com settled its final copyright suit with Seagram's Universal Music Group for \$53.4 million. The settlement gives Universal an undisclosed number of MP3.com shares. CEO Michael Robertson says the total will not exceed 20%. The San Diego company settled four similar suits with record labels earlier this year. So far, it has spent less than \$117 million on legal fees—the amount set aside for copyright disputes. An unfavorable ruling could have cost an additional \$118 million. Rather than take the risk, MP3.com chose to make peace. Now, it will legally house the Big Five's music catalogs, giving users access to more than 700,000 digital songs.

LIGHTENING THE LOAD AT CMGI

THINGS SEEM TO BE GOING from bad to worse at ailing Net incubator CMGI. In efforts to damp a \$190 million-a-quarter burn rate, CMGI has been shuttering operations. On Nov. 13, it pulled the plug on entertainment portal iCast and the ad-based free Internet service provider 1stUp.com. CMGI Chairman David Wetherell, once hailed as a Web ad visionary, is today "saddled by major exposure to Internet advertising," said Steven Frankel, an analyst with Adams, Harkness & Hill in Boston. Frankel is not optimistic about the Web ad holiday season, suggesting CMGI's road to profitability could be a long one.

HEADLINER: WALTER ISAACSON

TIME PASSAGE

For weeks, rumors swirled that *Time* magazine Managing Editor Walter Isaacson would be moving on after four years on the job, but not before he oversaw the closing of the crucial Election Day issue. Sure enough, though the election is unresolved, Isaacson's fate is not. On Nov. 14, the New Orleans native was promoted to editorial director of Time Inc., Time Warner's publishing unit, with a bevy of 40 magazines. Isaacson, 48, will be replaced by Deputy Managing Editor Jim Kelly, with whom he started at *Time* in 1978.



Isaacson's new role gives him more clout to shape strategies for the pending Old Media/New Media marriage of Time Warner and America Online. His main focus will be finding ways the magazines can work with AOL and CNN, another Time Warner unit. "I bring enthusiasm, if not wisdom," says Isaacson, who was Time Inc.'s New Media editor before joining *Time*. And for those old ink-stained wretches at the magazines who are nervous about their new Net partner, Isaacson seems to be the perfect liaison.

By Tom Lowry

CLOSING BELL

MORNING AFTER

The lending boom of the '90s is leaving banks with hangovers. Bank of America said on Nov. 14 that charge-offs from troubled loans in the current quarter could be more than twice the \$435 million recorded in the third quarter. BofA cited the slowing economy, tighter regulation, and a loan to a large unnamed customer that soured. Its shares tumbled roughly \$4, to around \$42 the following day—well below last November's \$67.50 high.



FEDEX HITCHES UP A NEW TRUCKER

FEDEX CONTINUED ITS ground assault against rival United Parcel Service with its Nov. 14 deal to purchase trucking company American Freightways for \$950 million in stock and cash. FedEx will also assume \$250 million in debt. Even with Harrison (Ark.)-based American Freightways, FedEx' ground-delivery service will lag behind that of UPS. Still, UPS doesn't have a regional trucking company that cuts costs and time the way that American Freightway does by combining the freight of several companies on one trailer.

WILL ICG HAVE TO PULL THE PLUG?

ICG COMMUNICATIONS, A ONCE-high-flying provider of telephone service and Internet access, has declared bank-

ruptcy. The Chapter 11 filing comes months after the Denver company raised \$750 million from such high-profile investors as John Malone's Liberty Media Group and investment firm Hicks, Muse, Tate & Furst. "We believe we'll be able to reposition ICG to be a profitable and competitive company," said the new CEO, Randall Curran. It is unlikely, however, that ICG's legal woes will be limited to bankruptcy court. More than a dozen lawsuits accuse ICG's former management of misleading investors.

ET CETERA...

- Promotional spending drove Campbell Soup's profits down 13% in the fiscal first quarter.
- Online gardening tools supplier Garden.com joined the dot-com dust heap.
- The Chicago Mercantile Exchange became a for-profit shareholder-owned corporation.

e t w o r k t h e w o r l d



Morgan Stanley Dean Witter is a service mark of Morgan Stanley Dean Witter & Co.

msdw.net/NewGame

For companies and investors alike, the market's a different animal.

In a market that keeps changing its stripes, there are three simple truths to keep in mind.

Seek real growth. Find genuine value. Avoid empty promises.

So, whether you're a company looking for the right investors — or vice versa — know this.

We've helped an extraordinary list of new companies to get the best start. And traditional companies to gain even more value for the long run.

We've also matched the right investors with the right companies. Something solid to think about.

Network the world

MORGAN STANLEY DEAN WITTER

INSTITUTIONAL SECURITIES & INVESTMENT BANKING

A photograph of a desert landscape with sand dunes. In the foreground, a dark, rocky outcrop or small dune is visible. In the middle ground, a small, dark-colored vehicle, possibly a truck or SUV, is parked on a sand dune. The background shows more sand dunes under a hazy sky. The overall color palette is warm, with various shades of tan, brown, and gold.

In the middle of the desert,
one of our biggest difficulties
was finding sand.

It's one of the last unconquered frontiers on earth. Located in Saudi Arabia's Empty Quarter, 340 kilometers (200 miles) from the nearest anything, Shaybah is a land of towering sand dunes and immense salt flats, with temperatures which exceed 50°C (120°F) in the summer. But it's also home to an oil field containing billions of barrels of light crude—energy the world needs now and in decades to come.

Saudi Aramco took up the challenge of harnessing that energy. In the course of the project, we built a 386-kilometer (240-mile) access road, laid a 645-km (400-mi) pipeline, and constructed extensive production, communication, maintenance, support and residential facilities. And we did it in record time. One problem we faced was finding sand—you see, the fine grains of the local sand in Shaybah make it unsuitable for use in building materials. As a result, we trucked in all of the sand needed for the concrete that was poured. Now, what was once barren desert is a sprawling mini-city and a state-of-the-art industrial complex.

The end result is abundant energy. Shaybah holds more than 14 billion

barrels of oil—roughly equivalent to the reserves of the North Sea—and some 25 trillion cubic feet of natural gas. The 500,000 barrels of oil we produce in Shaybah each day is equivalent to the daily total energy needs of over 10 million households.

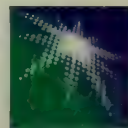
But Shaybah is just part of Saudi Aramco's story. We manage a quarter of the world's total oil reserves, and



Saudi Aramco's Shaybah Field adds 500,000 barrels to the world's daily supply of crude oil and helps ensure a stable supply of energy.

maintain a 10 million barrel-per-day production capacity, far exceeding any other company in the world. That oil, along with our integrated petroleum production, processing, storage and shipping network, helps to ensure a stable supply of affordable energy now, and well into the future.

أرامكو السعودية
Saudi Aramco



TM

CAN HOME DEPOT GET ITS HOUSE IN ORDER?

As home remodeling slows, investors fret the hardware giant will hit the wall

When Bernard Marcus co-founded Home Depot in the late 1970s, he was so obsessed with creating an authentic warehouse feel that on the morning his first store opened, he raced through the aisles on a forklift—slamming the brakes at every turn—to make sure the floor had visible skid marks.

Since then, Home Depot Inc. has gone on to dominate the home improvement business, with sales last year of \$38.4 billion. But now—after years of 30% to 40% annual earnings gains—Marcus and co-founder Arthur M. Blank are dealing with a different kind of skid. After stunning Wall Street last month with its first profit warning in five years, Home Depot on Nov. 14 registered a disappointing 13% increase in fiscal third-quarter earnings—barely half the 25% growth that analysts were earlier banking on. With the fourth quarter looking just as dicey, Deutsche Bank Alex. Brown analyst Dan R. Wewer expects net income to grow just 17%, to \$2.7 billion this year, on sales of \$46.3 billion. Next year, when the company expects same-store sales growth to slide to 4%, down from 10% last year, doesn't look much better. Investors, fearing that Depot has hit the wall, have slashed the stock to around 40, or 42% below the peak of last March.

What's behind the woes at the Atlanta-based hardware store giant? The company maintains that the current slowdown reflects the industrywide collapse in prices for lumber and other building materials as well as tough comparisons to 1999, when sales were aided by Y2K stockpiling. Blank, who succeeded Marcus as CEO three years ago, assured analysts in October that "we remain committed to our goal of 23% to 25% earnings-per-share growth for fiscal 2001." **BASIC INSTINCT.** How? For one, Blank plans to squeeze out weaker competitors—just as he did with Hechingers and Builders Square in the 1990s.



RETOOLING: Home Depot is unveiling new offerings, from rentals to appliances

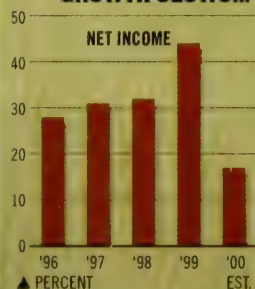
Betting that lumber yards, supply houses, and other rivals are cutting costs and perhaps service to weather the collapse in prices, Blank intends to go full bore with a spate of initiatives. "Whenever there's been this kind of slowdown, we've turned back to our basic kind of nature, which is to be piranhas," Blank told investors on Nov. 14. "We'll be very aggressive in the marketplace

to gain as much share as we can."

But some industry experts believe Home Depot's third-quarter woes reflect a more fundamental problem: a slowing economy and a decline in home sales and home remodeling, the company's lifeblood. After four record years, sales of existing homes are expected to fall by 3.1% this year and another 0.5% in 2001, according to the National Association of Realtors. New home sales and remodeling are heading the same direction. "As remodeling slows, [Home Depot is] going to see some slowing growth of sales unless they pick up market share from other retailers," says Kermit Baker, an economist with Harvard University's Joint Center for Housing Studies.

Home Depot's profit warning has also caused some analysts to question how much more mileage the company can get from its orange warehouse stores—which

AS HOME DEPOT'S GROWTH SLOWS...



...ITS STOCK HAS BEEN HAMMERED



DATA: HOME DEPOT INC., WACHOVIA SECURITIES INC., BLOOMBERG FINANCIAL MARKETS

**If This City Is Unfamiliar,
Chances Are You Need
NTT Communications.**

Recognize this city? It's in Asia. Here's another hint: A lot of global companies do business here. If you're feeling left out, try getting connected with NTT Communications. As Japan's leading telecommunications company, NTT Communications can provide your business with everything it needs to stay ahead of the competition, including our one-stop network solutions service: **Arcstar**. Currently serving 25 major cities around the world and available in 53 countries, Arcstar can develop the network solution that's right for you. And with special focus on IP (Internet Protocol), Arcstar offers top-quality, high-speed and secure access to the Internet. So when it comes to connecting to Tokyo, or anywhere else in the world, connect with NTT Communications. **Your trusted partner in Network Solutions.**

Global Connections From East to West.



www.ntt.com/world

Tokyo Osaka Seoul Beijing Shanghai Taipei Hong Kong Hanoi Bangkok Manila Kuala Lumpur Singapore Jakarta Sydney London
Brussels Paris Geneva Dusseldorf Frankfurt Milan New York Washington D.C. Virginia San Francisco Los Angeles Rio de Janeiro São Paulo

NTT Communications Group in the Americas: NTT America New York Head Office +1-212-661-0810 / Washington D.C. Office +1-202-312-1444 / Virginia Office +1-703-288-3103 / New England Office +1-978-392-4764 / Chicago Office +1-773-693-0080 / Mountain View Office +1-650-940-1414 / Seattle Office +1-206-762-5362 / Los Angeles Office +1-310-516-2111 / NTT do Brasil Telecomunicacoes Ltda., Sao Paulo Head Office +55-11-253-0108 / Rio de Janeiro Office +55-21-553-7297

People know Pueblo for its...



Snazzy Web Site?
(www.pueblo.gsa.gov)



Famous Hot Salsa?

In Pueblo, the free information is also hot. You can get it by dipping into the Consumer Information Center web site, www.pueblo.gsa.gov. Or calling toll-free 1-888-8 PUEBLO (1-888-878-3256) to order the Catalog. Spice up your life with ready-to-use government information on topics like investing for retirement, getting federal benefits, raising healthy children and buying surplus government property. Sorry, salsa not available through our web site or Catalog.



U.S. General Services Administration

The Corporation

are already facing heightened competition from rival Lowe's Companies Inc. Marcus and Blank declined requests for interviews, but investor relations head Robert M. Burton insists that the chain can boost the number of stores from 1,060 to 2,300 in the next four years, thanks to expansion in the U.S., Canada, Puerto Rico, Chile, and Argentina. Some analysts, though, believe saturation in the U.S. will be an issue in coming years. "As Home Depot saturates its geographical expansion with the orange stores, it will need to seek alternative investment opportunities," says Wachovia Securities Inc. analyst David A. Buchsbaum.

That could be a problem. Home Depot's efforts to develop other concepts have moved slowly. It took eight years to ramp up its Expo Design Centers, home-design and decor stores launched in the early 1990s. Depot has repeatedly rejiggered the concept. Executives believe they've got the format right now: The 21 Expo stores, which con-

erate growth and wring new efficiencies out of its core warehouse stores with new services such as tool rentals. In January, the company added big-ticket appliances like refrigerators and ovens. While the company says initial sales are encouraging, the margins in the appliance business are razor-thin and Depot faces formidable competition from the likes of Sears, Roebuck & Co., which controls 38% of the market. Sears won't surrender share without a fight. "This is a very key business for Sears, and we plan to continue to grow it," says Tina Settecase, Sears' general manager for appliances.

At the same time, the company is redoubling its efforts to woo professional contractors, which now account for almost 30% of sales. Contractors interviewed by BUSINESS WEEK said they use Home Depot because of its many locations and one-stop shopping, but that the retailer still doesn't provide the selection—or service—found at electrical supply houses or lumber yards. "They



“We’ve turned back to our basic kind of nature, which is to be piranhas. We’ll be very aggressive in the marketplace”

— ARTHUR M. BLANK, Home Depot

sist mostly of sample rooms showcasing products, are averaging \$45 million in annual sales, the same as the average Home Depot unit, and with the same returns. Still, Depot expects to open only 179 more Expos over the next five years—well below the pace of the warehouse stores.

GETTING IT RIGHT. Then there's Villager's Hardware, a small-format hardware store Home Depot is testing in four New Jersey locations. Burton says the units, which carry basic hardware as well as plants, paint, and coffeemakers, are "a way for us to go after densely populated areas where it's difficult [to find] real estate." But ING Barings analyst Maureen M. McGrath is skeptical. "I'm just not convinced the Villager's Hardware is the right format." With its heavy emphasis on kitchen wares, Villager's may disappoint shoppers looking for nuts, bolts, and power tools. "It's really for women," grumbles Detlef Scholz, a corporate pilot who was recently shopping at the Saddle Brook (N.J.) location. "I wish it had more specialty tools."

And Home Depot believes it can gen-

erate growth and wring new efficiencies out of its core warehouse stores with new services such as tool rentals. In January, the company added big-ticket appliances like refrigerators and ovens. While the company says initial sales are encouraging, the margins in the appliance business are razor-thin and Depot faces formidable competition from the likes of Sears, Roebuck & Co., which controls 38% of the market. Sears won't surrender share without a fight. "This is a very key business for Sears, and we plan to continue to grow it," says Tina Settecase, Sears' general manager for appliances.

Will all this be enough to reignite Home Depot? Company officials note that after a similar swoon in 1995, the company rebounded nicely, with profits rising more than 40% in 1999. But the hardware chain is a lot more ubiquitous now. With the housing boom showing signs that it's played out, Depot may find it needs a whole new set of tools to get its growth back on track.

By Aixa M. Pascual in Atlanta, with Robert Berner in Chicago

AOL All-New Version 6.0!

**The Easiest
Just Got Even Easier!**



- *New look, design and features make it even easier to get started*
- *Free 24-hour customer service means help is just a phone call away*
- *Your security and privacy are always protected on AOL*
- *Parental controls to help safeguard your kids*
- *There's never been a better time to join*

**Call 1-800-4-ONLINE
NOW To Sign Up Today!**



So easy to use,
no wonder it's #1

There's no bear market

r good ideas.



NEW MATERIALS

IT'S A NANO WORLD

Manipulating molecules can create tomorrow's miracle materials

BY OTIS PORT

Materials technology is the real wealth of nations. It has been the hallmark of civilizations stretching back 8,000 years to the Bronze Age. Today's Information Age is no different. Without silicon that is 99.99999% pure, there wouldn't be computer chips, cell phones, or fiber-optic networks. In recent decades, inorganic chemists have concocted an impressive array of metals, alloys, and ceramics—sending skyscrapers ever higher, making cars lighter and more fuel-efficient, and launching air travel for the masses.

Organic chemistry, meanwhile, contributes its own share of modern conveniences. It produces the plastic packages that keep foods fresh, the housings that protect TVs and appliances, and synthetic fleeces that ward off the cold. Organic chemists created the fertilizers that help feed the world—and the ever-growing medley of wonder drugs that keep people healthy.

BOUQUET. Now, materials scientists are determined to transform the world yet again. Not content with the raw materials that can be extracted from the earth, researchers are mining their imaginations for totally new structures. They're doing it by tearing down the walls between organic and inorganic chemistry, something that not long ago would have been dismissed as pseudoscience. Tomorrow's inorganic-organic combos will be tailored from the bottom

up—patched together from individual atoms or molecules—to provide the precise properties needed for each specific application. Arden L. Bement Jr., an engineer at Purdue University, calls it the dawn of “the boutique materials age.” And it promises to turn Mother Nature green with envy.

The possibilities are almost endless: Polymer-based paints and coatings that contain tiny ceramic particles to defy scratching and corrosion. Improved catalysts that spawn new pharmaceuticals and plastics. Iron-polymer batteries that generate twice as much power. We could also see resilient metal-composite carbody panels that pop back into shape after minor fender-benders. Tough yet lightweight composites that boost jet-engine performance—including turbofans that self-repair tiny stress cracks. And there'll be all manner of materials with internal smarts that emulate biological systems, enabling them to adapt to changing conditions, compensate for wear, and warn of impending trouble.

Biological metaphors are a frequent theme among nano researchers, partly because they work with things measured in nanometers. This is the scale at which molecules mingle to create DNA and proteins, the building blocks of life. A nanometer is a billionth of a meter. Individual atoms are a few nanometers in diameter.

Indeed, a chief goal of organic-inorganic weddings is to breathe a spark of life into tomorrow's materials progeny. That's not just a dream. With nano engineering, “almost anything you can think of will be possible,” declares W. Lance Haworth, executive officer for materials research at the National Science Foundation (NSF). The idea, says John H. Weaver, head of materials science at the University of Illinois, is to harness the molecular mechanisms that Nature has evolved for the production of new materials.

The appeal of bio-inspired materials is



JUST LIKE CHILD'S PLAY

With the nanoManipulator system at the University of North Carolina, experiments in nano land are almost child's play. Holding a pencil-like device, researchers can nudge molecules, like the carbon nanotubes projected onto the table, into different arrangements. A computer tracks every motion, reduces it a millionfold, and steers the tip of an atomic-force microscope, or AFM.



easy to understand: The human body is a marvelously efficient factory. Most cells in the body contain the entire genetic code—4 billion “base pairs” of data that contain the recipes for making every one of the body’s 10 trillion cells. But each cell actually needs just a tiny chunk of the genetic code to reproduce itself, and it manages to track down only that data. Since all 10 trillion cells replace themselves every few years, the body cranks out new DNA at the amazing rate of 10,000 miles an hour, day in and day out. But before nanotechnology can give birth to “living” materials, many fundamental issues must be resolved. Biological systems, Haworth notes, “know when to switch various functions on and off. How do you mimic those processes in synthetic materials? How do you get organic and inorganic materials to grow cooperatively together?”

EXOTIC TOOLS. To find the answers, materials wizards are using exotic tools such as scanning-probe microscopes with supersharp tips. These not only trace the outlines of individual atoms but also move them around to explore how nanosize elements fit together. For example, the nanoManipulator at the University of North Carolina makes dabbling in chemistry so easy that biologists and physicists regularly use it to play with atoms and molecules as if they were Tinkertoys. “What we’re having the most fun with now,” says Sean Washburn, a North Carolina physicist, “are cigar-shaped nanotube molecules.”

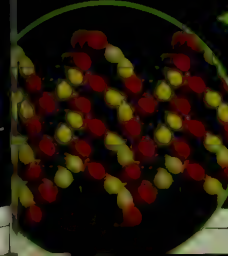
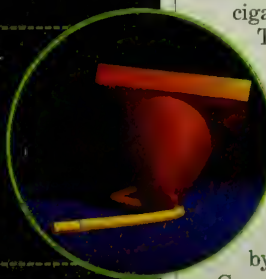
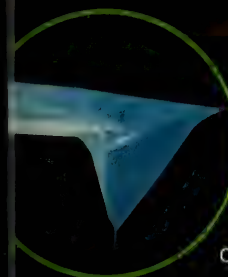
These are elongated versions of the carbon buckyballs discovered in 1985 by Richard E. Smalley, a professor of physics and chemistry at Rice University. The discovery earned Smalley a Nobel Prize in 1996.

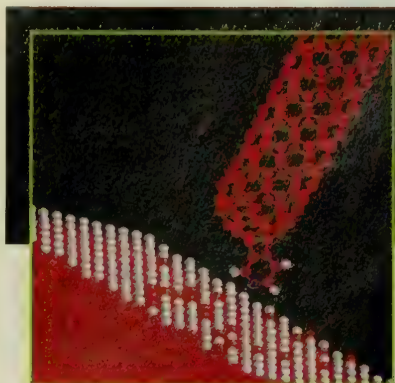
Nanotubes are truly wonder molecules. First created in 1991 by Sumio Iijima, a scientist at NEC Corp., nanotubes are at least 100 times stronger than steel, but only one-sixth as heavy—so nanotube fibers could bolster just about any material. Moreover, nanotubes can conduct heat and electricity far better than copper, so reinforcing strands could do double duty as computer circuits, creating the nervous system for “smart” materials. Or

◀ AFM tips are so pointy they can trace the outlines of individual atoms. The whisker on the tip at left is a carbon nanotube that improves the resolution of images. For physically manipulating molecules, clean-shaven tips are used.

Here, an AFM tip touches and bends a carbon nanotube. Because it would be incredibly tedious to create electronic circuits by nudging millions of nanotubes into place, researchers are working on techniques that cause nanotubes to self-assemble into desired shapes and patterns.

◀ As an alternative, conductive polymers can be coaxed into specific patterns. The Z-shaped structure here is formed by a conductive polymer with a tongue-twisting name: naphthalene-tetracarboxylic-dianhydride.





they could serve as heat pipes to keep composite-plastics parts cool enough to be used in engines.

These new molecules extend the performance of organic materials to unprecedented levels. But inorganic substances still offer many advantages. And nanotechnology provides the means to fashion inorganic-organic hybrids. "Now you can develop materials that you couldn't even imagine before, because the mix of properties just wasn't available," says Ralph E. Taylor-Smith, a chemical engineer at Lucent Technologies Inc.'s Bell Laboratories. Inorganic materials tend to be hard but brittle—glass being a prime example. Organic materials, on the other hand, are typically soft and rubbery. Merge the two sets of properties, says Taylor-Smith, and you could get a substance that's very strong and hard, yet with enough "give" to impart good impact resistance. One example: a big flat-panel display for handheld computers that folds up.

SCATTERSHOT. Inorganic-organic hybrids are hardly new, of course. Fiberglass-reinforced plastics have been around for decades. But these are essentially physical mixtures. They often suffer from weak chemical bonds between the reinforcements and the bulk material. Beyond a certain stress level, the two materials can delaminate, which often leads to structural failure. Nano engineering promises to cure that by tailoring the surfaces of components so they have chemical hooks specifically designed to glom onto each other.

It's basically an issue of size. Silicon's carefully crafted semiconducting properties are produced after the fact, by shooting boron or other atoms into the finished bulk material. Tomorrow, this

THE ULTIMATE LIBRARY

Incredible amounts of information could be saved on a postage stamp if digital bits were stored as individual atoms. In NASA's visionary scheme, a nanotube is used as the read/write head, and zeros and ones are represented with hydrogen and fluorine atoms, respectively. A stamp might hold the entire Library of Congress and then some.

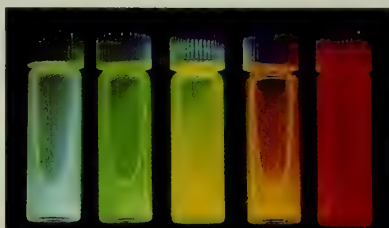
scattershot approach won't be good enough. Organic molecules will have to be placed at specific locations with atomic precision. One method might be to insert organics inside the crystalline structure of silicon, so its properties can be chemically tweaked from within. A research team at the University of Toronto, led by chemist Geoffrey A. Ozin, pulled off such a feat late last year. They crammed organic molecules into porous silica, producing an insulating compound that could replace the silicon-dioxide layers on future chips. Circuit lines and insulation will soon shrink to dimensions at which silicon dioxide is no longer an effective insulator.

At the University of Minnesota, a team led by chemist Xiaoyang Zhu tackled another size-related problem by attaching chlorine atoms to silicon atoms. The problem is called stiction—the stick-

iness that particles exhibit starting in the so-called mesoscale range. This is in between the nano realm of quantum physics and the macro world of chemical events that unfold in test tubes or industrial vats. Stiction kicks in at around 1,000 nanometers. Below that, surface forces "really dominate everything else," says Zhu. Even fluids have a hard time moving, not to mention the components in microelectromechanical systems, or MEMS—little machines carved into silicon chips. But a coating of chlorine that's one, and only one, atom thick can create a lubricating film that will make it easier for MEMS designs to include parts that move across the surface.

The nano world has its own size-related surprises. For example, researchers at Massachusetts Institute of Technology discovered that semiconductor nano particles sandwiched between one polymer that conducts negative charges and another that conducts positive charges can create light-emitting diodes (LEDs) that emit colors spanning the visible spectrum. The same structure produces a rainbow of hues depending on the size of the particles. Green light is emitted by 1.8-nanometer particles, while 7.5-nanometer particles glow red when they're illuminated with ultraviolet light. This makes for more than a pretty light show. Diodes like these could provide the color in those fold-up displays for pocket computers—or for "wallpaper" TV screens in homes.

Similarly, the bulk properties of materials often change dramatically with nano or meso ingredients. Composites made from particles of nano-size ceramics or metals smaller than 100 nanometers can suddenly become much stronger than predicted by existing materials-science models, says Richard W. Siegel, chief nanotechnologist at Rensselaer Polytechnic Institute. For example, metals with a so-called grain size of around 10 nanometers are as much as seven times harder and tougher than



RAINBOW'S END

The romance of rainbow colors gives way to mathematical formulas in the nano world. Researchers at MIT developed a polymer-semiconductor composite that can emit different colors—in fact, all visible colors. The material could yield nano-size light-emitting diodes (LEDs) for wallpaper-thin computer displays and TV screens.

NEW DREAMS With a bottom-up approach, scientists can fashion materials that traditional chemistry could never create

3 IXL HEWLETT-PACKARD EZENIA! ERICSSON TRELLIX ALCATEL AUCTIONROVER.COM LANTE BO
PARTS J.D. EDWARDS COMMERCE ONE. ICG COMMUNICATIONS FOOD.COM DELOITTE CONSULTING
TEMS TICKETWEB TRELLIX MICROSOFT ECAMPUS.COM PEOPLESOFT ROCKWELL SOFTWARE LANT
EZENIA! PEOPLESOFT J.D. EDWARDS LANTE AUCTIONROVER.COM ERICSSON ALCATEL IBM BOOK

IBM's software is built with precision. With vision. With Rational.

COM NETWORK ASSOCIATES EZENIA! MICROSOFT FOOD.COM SUN MICROSYSTEMS ALCATEL HEV
I IXL ERICSSON FOOD.COM SUN MICROSYSTEMS RECRUITSOFT.COM CALICO COMMERCE COMME
WARE COMMERCE ONE IBM TICKETWEB MICROSOFT RECRUITSOFT.COM TRELLIX EZENIA! J.D. E
CASE PARTS AUCTIONROVER.COM BOOKSONLINE.COM CASE PARTS CONTEXT INTEGRATION ECAMP

IBM is the world's largest IT company and a leading provider of e-business software and services. IBM uses Rational's e-development solutions, from visual modeling to software testing, in conjunction with IBM's VisualAge[®] application development tools and the WebSphere software platform. They're not alone. Thousands of companies worldwide apply Rational's software engineering best practices, unified tools and services to increase their software development speed and quality. In fact, 47 of Fortune's top 50 e-businesses use Rational's software. Want to build software better and faster? Visit us at www.rational.com/IBMsucces1 for the complete IBM story.

Rational
the e-development company

© 1999 Rational Software Corporation. All rights reserved.
Rational Software Corporation in the United States and other countries.

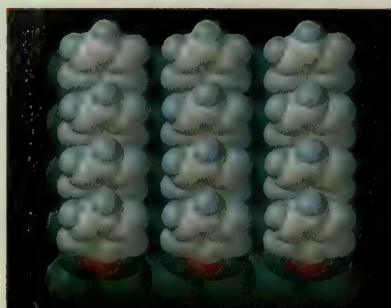
their ordinary counterparts with grain sizes in the hundreds of nanometers.

The causes of these drastic changes stem from the weird world of quantum physics, says Thomas N. Theis, IBM's director of physical science. The bulk properties of any material, he explains, are merely the average of all the quantum forces affecting all the atoms. "But as you chop things smaller and smaller, you eventually reach a point where the averaging no longer works."

Associated changes in electrical properties have grabbed the attention of the U.S. Air Force, says John Kieffer, an inorganic chemist at the University of Illinois. The radar "signature" of a jet plane coated with nano compounds could be smaller and stealthier. Mesoscale particles may turn up in car paints. Andreas Stein, a Minnesota chemist, is working on photonic crystals that could be tuned to reject green light. Green light carries the most energy of any color. Block it with special paints, and the interior of cars parked in the sunlight wouldn't get so hot. Or the paint could include tough ceramic particles smaller than the wavelengths of visible light—making them transparent, so they wouldn't affect the color of the paint. But the particles could provide a virtually scratchproof surface.

CHAMELEON. For materials scientists, all these strange new potentials are inspiring new dreams. At the University of California at Los Angeles, chemist James R. Heath envisions building unique materials from "artificial atoms." These actually are small clusters of atoms dubbed quantum dots. With a bottom-up approach, Heath predicts, it will be possible to create materials that could never be produced with traditional chemistry. To prove it, his research group recently hatched a chameleon material that responds to electrical signals by switching back and forth from being a metal to being an insulator.

To Colin Humphreys, a materials expert at Britain's Cambridge University, such feats indicate that materials



MIX AND MELD

Organic coatings consisting of one-atom-thick layers may be silicon's ticket to new jobs. Here, nitrogen atoms (red) link a silicon substrate and a coating of carbon atoms capped with hydrogen (blue). The University of Minnesota is developing a range of coatings for inorganic silicon.

science is now reaching a point analogous to genetic engineering in biology: Molecules will be engineered at the atomic level, then replicated with biologically modeled processes to produce bulk quantities. That's why many labs are working to harness biological principles, often focusing on DNA-like molecules that can direct the self-assembly of new materials. DNA is the leader of the body's chemical orchestra, directing it to turn out the 200-odd types of cells that make up human bodies.

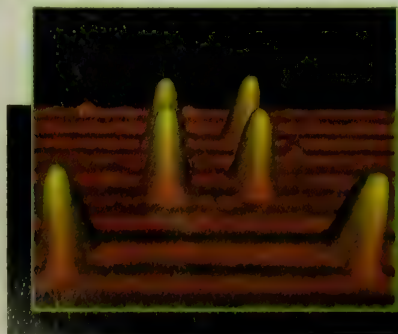
Chipmakers salivate at the thought of a DNA-type process for creating circuits. Actually, it will soon be necessary, says Aristides A.G. Requicha, head of the Laboratory for Molecular Robotics at the University of Southern California. "We've got to break away from traditional silicon technology," he says, "because it's about to price itself out of the market." The cost of new chip factories has climbed above \$2 billion, with no

end in sight. In 10 years, it could hit \$15 billion. Moreover, silicon physics is due to hit a brick wall around 2010 to 2015, when circuit lines shrink to 0.01 micron and fall prey to the weird effects of quantum physics. So the search is on for new ways to fabricate transistors and wires. This is the main driver behind nanotech advances.

This year, a research group at the University of Illinois, led by electrical engineer Joseph W. Lyding, pulled off a neat trick. They attached buckyballs and other carbon molecules to precise points on the surface of silicon, where the silicon transistors would normally be. The carbon atoms were attached in such a way that they could spin like tops, at speeds of trillions of times a second. If Lyding's team can create nano circuits to regulate the direction of spin, their carbon transistors might switch on and off a thousand times faster than silicon. The Defense Advanced Research Projects Agency (DARPA), the Pentagon's venture capitalist, is cultivating that potential. It has launched a \$10 million "spintronics" research program headed by the University of Buffalo.

In another thrust, DARPA's Moletronics program aims to lay the foundations for molecular electronics. While molecular biologists can manipulate electrical charges in protein channels very accurately, this knowhow has been patched together empirically. The mathematical formulas that engineers would need to translate the biological processes into computer circuits don't exist. "We're getting the hang of designing molecules to have specific electrical properties, not just chemical properties," says Christie R.K. Marrian, manager of DARPA's Moletronics program. How to wire such molecular switches together is now the main roadblock, he adds, but a DNA-type mechanism for self-assembly could be a solution.

If scientists harness DNA for materials, the results would be amazing. Kieffer at Illinois envisions engineers spelling out what a material needs to do, and a computer program doping out the possible structures and the procedures for growing them. For NASA, creating superstrong, ultralight materials on de-

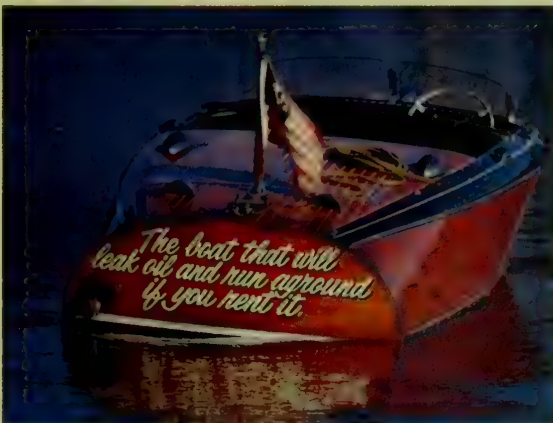


ATOMIC SKYSCRAPERS

Researchers can use exotic tools such as atomic-force microscopes to nudge individual atoms into place. Until recently the atoms were just rolled across a surface. Now scientists at the University of Southern California are building upward, erecting structures that look like tall ant hills—two, three, and four molecules high.



SOMETIMES THE **WISE** CHOICE ISN'T ALWAYS THIS OBVIOUS.



Take health care, for example. Say you're looking for a way to offer employees and retirees quality health care at an affordable price. One person cares more about cost—another, quality. And for someone else, it could be a preferred doctor. Enter Sageo,SM a new alternative that can take on your administration and provide your employees and retirees access to a broad array of health plans, guidance on how to use their health benefits, and a library of interactive health and medical educational resources from Mayo Clinic. If your company is looking for a cost-effective way to deliver health care to employees and retirees, isn't it obvious what to do? Contact us at 1-877-465-7000 or visit www.sageo.com.

sageo

a Hewitt **EBUSINESS**

mand would be just what the doctor ordered. "NASA has the world's biggest weight-watchers program," says Meyya Meyyapan, chief nanotechnologist at NASA's Ames Research Center. "Every pound we try to lift to LEO [low-earth orbit] costs \$10,000—and to Mars, it's \$100,000 a pound." The ultimate goal: a robotic spacecraft tipping the scales at 22 pounds. Here on earth, Dow Chemical Co. is working on nano composites for cars that could slash U.S. gasoline consumption by 4 billion gallons for each model year they're used. In turn, that would cut carbon-dioxide emissions by 11 billion pounds.

PAYOFFS. Researchers at the California Institute of Technology think they're close to cracking Nature's codes. William A. Goddard III, head of Caltech's Materials & Process Simulation Center, says software has been devised for the Army that predicts the structure necessary to create a supersensitive sniffer. "We're now in the process of designing modified olfactory receptors sensitive to very small concentrations of the products that come off land mines—and off nerve gases," says Goddard. Still, many questions remain, he admits. For example, when a molecule binds to an olfactory receptor, the receptor signals nerve cells by releasing calcium. "We don't know enough about that to mimic it artificially," so for now the sniffer will sound the alarm with silicon circuits. But in a year or two, he predicts, Caltech will know how to do a far broader imitation of life.

Some scientists smell commercial pay-offs and are forming companies. Earlier this year, Smalley of Rice teamed up with Bob G. Gower, former chairman of Lyondell Petrochemical Co., to create Carbon Nanotechnologies Inc. in Houston to produce nanotubes. Minnesota's Stein recently co-founded MicroSurfaces Inc. in Minneapolis to market mesoscale coatings. And at North Carolina, physicist Otto Z. Zhou has a prototype product: an iron-polymer nano composite battery with "double the lifetime per unit weight" of lithium-ion batteries—plus several manufacturers haggling for the rights to build it.

The new century is off to a good start in nanotech. It will be years before nanotubes and nanocomposites become as familiar as silicon. But the Nano Age should be in full swing around 2010.

FROM A VOLCANO TO YOUR WASHING MACHINE—AND BEYOND

Look at the ingredients listed on a box of laundry detergent, says Andreas Stein, a chemist at the University of Minnesota. "You may find 'aluminosilicates as water softeners.' These are zeolites." The tiny porous crystals function as sponges for the calcium and magnesium atoms that make water "hard." Recently, zeolites emerged as a hot area of so-called meso-scale research. This is

cules up to a certain size, but no bigger. Zeolites with slightly different pore sizes produce gasoline with different octane ratings by separating petroleum molecules of different sizes—larger molecules packing more energy.

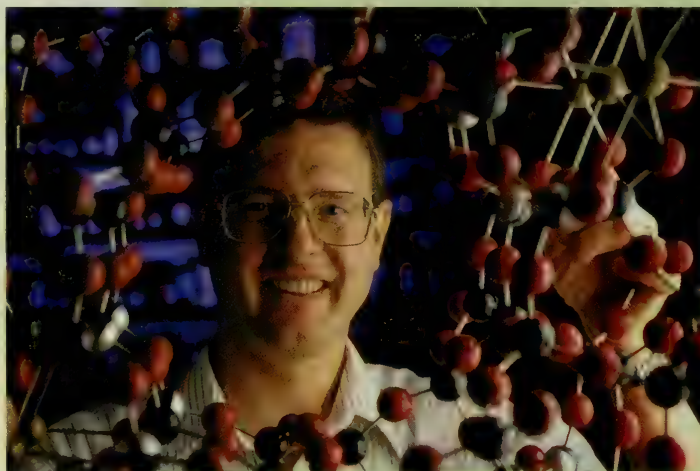
What sparked the latest round of research was Mobil's development in 1992 of a new kind of zeolite crystal. By modifying the basic inorganic

structure with organic molecules, Mobil stretched the pore openings and channels, enlarging them enough to admit even the "bottom-of-the-barrel" gunk that until then had defied processing with zeolites. But the bigger pore sizes also opened the door to other exciting applications, including pharmaceuticals. Researchers at several schools—including Pennsylvania State University, Georgia Institute of Technology, and the Universities of Rochester, Toronto, and Wisconsin—began exploring the potentials of inorganic-organic hybrids.

Late last year, a team of chemists from Arizona State University and the University of Michigan announced a metal-organic "framework" that can be used at temperatures up to 300C—highly unusual for a structure containing organic components, so even more applications may arise.

Back in Minneapolis, one of Stein's pet projects is aimed at a variation of zeolite water softeners. He wants to create a meso sponge that sops up oil. Someday, when an oil spill washes ashore, the cleanup crew may sprinkle Stein's oil-grabbing crystals on the water to get rid of the oil below the surface while it collects the thick stuff floating on top.

By Otis Port in New York



the field of materials science that studies structures and processes involving things bigger than atoms and molecules but smaller than the clumps of bulk materials in traditional test tubes and vats.

CATALYSTS. Nature's zeolites, found in volcanic rocks, were first introduced to industry in the 1950s. Because they're even more porous than sponges, zeolites have an enormous surface area—hundreds of square meters per gram. And the aluminum atoms studding the cavern walls of the silicon dioxide-based crystals can serve as catalysts to trigger chemical reactions. Led by ExxonMobil Corp., the petrochemical industry has been refining oil with zeolite catalysts since the early 1960s. Today, most oil and many polymers are processed with zeolites, although the crystals are now largely man-made. Their pores are carefully tailored to admit mole-

CRYSTAL GAZING

Chemist Andreas Stein envisions oil-grabbing crystals that can clean up spills



INTRODUCING THE WORLD'S FIRST
ALL-OPTICAL NETWORK.
NOT THE PROMISE OF ONE.
THE ONE.

We're proud to present the network we've all been dreaming about: all-optical from beginning to end. Which means starting today, your network can be simpler, more reliable, faster and more affordable than it was yesterday. Welcome to accountability. Welcome to Broadwing. Call 1-800-BROADWING or visit broadwing.com today.



**CREDIT
SUISSE**

**FIRST
BOSTON**

**INTERNET TRAFFIC AFFECTS
AUSTRALIA'S REAL ESTATE AFFECTS
SHIPBUILDING IN SOUTH KOREA.**

**AND SOMEWHERE WITHIN
ALL OF THIS IS AN OPPORTUNITY.**

www.csfb.com

Only a truly global bank can help you take advantage of opportunities on a truly global scale. At Credit Suisse First Boston, we empower our clients to leverage opportunity no matter where in the world it occurs. And our expertise spans an enormous range of industries, from manufacturing and information technology to everything in between. Because in today's market, you simply can't afford to let a little thing like geography get in your way. **CREDIT SUISSE FIRST BOSTON.**

EMPOWERING CHANGE.SM

Developments to Watch

BY PAUL RAEURN

Gobbling gumbo and jambalaya in defiance of their own recommendations, 20,000 of the world's cardiologists gathered in New Orleans in early November to present their latest research findings. Here are some highlights, reported by Paul Raeburn, from the American Heart Assn. meeting

DON'T TAKE OFF ON AN EMPTY STOMACH

A SNACK AND A BEVERAGE prior to boarding an airplane could do much more than just steady your nerves: It might also help prevent a heart attack or a loss of consciousness while in the air.

A study of 12 volunteers in a low-pressure chamber used to train pilots in Japan's air force found that those who hadn't eaten beforehand suffered a drop in blood pressure and a decrease in oxygen saturation in the brain and peripheral arteries. Eating and drinking before the tests boosted the heart's output and the blood flow to the brain, while oxygen levels in the

brain and other organs also rose sharply.

Medical emergencies occur as often as once in every 800 flights, and more than half involve heart attack and loss of consciousness. The study, by Dr. Makoto Matsumura and colleagues at Saitama Medical School in Japan, was undertaken because of concern about the effects of low cabin pressure on airline passengers. Matsumura doesn't know exactly how much passengers might want to eat or drink before boarding their flights, as very heavy meals could strain the heart in people with heart disease. The volunteers in the study drank a 16-ounce soft drink and a modest lunch. Future studies will explore what effects different lunch menus have.

BAD GUMS, BAD HEART? COULD BE

ONE-THIRD OF THOSE PEOPLE who suffer heart attacks do not have the risk factors usually associated with such trouble: high blood pressure and high cholesterol. But several new studies add to the evidence that heart disease may be triggered by viruses or bacteria.

Dr. Efthymios Deliargyris of the University of North Carolina at Chapel Hill found, for example, that 85% of a small group of heart-attack victims also had severe gum disease, compared with 29% of a healthy control group. Researchers aren't sure how gum disease and heart disease are linked, but one possibility is that the diseased gums cause immune-system changes that can spur the formation of

clots in coronary arteries.

In another study, Steve Kerrigan, of Dublin's Royal College of Surgeons in Ireland, found that an infection with *H. pylori* bacterium can encourage blood platelets to clump together—an important step in clot formation. And Dr. Deepak L. Bhatt of the Cleveland Clinic Foundation reported that a high white-cell count, an indication of infection, is also linked to elevated heart-disease risk. In yet another study, Dr. Jianhui Zhu and Dr. Stephen E. Epstein of the Cardiovascular Research Institute in Washington, looked at levels of antibodies to cytomegalovirus, which infects more than half of all U.S. adults by age 40. Levels of antibodies were highest in women whose arteries were narrowed and damaged by atherosclerosis, researchers found.



PERILS OF THE SPORADIC WORKOUT

PEOPLE WHO EXERCISE ONLY intermittently have an elevated risk of an exertion-induced heart attack—compared with those who exercise regularly, a study found. And in a separate report, researchers said that health clubs often failed to screen older members for heart disease and establish an emergency response plan, as recommended by the American Heart Assn.

The study of heart attack risks was based on data from health clubs. Researchers investigated 71 fatal heart attacks that

EASY DOES IT: occurred during a total of 182 million workouts by health club members. Almost half of the deaths occurred in those who exercised less than once a week.

The researchers emphasized that the mortality rate was low—one death in every 2.5 million workouts. Exercise is safe, and it remains an important way for people to lower their heart disease risks, said one of the study's authors, Barry A. Franklin, director of cardiac rehabilitation at William Beaumont Hospital in Royal Oak, Mich. But Franklin suggested that people should perhaps work out less vigorously if they don't exercise regularly.

In a separate study, researchers from the University of Massachusetts surveyed health clubs in Ohio and found that 28% failed to conduct screenings of members to identify potential heart risks. And nearly 60% of the clubs had no written medical-emergency response plans. Kyle J. McInnis, the study's principal author, said equipping gyms with automatic external defibrillators could save lives.

INNOVATIONS

■ Eating a heavy meal can quadruple the risk of a heart attack for two hours afterward, a study has found. Dr. Francisco Lopez-Jimenez and colleagues at Brigham & Women's Hospital in Boston asked 1,986 men and women about the meals they had eaten prior to having heart attacks. They found that 158 of the patients had had a big dinner during the 26 hours before their attacks, and 25 had eaten heartily less than two hours before. The researchers speculated that the heavy meal could cause certain hormones to rush into the bloodstream, increasing

the likelihood of a blood clot.

■ A study of 11,324 Italians who suffered heart attacks found that those who ate the most olive oil, vegetables, and fruit had a lower risk

PASTA: It's primavera

of death. The patients were not put on a diet: They simply made healthy choices. Similar results have been found before, but this study shows that even a modestly healthy diet has great benefits.



Look for DLP™
technology in
products made
by these
manufacturers.



A TEXAS INSTRUMENTS TECHNOLOGY

3M • Acer • Agfa-Gevaert
ASK • Barco
basysPrint GmbH • Boxlight
Christie Digital Systems
Clarity • Compaq
ComView Graphics
Davis • Diamond Visionics
Digital Projection • DWIN
Dreamvision • Electrosonic
Gretag Imaging AG • Hitachi
IBM • IMAX • InFocus
Lanetco • Liesegang
Light & Sound Design
Marantz • MCSi • Mitsubishi
Noritsu KOKI • NEC
Optoma • Panasonic • Philips
PLUS • Proxima • Raytheon
Runco • Sharp
SIM2 • Sony • Synelec
Toshiba • Viewsonic
Yamaha • Zenith

www.dlp.com

 **TEXAS
INSTRUMENTS**

Workplace



COMMENTARY

By Aaron Bernstein

LABOR'S LABORS AREN'T LOST

Organized labor made a Herculean effort for the Democrats in the recent elections, only to see the GOP retain control of both houses of Congress and perhaps capture the Presidency, too. But while the outcome is a disappointment to the AFL-CIO, unions probably won't suffer as much damage as may first appear. Given the Republicans' slim majority in Congress, business isn't likely to get its way on labor legislation, even if George W. Bush does wind up in the White House.

In fact, the gridlock almost certain to persist on Capitol Hill will put labor in a surprisingly good position on education, Social Security, and taxes. True, the Democrats are more beholden to labor than ever, in light of the crucial difference its efforts made in so many House and Senate races. But a victorious Gore wouldn't be able to make sweeping changes, either, given the divided legislature.

Unions aren't looking to rock the boat on these issues, in any case. Their primary concern is to head off such GOP initiatives as big tax cuts,

which are also unlikely now. The result is likely to be little change or centrist policies that don't cut too sharply against a labor agenda. "I hate to throw in the towel and say business can't accomplish anything in this environment," says Patrick J. Cleary, vice-president for human resources at the National Association of Manufacturers. "But whatever we achieve will be fairly minor."

Certainly, the Democrats owe labor big time. Without the AFL-CIO's efforts, Gore almost certainly would

have trailed badly, as would many Democratic House and Senate candidates. Indeed, the massive on-the-ground political operation the AFL-CIO has rebuilt under President John J. Sweeney is the mainstay of the Democratic Party in many parts of the country. For this election, the federation put more than 1,000 political coordinators into key congressional districts, up from 400 in 1998, and 200 in 1996. The coordinators trained and directed hundreds of thousands of volunteer foot soldiers. All told, labor made 8 million phone calls to union members, up from 5.5

**ELECTION
2000
THE LABOR VOTE**



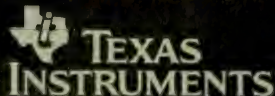
A TEXAS INSTRUMENTS TECHNOLOGY

PROJECT IMPACT WITH THE CLARITY OF DIGITAL LIGHT.

Catch the wave of the future. Digital Light Processing™ technology by Texas Instruments is revolutionizing the projection industry. With DLP imaging technology, leading manufacturers are creating the lightest and brightest projectors available. In fact, our DLP™ processor is unleashing a new category of ultralight, microportable projectors that are half the weight of your notebook computer. So now you can deliver the impact and crisp clarity of digital quality, wherever your travel takes you. From microportable and large-screen projectors to high-definition home entertainment and digital cinema, TI provides the premier digital solution for all of your projection needs. To find out more about DLP™ technology and the products it enables, visit our Web site or call 1-888-DLP-BY-TI.

www.dlp.com

DIGITAL LIGHT PROCESSING: DEMAND VISUAL EXCELLENCE



JUST ONE OF THE THINGS THAT SETS OUR HOTEL APART.

THE PENINSULA
BANGKOK



ON THE BANKS OF THE CHAOPIRAYA RIVER.
TEL (66 2) 861 2888 • FAX (66 2) 861 1112 • www.pentinsula.com

Workplace

million in 1998, and sent out 12 million pieces of mail. Unions also passed out more than 14 million leaflets. "This was by far the greatest program labor has ever put together," boasted AFL-CIO Political Director Steve Rosenthal the day after the election.

TURNOUT. And it showed on Nov. 7. Union households made up 26% of the electorate, vs. 23% in 1996 and 19% in 1992, according to Voter News Service data. Put another way, labor persuaded 2.5 million more union members or their families to go to the polls than in 1996, a huge margin in such a tight race. And 63% of union voters plumped for Gore, vs. just 32% for Bush. By contrast, Walter Mondale won only 53% of the union vote in 1984, with 46% of it going to Ronald Reagan.

Grateful Dems on the Hill are likely to fight hard against the GOP's workplace agenda (table). In recent years, Republican leaders have pushed business-sponsored

GRIDLOCK: THE UNIONS' FRIEND?

The lack of a big GOP majority in Congress will probably keep business from winning much of its employment-legislation wish list, including:

FAMILY LEAVE

Employers want to tighten the law by narrowing the definition of a "serious health condition" of a family member who needs the employee's care.

OVERTIME

Bosses want to give hourly workers time off in lieu of overtime pay and not pay overtime rates to computer professionals and some other workers. Also, they want to abolish laws requiring employers to include bonuses when calculating overtime.

HEALTH & SAFETY

Companies want to require cost-benefit analyses of health and safety standards.

TEAMS

Employers are trying to amend federal labor law to give them more leeway to set up worker teams, without violating prohibitions against sham or company unions.

DATA: BUREAU OF NATIONAL AFFAIRS, BUSINESS WEEK



It only took you half an hour to get 35 people
from 14 states to approve a quarter page ad.

What next?

From reviewing print ads to TV spots, to collaborating on marketing plans and product launches, if it has to do with marketing you can do it better with Magnifi. Anytime, anywhere, everything and everyone you need to perform miracles, is now all in one place.



magnifi.net

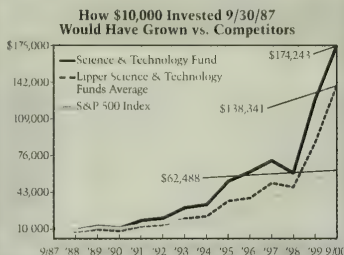
©2000 Magnifi, Inc. Call 800-301-0040 or visit www.magnifi.com.

Global marketing from a 12-inch screen.

HIGH-TECH FOR HIGH POTENTIAL

100% NO LOAD

T. Rowe Price Science & Technology Fund (PRSCX) invests primarily in stocks of companies that seek scientific or technological advances. Since its inception it has successfully identified many dynamic opportunities, outperforming its Lipper Category Average and the S&P 500. Of course, the risks of investing in this field are commensurate with the rewards. Past performance cannot guarantee future results. No sales charges.



Call 24 hours for your free investment kit including a prospectus
1-800-401-4596
www.troweprice.com

Invest With Confidence®
T. Rowe Price

38.42%, 26.90%, and 31.96% are the fund's average annual total returns for the 1-, 5-, and 10-year periods ended 9/30/00, respectively. Figures include changes in principal value, reinvested dividends, and capital gain distributions. Investment return and principal value will vary, and shares may be worth more or less at redemption than at original purchase. (Source for Lipper data: Lipper Inc.) The S&P 500 is an unmanaged index that tracks the stocks of 500 U.S. companies. For more information, including fees, expenses, and risks, read the prospectus carefully before investing. T. Rowe Price Investment Services, Inc., Distributor.

STF056742

Rid your home of varmints and pests once and for all, with...

Rodelsonix IX
only \$69^{95*}

**But read this ad for an even better deal!*

Mice, rats, roaches, bats, fleas, spiders and other pests and varmints make life miserable at home or at the plant. Old-fashioned traps and poisons get rid of them—but only temporarily. **Rodelsonix IX** delivers a tremendous blast of ultrasound—in audible to you and your pets—that totally disrupts the nervous systems of these critters. They'll leave your home within just a few weeks—and they'll never return. **Rodelsonix IX** is an industrial-type unit, designed and engineered to be effective in restaurants, factories and food-processing plants. It protects up to 10,000 sq. ft. (70,000 cu. ft.). It has six variable pitch and "loudness" settings. You can even use it outdoors to keep larger pests, such as raccoons or rabbits at bay.

And here is the "even better deal": Buy two **Rodelsonix IX for \$139.90 and we'll send you a third one, with our compliments—absolutely FREE!*

You may order by toll-free phone, by mail, or by fax and pay by check or Visa/MasterCard. Please give order number #1007F826. Add \$4.95 for one or \$9.90 for three ship./ins. and sales tax for CA delivery. You have 30-day refund and one-year warranty. We do not refund postage. For customer service or wholesale information, please call (415) 643-2810.



*Rodelsonix IX is an industrial-type unit, the most powerful you can get. It's a humane, clean, and effective system to get rid of your pests—once and for all.

since 1967
haverhills®

2360 Third St., San Francisco, CA 94107

Order by toll-free phone: (800) 797-7367 or (fastest!) by fax: (415) 643-2818
Visit our website at www.haverhills.com

Workplace

bills to ease federal laws on everything from overtime to family leave. But they failed to get a majority or enough votes to override President Clinton's veto threat. Even if Bush prevails in the recount, the GOP could have a tough time mustering a majority on such controversial issues, concedes the NAM's Cleary and others.

Where labor stands to lose the most, in the event of a Bush victory, is in the regulatory arena, where the President has greater leeway. The Clinton Administration has issued a number of pro-labor regulations, such as the proposed

new ergonomic rules that business tried hard to kill off for three years. As President, Gore would probably follow Clinton's lead, but Bush could use similar tactics to favor employers.

ANATHEMA. Still, labor is likely to do fairly well on larger national policy issues, no matter who finally captures the White House. Continued gridlock would prevent Bush from trying to privatize Social Security or push through big tax cuts or school vouchers—all anathema to labor. "The American people voted for little change, so it's hard to imagine anything like a major overhaul of Social Security," says Service Employees International Union President Andy Stern.

Labor leaders had hoped that a Gore victory would be an opportunity to make real gains—for example, by tightening up rules on employer opposition to unionization drives. Gore still might try if he prevails. But it would be just as difficult for Gore to push pro-labor reforms as it would be for Bush to win anti-labor ones. Despite its big hand on Election Day, labor will have to be content with the same prospect faced by business and everyone else: little change on the policy front, no matter what your political perspective.

Bernstein covers labor from Washington.





Will never breathe without a tracheal tube.

Will always have to wear a diaper.

Will never utter an intelligible word.

Will never see the light of day (literally).

Isn't expected to live past the age of 5.

GOD, WE LOVE HIM.

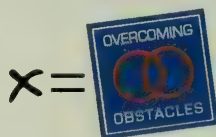
Founded on a promise that all children should know love,
The Foundling Hospital is a multi-faceted family agency with innovative services
and programs that provide caring, compassion and yes, love.

To help, please call **1-877-FOUNDLING**.



The New York Foundling Hospital

A teacher has 50 minutes to teach Algebra. If she spends 8 minutes on attendance, 12 minutes on new formulas and 30 minutes on last night's homework, how much time does she have left to teach them how to interview for a job?



Overcoming Obstacles helps teachers find solutions. By integrating relevant skills such as communication, decision making and goal setting in the classroom, students will be more motivated to dream and achieve. Teachers, school administrators and parent volunteers are urged to attend our next seminar. For dates and locations, **call 1-888-840-9606 or visit www.overcomingobstacles.org**.

With Boise, you'll notice a difference right away.



Julie Hay
Account Manager
Seattle, WA

Especially when we make a promise.



**Boise Cascade
Office Products**
www.bcop.com

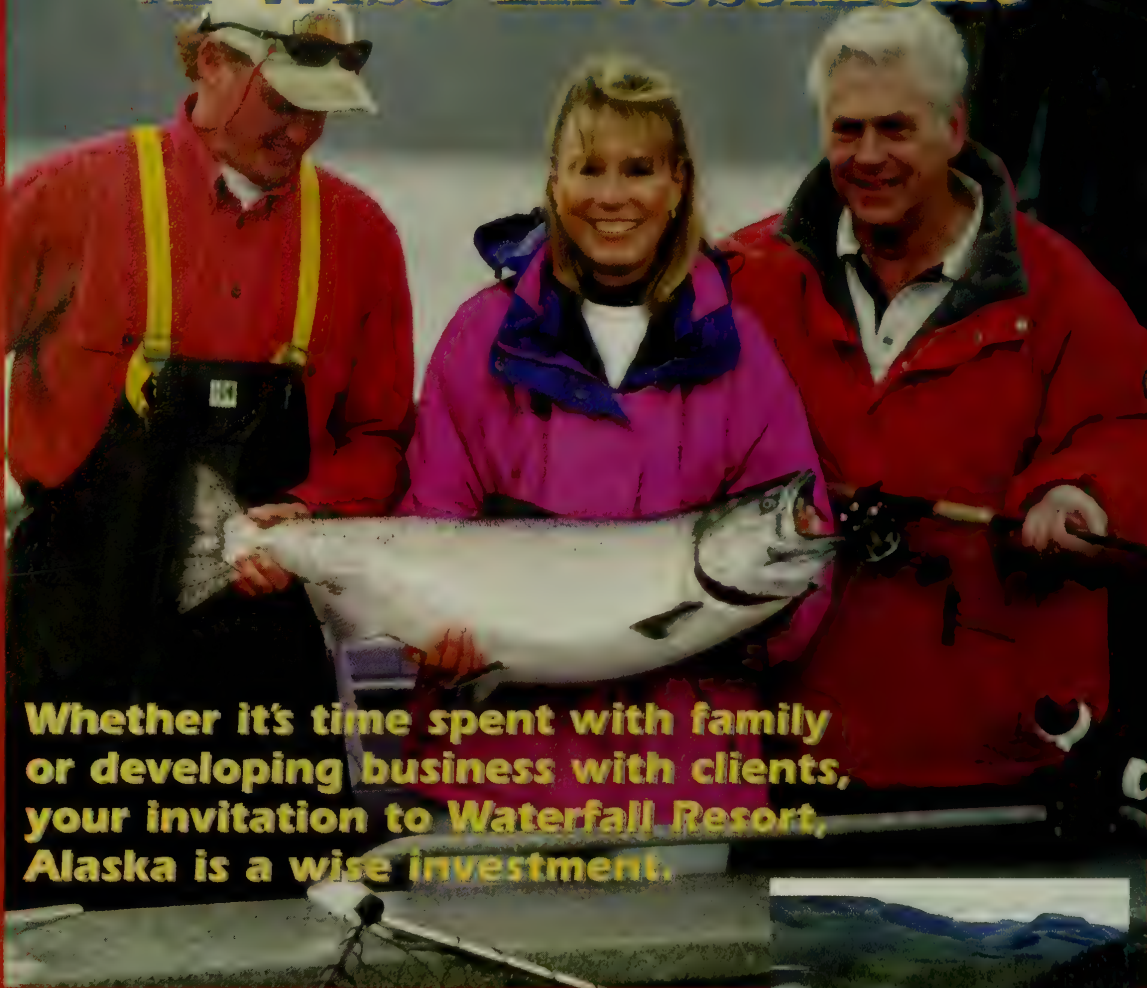
And we promise impressive ordering flexibility. Easy options that amount to significant time savings when your company selects and places orders with Boise Cascade Office Products. It all starts with our main catalog, clearly organized with a more comprehensive index than you'll find in any other office products catalog. If your people are wired for Internet transactions, you'll be glad to know Boise was the first contract stationer to develop an online catalog and ordering site for a seamless buying process. Other options include fax orders or phone calls to one of our national customer service centers. Your Boise sales professional can help you determine the options that work best for you. Lots of companies make promises – we deliver. Call **888-BOISE-88** to learn how we really can simplify the whole process...honest!

BOISE. IT COULDN'T BE EASIER.™

OFFICE SUPPLIES • TECHNOLOGY PRODUCTS • FURNITURE • PROMOTIONAL PRODUCTS

Alaska

A Wise Investment



**Whether it's time spent with family
or developing business with clients,
your invitation to Waterfall Resort,
Alaska is a wise investment.**

Name (print) _____

Company _____

Address _____

City _____ State _____ Zip _____

Area & Phone _____ Fax _____

Saltwater _____ Freshwater _____ Business _____ Pleasure _____

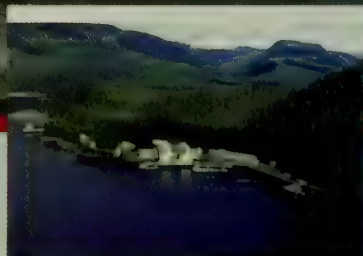
Number of Guests _____ Best Season: 2001 _____ 2002 _____ 2003 _____

Email Address _____

1-800-544-5125

Fax this page to 907-225-8530

(or email us at: waterfal@ktn.net) to receive a complimentary video and brochure



Visit our web site at www.waterfallresort.com

Legendary Sportfishing

American Airlines and Advantage are registered trademarks of American Airlines, Inc. American Airlines is not responsible for products or services offered by other participating companies. ©2000 American Airlines

LOS ANGELES • NEW YORK • SAN FRANCISCO • SEATTLE • SEOUL • PUSAN • CHEJU • KWANGJU • HONG KONG

POHANG • CHINJU • XIAN • GUILIN • MOKPO • YOSU • KANGNUNG • KUNSAN • TAEGU • ULSAN • CHANGCHUN • HO CHI MINH CITY • GUANGZHOU • SAIPAN • HARBIN



WHEN WAS
THE LAST TIME
YOU LOOKED
FORWARD
TO FLYING?



Asiana Airlines

THE JEWEL of ASIA.

Glorious, wasn't it? Soaring back and forth, not a care in the world. Which perfectly describes any Asiana Airlines flight. Our staff won't just cater to you. They'll pamper you. Our fleet is one of the newest in the air, with all the modern amenities. Just sink back into your seat – all the way back to 180° in Sleeper First Class – and enjoy. A rewarding experience, especially since the miles you fly with us can be credited to your American Airlines **AAdvantage**® account. Next time, fly Asiana. After all, why should kids have all the fun? Call your travel agent or Asiana at 800-227-4262. Or visit www.flyasiana.com.

ALMATY • SAKHALINSK • SYDNEY • GUAM • BEIJING • BANGKOK • MANILA • SINGAPORE • YECHON • SHANGHAI • YANTAI

His life is in pieces... that fit.

Mark knew more about crime than he did about building. Today, he's learning more than carpentry. He's learning that he is valued, able, and important to his community.

What happened? You happened!

Adults like you helped Mark and other kids build a better community and a foundation for success. Programs like these are bringing out the best in kids and the best in their communities.

LESS CRIME IS NO ACCIDENT

It takes you — and programs that work.

Call 1-800-WE PREVENT and we'll send you a free booklet on how you and your community can keep kids away from crime and crime away from kids.



1-800-WE PREVENT

www.weprevent.org



**TAKE A BITE OUT OF
CRIME**



U.S. Department of Justice
Crime Prevention Coalition of America



**VISIT
WWW.BIZLAND.COM
TODAY!
HELP YOUR BUSINESS SUCCEED.**



**MAGGIE'S
HARBOR CRUISES**

maggies.bizland.com

Trading in a desk for a schooner. At BizLand.com, we understand that it takes more than just passion to grow a small business. That's why we've made it simple for small business to leverage the power of the Internet, with easy to use Web site development tools and hosting services, e-commerce storefronts, expert advice on Web marketing and a growing community of more than 1,000,000 small business owners sharing ideas with each other. So you'll have the resources you need to make your dream a reality.

Helping small business succeed. One dream at a time. **BizLand.com**

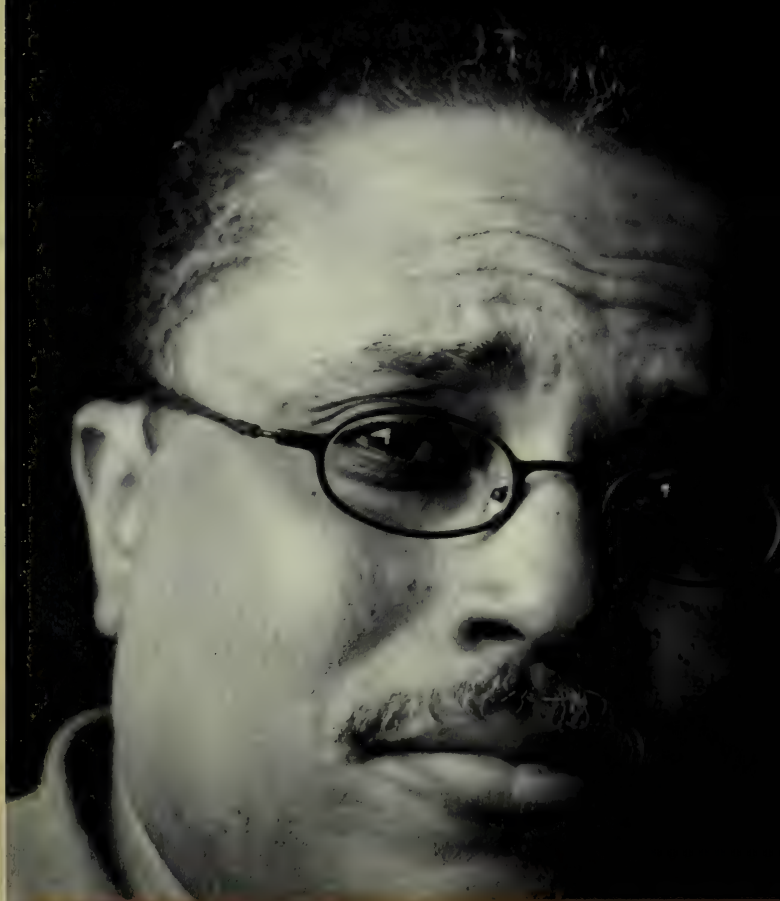


University
of Michigan
Business
School

Executive
Education
Center

"I needed to find today's thinking.

What I found was a glimpse into the future." **Mike Harding, Vice President, Plant Operations- Anheuser Busch**



At the University of Michigan Business School Executive Education Center, you'll get more than just an update. We'll give you the very latest and most relevant thinking, along with a focused vision of what's to come. You'll be equipped with the knowledge you need to grow. Get ahead. Make an immediate impact. Be a leader. You'll learn from the faculty that create the big ideas and show you how to apply them. In the real world. Your world.

To accommodate your busy schedule, we offer courses that range from three days to four weeks. You can choose from a breadth of courses in General Management, Corporate Strategy, International Business, Managerial Leadership, Human Resources, Accounting/Finance and Marketing/Sales.

Come learn why Michigan is ranked as one of the two best providers of executive education in the world. And why it's the country's most innovative business school.



*Simplify your communications
and save up to 40%!*

1-88-TELEPACIFIC



TelePacific
COMMUNICATIONS
MAKING BUSINESS PERSONAL

LOCAL • LONG DISTANCE • INTERNET

**Is company
need?**

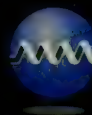
Based on your specific business
on one company on one bill.

up to 40%. After all, shouldn't

company do more than just keep your head above water?

► **For free installation, sign up before January 31, 2001***

1-800-399-6466
telepacific.com



TelePacific
COMMUNICATIONS
MAKING BUSINESS PERSONAL

*Based on 12 minimum business lines and 2-year term. Subject to regulatory approval. Call for complete details.

Wait!

**There's still a way to grow your
web revenue.**



Take a step in the right direction and put 30,000 advertisers on your site.

Partnering with GoTo's innovative Web Search, Shopping and Auctions marketplace will connect you to over 30,000 advertisers and merchants who pay for targeted web traffic. If you have a high traffic site, we'll get your revenue jumping in the right direction.

To learn more call John Gentry, VP, Business Development, at 626-685-6170.





Beaming.

Because she booked
this trip last Sunday.
And still got exactly
what she wanted.

Introducing discount travel for the savvy.

Introducing Savvio.com

The first website dedicated to savvy travelers. Where you get exactly what you want at what you're willing to pay.

You see, on Savvio.com, you get great, low prices on travel within the US, to Canada, or to the top destinations of Europe, Asia, and Latin America. Find the flight or cruise that's right for you. And then you can watch the price drop as your time of departure nears, and available spaces are taken.

So you can lock in your trip early. Or wait and save even more.

With no hidden details. You know the airline or cruise line. You know when you leave and return. And we won't ask for your credit card until you're ready to book the trip you want. At the price you want.

So you get what you want without compromise.
And without paying full fare.

© 2000 Savvio, Inc. All rights reserved. Savvio is a trademark of Savvio, Inc.
CST #2052954-40. Registration as a seller of travel does not constitute approval by the State of California.

savvio.com
Discount Travel for the Savvy



Don't panic. It's just something called great service.

money management
insurance & investments*
online brokerage*
education center
financial seminars
loans of all types
credit cards
savings & checking accounts
online home banking
nationwide ATM access

Serving the greater Bay Area.
Call or visit us online for details.



"Handle with care" is our motto.

Great service is signed, sealed and delivered at Meriwest, the financial institution that combines the personal service of a credit union with the full services of a bank. And packages them any way you like: in person, by phone, online. Whatever works for you, works for us.

As your financial partner, we proactively anticipate your needs and help guide your financial future. So, if you're startled by good old fashioned service, visit Meriwest. We promise to scare the wits out of you.

Call toll free at
1.877.MERIWEST
www.meriwest.com

MERIWEST
CREDIT UNION

*It's where the smart money goes,
and has for years.™*

HIGH PROFILE

Gatorade shows up at most pro games

seems healthy. It's a market that could grow as much as 20% annually over the next several years, according to Patrick Schumann, an analyst at St. Louis brokerage Edward Jones. And, although Gatorade is only a borderline nutraceutical (providing sodium, potassium, and chloride), it could bill itself as one. Sales are already up 15%, to \$1.82 billion, for the first nine months of 2000. Morrison has said he expects a

double-digit profit increase this year, following last year's 18% rise.

PRECIOUS FLUIDS. If there were ever a testament to the power of marketing, Gatorade is it. The company sells consumers on the idea that the drink is the best way to replenish minerals and fluid lost during exercise. Truth is, a blend of water, sugar, and salt would work just as well. But what fun is that?

Last year, Quaker spent \$81 million on advertising; that was about five times as much as Coke gave to Powerade and 275 times as much as Pepsi devoted to All Sport. Gatorade is now the official drink of almost every major sports league, except the National Hockey League (that went to Powerade). The company sponsors some 1,000 athletic events a year, including the New York City and Boston marathons.

Gatorade's most prominent spokesman has long been superathlete Michael Jordan.

Quaker signed him to a 10-year endorsement contract back in 1991. Two years later, Gatorade hit the \$1 billion mark in sales.

"The promotions they built around Jordan, particularly the 'Be Like Mike' campaign, are some of the best known among their target audience," says Christie Nordhielm, a marketing professor at

SPORTS DRINKS

GOTTA GET THAT GATOR

Why suitors are lining up for Gatorade

Jessica Goldin, an Illinois high school swimming champion, is the kind of consumer companies pay good money for. She's devoted to a brand—the 16-year-old drinks only Gatorade when she's practicing or competing. And she has absorbed the marketing message: The salty sweet liquid is "the thirst-quencher," Goldin says. She won't even touch plain water.

Millions of other athletes are right there with her. Gatorade commands a stunning 83% share of the sports-drink market. In the food and beverage industry, that kind of market share is "almost illegal," says William Leach, a food analyst at Banc of America Securities. Coca-Cola Co.'s Powerade has captured no more than 11% of the market; PepsiCo's All Sport has just 3%. Gatorade is so dominant that Quaker Oats Co. executives smugly say its main competitor is tap water. "When we're done, tap water will be relegated to showers and washing dishes," Susan D. Wellington,

president of Quaker's U.S. beverages division, said to analysts earlier this year. Quaker executives declined to comment for this article.

It's no wonder that rivals are thirsting after the brand. Pepsi's \$14 billion stock offer for Quaker was rebuffed by Chief Executive Robert S. Morrison on Nov. 2. Pepsi may well try again. But if it doesn't, Coke, Danone Group, and Nestlé are all possible buyers.

Why so much interest in Gatorade now? After all, its sales have been growing by about 10% a year for the past decade. First, the global food and beverage industry is consolidating. Second, U.S. consumers are taking to what's known as nutraceuticals, those drinks with nutrients, vitamins, herbs—anything that





A black and white photograph of a baby sitting in the cockpit of a fighter jet, smiling. The jet is flying through clouds. The word 'RESCUE' is visible on the side of the fuselage.

Who cares about size when you've got power.

Imagine if small companies
suddenly had strength far

beyond their dimensions.

If efficiency increased so

radically, you couldn't tell who

had ten employees or ten

thousand. What if the ability

to grow was as limitless

as your ambition. Meet

NetLedger. We leverage the

power of the Internet to turn

your accounting system into

an e-business rocket. Visit us

at NetLedger.com or

call 1-800-NETLEDGER.

Then stand back and watch

the capability of the small

get very, very large.

NetLedger™

Small business powered by

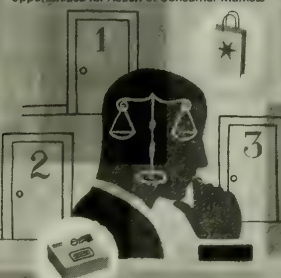
ORACLE™

WHO SET THE TIME LAG BETWEEN DEMAND AND SUPPLY?

Rethink your
basic assumptions
about business.

BREAKING COMPROMISES

Opportunities for Action in Consumer Markets



THE BOSTON CONSULTING GROUP
Edited by Michael J. Silverstein and George Stalk Jr.

More breakthrough thinking from
THE BOSTON CONSULTING GROUP
www.bcg.com/breakingcompromises



Available at bookstores or online retailers

Marketing

Northwestern University's Kellogg Graduate School of Management. More recently, the company has signed on soccer star Mia Hamm and the New York Yankees shortstop Derek Jeter.

Having sewn up the sports-drink market, Gatorade is trying to broaden its base from the serious competitor to the weekend athlete. Its ads now ask: "Is it in you?" The idea is to "drive up the emotional equity in the brand," says John Fraser, senior vice-president at FCB Worldwide, the Chicago advertising company that holds the Gatorade account.

Quaker is also working to expand distribution beyond grocery and convenience stores. It's putting Gatorade in vending machines and kiosks near golf courses, parks, and schools. The company expects to increase such distribution from a January level of some 50% of the country to 70% by yearend. That will mean adding about 15,000 "alternative sites" to the existing 40,000.

Gatorade won cult status in the late 1960s. University of Florida researchers had developed the concoction in 1965 to prevent dehydration, testing it on the school football team. It seemed to work: The Gators often outplayed their opponents in the second half of games. In 1967, Stokely-Van Camp Inc., of baked beans fame, bought the rights to distribute the drink nationally.

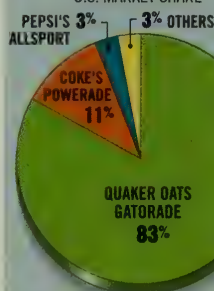
But Gatorade really took off when Quaker acquired it in 1983. The company's former chief executive, William D. Smithburg, had been drinking Gatorade on the tennis court for years. When he took over the brand, Gatorade was still largely a southern drink with modest sales of \$90 million. It was available only in glass bottles and in only two flavors—lemon-lime and orange. Smithburg gets most of the credit for improving the taste and the packaging, and for broadening the distribution. Gatorade now is available in 19 flavors; there are two other versions (one that's crisper and one that's sweeter); and it sells energy bars in a few cities.

Over the years, some 100 rival drinks have come and gone. Even Coke and Pepsi have failed to pose a serious threat to Gatorade. In part, that's because of Gatorade's dominance. But in

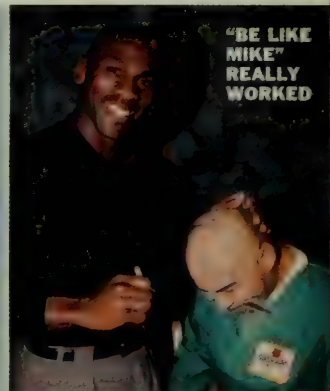
Coke's case, it was also because former CEO M. Douglas Ivester resisted making a big commitment to sports drinks and other noncarbonated products—figuring it was more profitable to churn out more Cokes and Sprites than to take on entrenched brands such as Gatorade. "Coke and Pepsi had distribution, but we had brand equity," says Smithburg. **PARTS UNKNOWN.** All Sport, Pepsi's sports drink, remains only a small piece of its business. The brand was launched nationally in 1994. Recently, though, Pepsi has targeted states such as Washington, West Virginia, and Oregon, where outdoor sports are particularly popular. "Even for marketing powerhouses like Coke and Pepsi, competing against a brand which is well-established, strong, and continuously well-marketed is very

BRAND GATORADE

U.S. MARKET SHARE



DATA: BEVERAGE DIGEST



difficult," says John Sicher, editor of *Beverage Digest*. He's impressed that Coke has won as much as 11% of the market.

Quaker's real challenge lies in international markets, where it is easily overtaken by rivals such as Coke, Danone, and Nestlé. "Quaker isn't big, so they don't have the wherewithal to get better distribution," says Leach of Banc of America Securities. In 1999, international sales were \$333 million, down 10% from the previous year. The company was hurt by currency devaluations in Latin America, its largest international market. It's struggling to make an impact in Europe, where Gatorade's gung-ho, All-American message doesn't always play well, and in China, where it's still a relatively unknown brand.

Under such circumstances, Quaker might be expected to form a joint venture for international distribution. But Quaker is likely to go it alone overseas. That will make it easier to sell the company, Quaker's ultimate endgame.

By Julie Forster in Chicago, with Diane Brady in New York and Dean Foust in Atlanta



breakthrough

A CEO Retreat

presented by
BusinessWeek
 and
Jim Taylor, Ph.D.

in partnership with
IBM Corporation

FEBRUARY 7-9, 2001
 RANCHO BERNARDO INN
 SAN DIEGO, CALIFORNIA

Define the Future

The technological advances of the past few decades have fundamentally transformed business and, with it, the qualities necessary for effective leadership. **Breakthrough: A CEO Retreat** will examine the changing face of leadership through themed discussions between top executives and an all-star faculty of renowned technologists, scientists, and creative thinkers.

Presented by BusinessWeek and Jim Taylor, Ph.D. in partnership with IBM Corporation, **Breakthrough** will be held February 7-9, 2001, at the Rancho Bernardo Inn just outside of San Diego, California. Featuring an intensive, intimate environment designed to encourage attendee participation, this invitation-only event is designed to challenge long-held assumptions and define the new rules of the leadership game.

Please consider joining the elite group of forward-thinking CEOs that assists us in this effort.

If you have already received your exclusive invitation, please return your reservation as soon as possible. If you have not received an invitation but believe you should be included, please contact Ms. Marsha Green, BusinessWeek, at 212-512-3113.

FOR MORE INFORMATION ABOUT SPONSORSHIP OPPORTUNITIES

contact Ms. Kim Harrell, Manager, Sponsorship Sales
 TELEPHONE: 212-512-2358
 E-MAIL: kim_harrell@businessweek.com

CO-HOST



JIM TAYLOR, Ph.D.
 Co-author,
*The 500-Year Delta and
 the Visionary's Handbook*

PROGRAM FACULTY

**CANDICE
 CARPENTER**
 Co-founder and
 Co-chairperson,
 Village Inc.



**DEEPAK
 CHOPRA, M.D.**
 CEO and Founder,
 the Chopra Center
 for Well Being



ANNIS CONNER
 Four-time
 America's Cup
 Champion



**DR. RONALD
 A. HEIFETZ**
 Co-director,
 Center for Public
 Leadership, John F.
 Kennedy School
 of Government,
 Harvard University



PROGRAM FACULTY



**DR. DONALD
 C. JOHANSON**
 Director, Institute
 of Human Origins;
 Professor, Arizona State
 University



**SUSANNE
 D. LYONS**
 Chief Marketing
 Officer, Charles Schwab
 & Co., Inc.



**JONATHAN
 NELSON**
 CEO and Chairman
 of the Board,
 Organic, Inc.



WILL RODGERS
 Principal,
 SHR Perceptual
 Management



GINNI ROMETTY
 General Manager,
 Strategy IBM
 Global Services,
 IBM Corporation



**GEOFFREY
 S.L. SHAW**
 President, CEO,
 Chairman, and
 Co-founder,
 Global Commerce
 Systems



STEPHEN G. VETTER
 President,
 Eureka
 Communities

A WAVE OF SCANDALS

Congress is becoming increasingly alarmed that federal money is fueling corruption in Puerto Rico

When 10-year-old Carlos Melendez-Dyer came tearing home from school one day in October, he ran through a courtyard that floods with sewage when it rains. He ran by a rusting electric box where high-voltage wiring lies bare. Then he tripped and fell on the crumbling staircase leading to his tiny apartment, where rain pulses through ill-fitting windows.

Home to Carlos is a public-housing project outside San Juan called Las Palmas, where the stench of rotting garbage hangs heavy, mixing with the odor of human waste that lingers after the floodwaters recede. "Look at this filth," cries Edward Marti-Ramirez, 31, a cousin of another tenant. "They should knock this down and start all over."

Las Palmas and the poor conditions found at many of the island's 332 public housing projects are the visible face of a growing number of corruption scandals racking Puerto Rico. They range from kickbacks to bribes to bogus companies

and sham transactions.

The scandals have caught the attention of Congress, since much of the corruption involves federal funds, and they may have cost the New Progressives (the statehood party) the governorship on Nov. 7. "No question about it—corruption played a major role [in the election]," says Alfonso M. Christ-ian, auxiliary comptroller of Puerto Rico. The scandals also have highlighted a nasty feud between U.S. Housing & Urban Development Dept. Secretary Andrew M. Cuomo and HUD Inspector General Susan Gaffney, who last summer attacked "HUD's failure to stop flagrant fraud, waste, and abuse" at Puerto Rico's public housing authority.

TRUST ISSUE. Concerned about pouring good money after bad, Congress in October voted to hold up a \$130 million payout to the Puerto Rico public housing agency. In a deal cut by Cuomo, the money was to have settled a lengthy court battle over whether HUD's funding formula was shortchanging the island. "You hate to get that heavy-handed,

but...we have an obligation to the taxpayers and the people down there," says Senator Wayne Allard (R-Colo.), who helped block the funds in his role as chairman of the Senate Banking, Housing & Urban Affairs Committee's housing subcommittee. Adds Senator Christopher S. Bond (R-Mo.), head of a Senate Appropriations subcommittee overseeing HUD: "According to what the investigators tell us, they keep opening up new areas of corruption every time they look into something." The next Congress may also want some assurances that none of the approximately \$250 million a year that supports the public housing



Bribery, Fraud, & Worse

Some recent public corruption cases in Puerto Rico:

HURRICANE CLEANUP
FEBRUARY, 1999 Mayor found guilty of seeking bribe for cleanup work in wake of September, 1998, hurricane

PUERTO RICO PUBLIC HOUSING ADMINISTRATION

MAY, 1999 Six people charged with bribery, conspiracy, money laundering, and theft of \$1.4 million in scheme alleged-

ly involving efforts to help residents set up small businesses

SAN JUAN AIDS INSTITUTE
1999-2000 Twelve people convicted or pled guilty to defrauding federal government of \$2.4 million intended for patients of now-defunct clinic

PUERTO RICO SOCIAL ACTION INC.

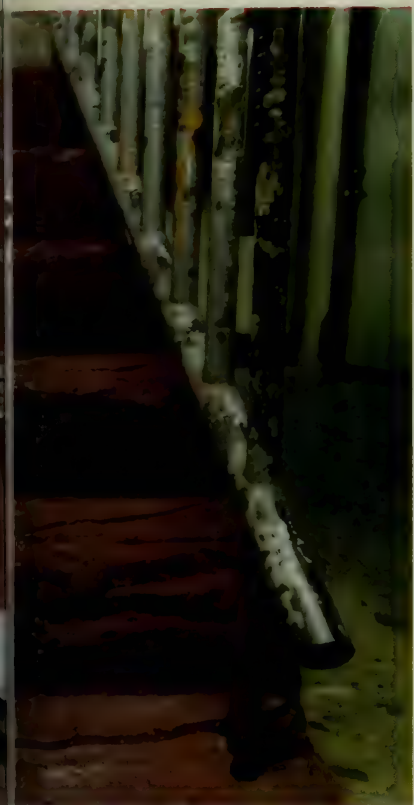
AUGUST, 2000 Two directors of nonprofit agency helping

children, homeless, and the elderly found guilty of embezzling \$5.4 million in federal funds

MUNICIPAL GOVERNMENT

AUGUST, 2000 Eighteen people, including two prominent mayors, indicted for allegedly collecting hundreds of thousands of dollars in payoffs at agency collecting taxes for island municipalities

DATA: BUSINESS WEEK



In October, Congress, concerned about corruption, held up a \$130 million payout authorized by Cuomo

HUD HOUSING: CRUMBLING STAIRS LEAD TO MELENDEZ-DYER'S APARTMENT; REHABBING AN APARTMENT IN SAN JUAN; LIVING WITH NO HOT WATER FOR 20 YEARS

sentative Patrick J. Kennedy (R.I.), spokesman Erik Smith says: "We're confident every contribution

WEEK. "The residents of public housing in Puerto Rico deserve to live in decent, safe, and sanitary housing." HUD officials contend that they are working diligently to address public housing deficiencies.

HUD has long been a troubled agency, and Cuomo, who has been chief since 1997, clearly inherited many problems on the island. His handling of them could be important to his future: It's widely believed that in 2002 Cuomo will run for governor of New York, which has a huge Puerto Rican population.

ENDEMIC. The corruption that HUD and other U.S. government agencies must contend with is endemic: embezzlement of federal funds for a social agency helping children, homeless, and the elderly; alleged payoffs at the agency that collects taxes for island municipalities; a mayor soliciting a bribe for hurricane cleanup work; the diversion of federal funds meant to help AIDS victims. "In the past, we had corruption, but never at this level, never with this amount of money, and never at the federal level," says Anibal Acevedo Vilá of the Popular Democratic Party, who was elected on Nov. 7 as "resident commissioner," the nonvoting delegate to the U.S. Congress.

Why such a climate of corruption? Greed, of course. Another factor is nepotism, which is not only common but le-

gal in the island's 78 municipal governments. But the biggest reason may be bound up in passions over Puerto Rico's hottest political issue: statehood.

In 1998, Puerto Ricans turned down statehood for the second time in five years. Governor Pedro J. Roselló, now stepping down after two terms, is a statehood supporter. So is the current resident commissioner, Carlos Romero-Barceló, whom Acevedo Vilá defeated. The opposition Popular Democrats (commonwealth party), whose candidate, San Juan Mayor Sila M. Calderón, was just elected governor, want to maintain the island's current status. "It's so partisan—worse than any U.S. politics," says former Representative Robert García (D-N.Y.), now a statehood lobbyist in Washington.

So heated has the issue become that some believe the line between party

authority in Puerto Rico—a sum second only to that spent on New York City—is being siphoned off.

The scandals could get even worse. Even though island residents can't vote in U.S. elections, Democratic and Republican party officials and candidates from the mainland have stepped up fundraising on this highly politicized island. The Democratic Congressional Campaign Committee (DCCC) has been especially active, with \$229,000 in donations reported thus far for the 1999-2000 election cycle (table). Now there are concerns that some donations to mainland campaigns may have been tainted by corruption. At the DCCC, headed by Repre-

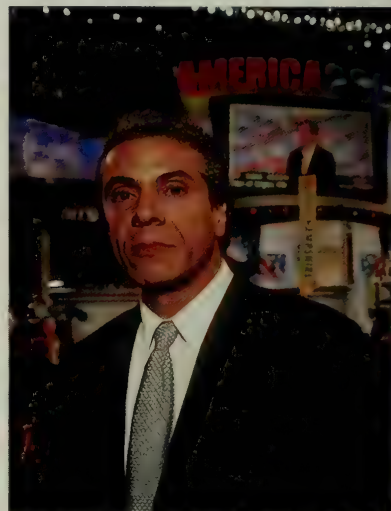
is above reproach."

For all the tropical glitz of San Juan's beachfront resorts or the shiny SUVs that clog narrow city streets, Puerto Rico remains poor. About one-half of the population of 3.9 million receives some kind of public assistance. And some 250,000 residents live in HUD's 57,000 public-housing units. HUD's Gaffney, for one, thinks the island's impoverished residents are suffering because of corruption in high places. In July, following a highly critical report she issued a few months earlier, Gaffney went nuclear, firing off an emergency letter to Cuomo and Congress. "I don't understand what is necessary to get HUD moving," she told BUSINESS



The Puerto Rican scandals have highlighted a nasty feud between HUD Secretary Cuomo and his inspector general, Susan Gaffney

GAFFNEY (WITH CUP) TOURING A STATESIDE HOUSING PROJECT; CUOMO AT THE DEMOCRATIC NATIONAL CONVENTION



and government has been erased and that the statehood party in recent years effectively became the government. That has contributed to corruption, suggests A. W. Maldonado, a longtime political commentator. "You give the corrupt an escape from the moral consequences of what they're doing," he says. "They're not 'stealing.' They're 'helping their ideology.' What you see in all these cases is that they say, 'I did it because I was helping the party.'"

DISTANT DONORS. Mainland politicians, eager to feed their constant need for money, have waded into this highly charged atmosphere. According to Federal Election Commission data available as of Nov. 1, George W. Bush and GOP interests collected \$550,768 this election cycle. Democrats have done better, raising \$783,900. Kennedy of the DCCC has made fund-raising visits to the island, while also netting \$51,000 for his own campaign coffers. The most obvious motive for such donations: influencing decision-makers in Washington, where the statehood issue could someday be decided.

In at least one instance, some questionable funds may have found their way to a mainland candidate. Jorge Colberg Toro, who just lost election to the Puerto Rico Senate, has provided BUSINESS WEEK with documents indicating that \$20,000 was diverted from federal highway funds for political contributions, of which more than \$10,000 went to the statehood party and \$1,000 went to

the just-concluded campaign of Senator Edward M. Kennedy (D-Mass.), father of the DCCC's chief, in 1995. That could be the first incident coming to light of tainted money landing in mainland campaign coffers. In Washington, a Kennedy aide said he knew nothing of such a donation but any questionable contribution would be reevaluated. Representative John L. Mica (R-Fla.), who heads a House subcommittee that oversees HUD, says he has heard reports of such recycling and may investigate.

Congress may have no choice but to

step in. For one thing, the public rift between Cuomo and Gaffney has escalated to the point of absurdity. Last month Gaffney filed a sexual discrimination and harassment complaint against Cuomo and other officials, alleging retaliation for her investigative work at HUD. Cuomo aides declined to make the Secretary available for comment. But according to Cuomo spokeswoman Lisa MacSpadden, Representative Tom Lantos (D-Calif.) demanded that HUD investigate the downloading and circulation of pornography by "senior officials" in the HUD inspector general's office. "This is nothing more than a diversion from [Gaffney's] misconduct regarding the downloading of pornography in her office and retaliation for our efforts to get to the bottom of it," MacSpadden says.

Puerto Rico Comptroller Manuel Diaz-Saldana, a soft-spoken former member of Governor Rossello's Cabinet and a watchdog for the island government, is cooperating with federal corruption probes. But Puerto Rico's legal infrastructure is so weak that Saldana is seeking nontraditional solutions, too: He wants to set up a special court to expedite corruption cases. He's worked with colleges and universities to develop and promote government ethics courses. And he's aired anticorruption spots on radio and TV. "We are emphasizing prevention," he says. But for now, few believe the parade of corruption cases is over.

By Christopher H. Schmitt in Catano, Puerto Rico

Tapping Puerto Rico

Beginning in 1996, U.S. mainland candidates and political parties stepped up fund-raising in Puerto Rico. The top 10 recipients for the 1999-2000 election cycle:

GEORGE W. BUSH	\$345,150
DEMOCRATIC CONGRESSIONAL CAMPAIGN COMMITTEE	229,450
AL GORE	222,750
BILL BRADLEY	200,500
DEMOCRATIC NATIONAL COMMITTEE	131,200
REPUBLICAN NATIONAL COMMITTEE	127,169
NATIONAL REPUBLICAN CONGRESSIONAL COMMITTEE	78,449
REP. PATRICK J. KENNEDY (D-R.I.)	51,000
SENATOR EDWARD M. KENNEDY (D-MASS.)	48,500
SENATOR CHARLES E. SCHUMER (D-N.Y.)	41,000

Figures as of Nov. 1. They do not include money raised for candidates for Puerto Rico's nonvoting congressional delegate

DATA: FEDERAL ELECTION COMMISSION, CENTER FOR RESPONSIVE POLITICS

amazon.com.

YAHOO!

CISCO SYSTEMS



 *Sun*
microsystems

**The companies
that know the
Internet best
run Oracle.**

ORACLE
SOFTWARE POWERS THE INTERNET

www.oracle.com

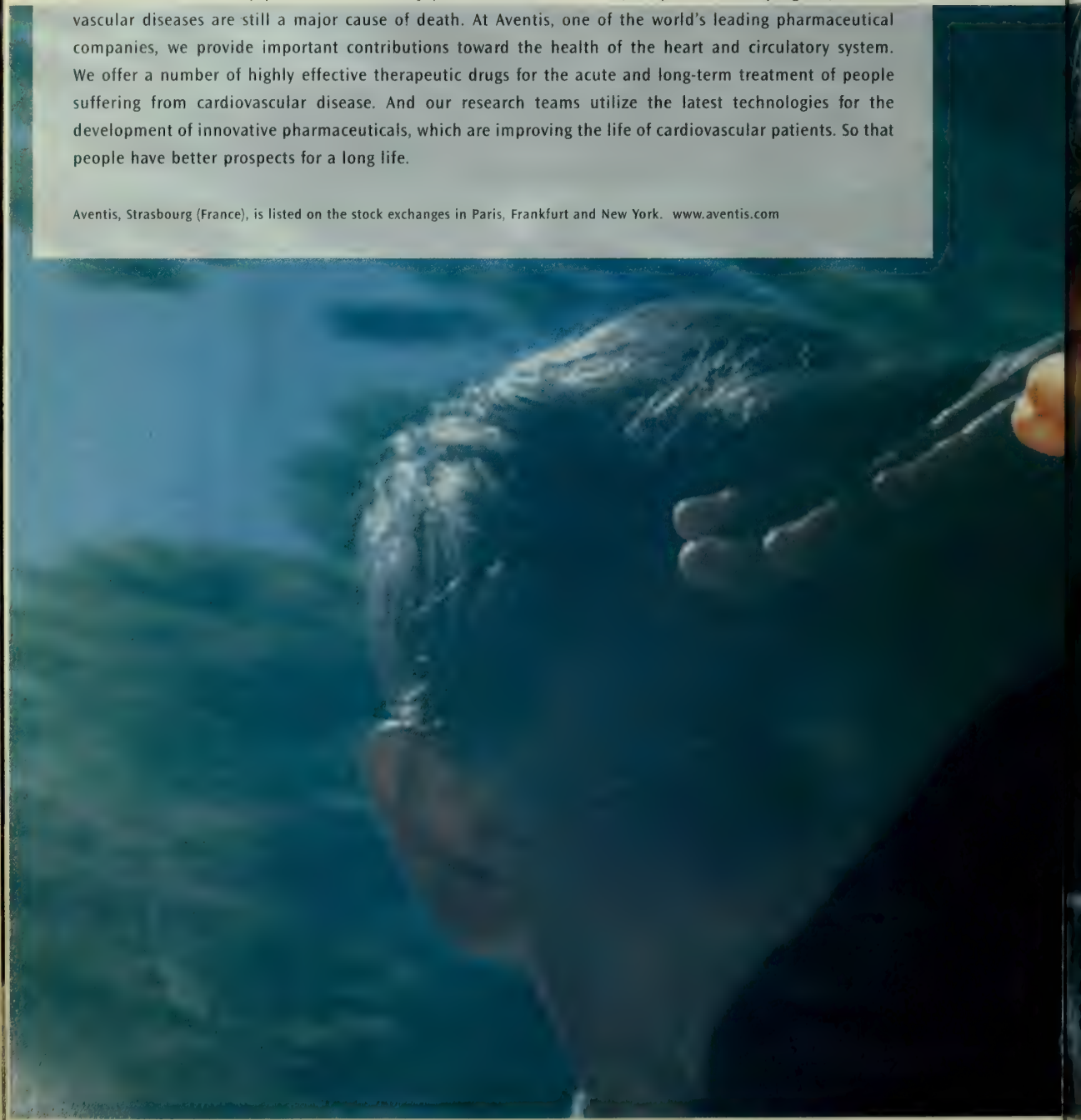
Copyright © 2000 Oracle Corporation. All rights reserved. Oracle is a registered trademark, and Software Powers the Internet is a trademark or registered trademark of Oracle Corporation. Other names may be trademarks of their respective owners. AMAZON.com is the registered trademark of Amazon.com, Inc. Copyright © 2000 Yahoo Inc. All rights reserved. Cisco, Cisco Systems, and the Cisco Systems logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries. Sun, Sun Microsystems and the Sun logo are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

We develop innovative pharmaceuticals for the treatment of cardiovascular diseases.

So that you only feel your heart pounding

Every person wants to enjoy life to the fullest. But, despite medical progress, cardiovascular diseases are still a major cause of death. At Aventis, one of the world's leading pharmaceutical companies, we provide important contributions toward the health of the heart and circulatory system. We offer a number of highly effective therapeutic drugs for the acute and long-term treatment of people suffering from cardiovascular disease. And our research teams utilize the latest technologies for the development of innovative pharmaceuticals, which are improving the life of cardiovascular patients. So that people have better prospects for a long life.

Aventis, Strasbourg (France), is listed on the stock exchanges in Paris, Frankfurt and New York. www.aventis.com



When you're in love.



Our Challenge is Life



**TIGER HAS THE PGA
AND FINCHEM SEEING
GREEN—AND RED**



GOLF

TIGER VS. THE PGA: HOW SERIOUS IS IT?

The PGA Tour will soon renegotiate TV rights, and Woods may want a cut

As ideas go, it's about as revolutionary as shrinking the golf ball or making the hole twice as big. Tiger Woods is telling the world that he's entitled to a chunk of the PGA Tour's next television contract.

The Tour is nearing the end of a four-year, \$650 million pact with CBS, NBC, and ABC, and all signs point to a huge increase in the value of the next deal, thanks to the new eyeballs Woods has brought to golf on TV. This year, audiences for tournaments Tiger played in were 105% higher than those Tiger skipped. Headly numbers, and they explain why golf's power brokers are taking very seriously a wide-ranging, sometimes pouty Woods interview in

the current issue of *Golf World*. He complains about the tour misusing his image in advertisements, about burdensome fees that the agency representing him must pay to the Tour when it stages independent golf tournaments, even about feeling unappreciated

by PGA Commissioner Tim Finchem.

Is he deserving enough to be handed a piece of the TV pie? "Philosophically? I would be. Arnold [Palmer] would be. All the great ones would be," Woods told the magazine. Yet how determined he is to fight for a cut of Tour revenues remains an open question. So far, Woods and his agent, IMG's Mark Steinberg, have couched such talk in terms of what should be rather than what will be. Steinberg declined to be interviewed.

NO COMMENT. Not all in the Woods camp have been as closed-mouth, though. Earl Woods, Tiger's dad, has said that his son doesn't need the Tour and that, if his concerns aren't addressed, he could end up playing golf far

THE IMPORTANCE OF HAVING TIGER

Average TV rating of 17 events Woods has played in this year* 4.5**

Average TV rating of 17 events Woods did not play in this year* 2.2**

*Tournaments broadcast on CBS, ABC, and NBC

**Millions of households

HUMAN & DIGITAL

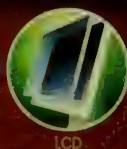


Hyundai Electronics:
Creating a Friendlier Digital World

While others concentrate their efforts merely on making digital products, one company is building the foundation of a new digital world. At Hyundai Electronics, we've long been a leader in semiconductors, and now we're bringing new digital technology to the world. Through specialization and an innovative management system, Hyundai Electronics is building the digital world you've always wanted to live in. Hyundai Electronics. Welcome to the friendly future.



Semiconductors



LCD



Communications

HYUNDAI
ELECTRONICS

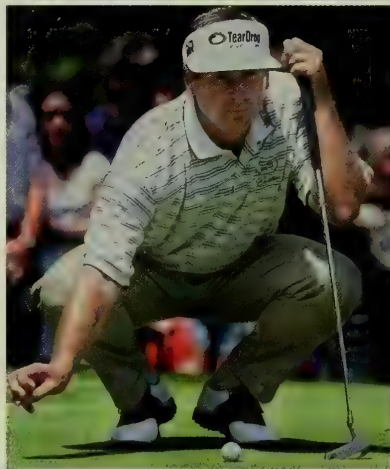
from the PGA. After placing eighth in the Tour's season-ending American Express Championship in Spain on Nov. 12, Woods had nothing to say except that he would be meeting soon with Finchem and his staff.

Tiger's fellow players and their agents have reacted cautiously—and not always negatively—to his claim on TV money. That's a surprise when you consider that for every TV dollar siphoned off by Woods, one less dollar is available to the rest of the PGA Tour in prize money and other forms of compensation. "My first reaction is that it's not a reasonable request," says Jim Lehman, a Minneapolis-based agent for about two dozen pro golfers, including his brother Tom, a top-echelon player. "I might have a different opinion if I understood where he was coming from. But it seems to me that Tiger already is being significantly compensated by increased purses and by his success on the golf course."

FORCE OF NATURE. Veteran Tour pro Fred Couples says he is keeping an open mind about all things Tiger, including his bid for TV dollars. "I can't be one of those [talk-show] callers complaining: 'Who does he think he is? He's already making \$80 million—and he wants more?'" says Couples. "Tiger Woods is making us all a lot more money." If paying Woods a percentage of the PGA Tour's television revenues was the only way to keep Tiger content, Couples says, "Write the check tomorrow." It may not be that simple. Golf observers say the Tour would be courting a compensation free-for-all if it used its TV revenues to reward one player—even in the case of Woods, the world's best.

No doubt about it, Tiger was a force of nature this season: He racked up nine victories and a record \$9 million in tournament earnings. In perhaps his most amazing display of consistency, he shot par or better in every round he played from the middle of May forward. But even superstars get the blahs. What if Tiger fell to earth next season and was challenged or surpassed by another young player, like Spain's Sergio Garcia or South Africa's Ernie Els. Wouldn't they be in line for a cut, too?

"I don't see it happening. I don't see the PGA Tour agreeing to it," says Neal Pilson, former president of CBS Sports. Moreover, Pilson isn't sure Woods can justify the special treatment. "It's the old story: No one's interested in seeing the Dallas Cowboys or the New York Giants practice—they have to compete against other teams," he says. "Tiger's value is only a function of his competition with other players. I don't think he



GIVE HIM THE MONEY?
"He's bringing the Tour gravy. He's making every tournament he plays in a lot stronger"

— FRED COUPLES

seriously believes that if he went out and played a round by himself he'd be able to secure a huge TV rights fee."

Because Tiger is Tiger, he'll get a hearing from Tour officials and is likely to win concessions on some of the less contentious issues he has raised. For example, Finchem might quickly compromise on the Tour's policy of extracting fees from the promoters of made-for-TV golf. It's a sore point for Woods

WITH EARL: *If Tiger walked, where would he go?*

because he's often the star attraction at events such as this year's *Battle at Bighorn*, in which he

went head-to-head with Garcia. For certain, Woods is also sounding off on behalf of IMG, the powerful sports marketing and representation outfit that promoted the Bighorn match and bristled at having to pay the PGA Tour a fee of over \$1.5 million.

Other changes may be in order, too. Many tour players support Woods in his campaign to force the Tour to stop using their photos in tournament advertising without permission. (Woods, who has an endorsement deal with financial services giant American Express Co., has complained about being shown in an ad touting his victory in an event sponsored by Pricewaterhouse Coopers LLC.)

HARD AND FAST. But Tiger may find the PGA Tour unyielding on other policies. Among those more entrenched rules is the one that limits pro golfers to three "releases" for every 15 tour events they enter. Releases are passes to play in tournaments around the world that conflict with PGA events. Australian Greg Norman, who preceded Woods as golf's top dog, attacked the rule and derided Finchem for standing by it. But Norman never changed it.

And if Tiger ever did act on Daddy Woods' threat and walked, where would he be walking to? "All he could do is retire, which I see occurring sooner rather than later," says Pilson. "He's had so much success at a young age...you begin to look for other things to do in life."

Other observers see options for Tiger, though none that would have him playing to larger audiences or honing his skills against the world's best. Woods' Asian heritage (his mother is Thai) has made him enormously popular in the Far East, but it's hard to imagine Tiger chucking the PGA Tour for full-time duty on the Asian Tour. The European Tour also beckons, but could Tiger truly find happiness as the shotmeister of the annual Peugeot Open de Espana?

Were he to exit the PGA Tour, the most attractive choice might be—the PGA Tour. Tiger could play in the U.S. part-time on the eight or nine sponsors' exemptions he would be permitted each year, plus golf's four major championships that don't count against that number. He could fill the rest of his dance card with international events.

That would be a nightmare for the PGA Tour. Tiger's popularity and impact on ratings have been so profound that, at times, he overshadows the tourna-



The bigger the crowd, the better the performance.

You're a major player in the securities markets worldwide, so when it comes to trading, you know what you need.

Liquidity.

A world of buyers and sellers — ready to trade. And when you're trading electronically, you know the place to come for global liquidity.

Instinet.

We give you electronic access to some of the broadest, deepest — most liquid — trading opportunities around the world.

What's more, we don't have our own portfolio so we never compete with your trades or take a position against you.

Our only goal is to help you get the fastest trade at the best price — and we handle the follow-up automatically.

All of which can add up to better performance.

If that's what you're looking for, by all means call toll free 1-877-INSTINET or visit www.instinet.com



Instinet

A REUTERS Company

*Nothing comes between you
and the best price.SM*

As an agency broker, Instinet does not come between its clients and the best price. We do not commit capital, make markets or make profits on our trades. ©2000 Instinet Corporation, all rights reserved. INSTINET and the INSTINET marque are registered service marks in the United States and other countries throughout the world. Instinet Corporation is member NASD/SIPC, and Instinet UK Limited is regulated in the U.K. by the SFA.

ments in which he is playing. The Golf Channel (TGC), a network partly owned by Palmer, revealed the power of Tiger last August. Instead of showing the opening round of a tournament in Michigan, TGC opted for coverage of Woods' entire first round—on tape. The PGA Tour fumed over having been pre-empted by one of its own. And TGC led off its live coverage the next day with an apol-

ogy. "It's easy to get caught up in the Tiger Effect," says David Manouagian, COO of The Golf Channel.

Whether or not he defects, the specter of a Tour without Woods could weaken the PGA Tour's bargaining position when contract talks with the networks get started next spring. Uncertainty about Tiger's future, if it is still an issue, could have a chilling effect on demands for an

enormous payday. Couples hopes any hard feelings and power plays are resolved long before then. "He's bringing the tour gravy. He's making every tournament he plays in a lot stronger and a lot better," says Couples. Right now, only one thing is certain: As the dispute plays out, all eyes will be on Woods. Nothing new about that.

By Mark Hyman

TEEING OFF IN THE INNER CITY

Not quite 200 yards from the first tee, students mill around outside a huge, concrete-block vocational high school. Along the third fairway, low-income families are moving into 100 bungalows built recently by crews from Habitat for Humanity. And freight trains rumble by each day on tracks that slice through overgrown fields. No doubt about it, this lower-middle-class neighborhood on the north side of Jacksonville, is an unusual place for a nine-hole golf course. But Joe Louis Barrow Jr. sees limitless potential for the oasis of manicured turf.

"We estimate there are 10,000 kids living within two miles of the course. So it's an enormous opportunity to expose them to the game of golf and to do it in their neighborhoods," says Barrow, who, though he lacks a heavyweight's physique, bears a strong resemblance to his father, boxing icon Joe Louis.

Barrow, 53, is national director of The First Tee, a nonprofit on a mission to bring golf to kids in inner cities and rural communities. With backing from the PGA of America, the U.S. Golf Assn., and wealthy individuals such as Richard J. Ferris, retired co-chairman of Doubletree Corp., and Jackson T. Stephens, chairman of investment firm Stephens Inc. in Little Rock, The First Tee has opened almost 40 kid-friendly courses in the U.S. and Canada. The organization intends to use some of its \$35 million in cash and pledges to open 12 more by yearend and have a total of some 130 by the end of 2002. In late November, Barrow will unveil a five-year plan at the World Golf Foundation 2000 Conference, a gathering to chart the long-



YOUTH PUSH: Barrow in Houston (top) and learning from Dad (far right)



term growth of the sport.

What makes Barrow, who joined The First Tee in April after a career as a banker and former aide to the late Commerce Secretary Ron Brown, think kids raised on pickup basketball want to be introduced to golf? "I'm not so sure they want to play golf. But they've never had the option to play golf," he says.

It won't be easy putting First Tee courses in every neighborhood that wants one. Or cheap. To join the program, a city must form a local chapter and begin raising money. Capital costs can range from \$1 million to \$4 million, Barrow says.

FREE SWINGING. In Jacksonville, the price tag was relatively low because the course was a reclamation project: Its overgrown, trash-strewn site was the former Brentwood Golf Club, designed by famed golf course architect

Donald Ross, but it hadn't seen a chip shot in more than 20 years. Costs of rehabbing the course and operating it for a year came to \$2.5 million, with the city making the biggest contribution—\$700,000. Brentwood, which opens this month, will allow adults to play nine holes for a small fee. But the course is designed to nurture young players, at no charge, with large greens that are easy targets.

In blue-collar Hammond, Ind., a nine-hole kids' course opened in April on what had been a dump site for steel-mill slag. Its vistas are still dominated by a BP Amoco oil refinery. "We didn't have a public golf course. Now we've opened the sport to kids who span the economic ladder," says Hammond Mayor Duane W. Dedelow

Jr. "That's the beauty of it—everybody benefits."

In Barrow, The First Tee has found an advocate with a passion for golf and a name that resonates with sports fans. Many of Barrow's fondest memories of his father are of days spent on the greens. His parents separated when he was 2, and Barrow saw his father, who died in 1981, only about four times a year. "My father was such a public person, it was difficult for us to have time alone," he explains. "On the golf course, I got to know him." It's a connection that Barrow is betting more parents and their children will soon be making on First Tee courses.

By Mark Hyman in Jacksonville



Some of the biggest names in the game come up short when it comes to building digital marketplaces.

Building B2B marketplaces is making some industry giants look small. The truth is, if you hand the ball to one of those so-called "dream teams," you'll be up against a sizable integration challenge.

VerticalNet Solutions will help you get your online marketplace together far more effectively—and faster. Our eMarketplace Suite provides a comprehensive set of tools required to develop a high-liquidity digital marketplace. All within one marketplace, our suite delivers content, community, and commerce transaction modules, including auctions, catalogs, exchange, RFP/RFQ, structured negotiation, and a broad range of e-procurement and e-distribution services.

Over the past five years, VerticalNet has built 57 online communities where buyers, sellers, and third parties meet to enjoy greater business efficiencies. Each combines content, community and commerce modules to satisfy the specific needs of the industry served.

Ready to seize an advantage in the competitive B2B game? Visit www.verticalnetsolutions.com right away or call 866-263-6040.

VerticalNet Solutions
A Division of VerticalNet

Fujitsu Network Communications is opening eyes in America with revolutionary photonic technology, like wavelength division multiplexing systems fast enough to send 20 million simultaneous phone and Internet calls down a single hair-thin optical fiber. The boundless multimedia capacity Internet users before could only dream of.





Look around. You're in the midst of a global maelstrom. A swirling mass of converging technologies and new business opportunities unleashed by the Internet. All waiting to be harnessed by companies like Fujitsu – the world's third largest IT services provider.* We've focused our energy and

resources on creating technology to

solve the unique problems of thousands

of individual businesses. Last year

alone we invested \$4 billion of our

WHEN YOU CLOSE YOUR EYES,
WHAT DO YOU DREAM?

WHEN YOU OPEN YOUR MIND TO THE
FULL POTENTIAL OF THE INTERNET,
WHAT DO YOU SEE?

\$50 billion global IT and telecommunications revenues on R&D. Imagine, \$4 billion. That's more than the total sales of many Fortune 500 companies. But that's what it takes to create next generation mobile technology, ultra-high-speed servers and leading-edge photonic networks. Innovations that keep your business one step ahead of the Internet. And light years ahead of the competition.


FUJITSU

THE POSSIBILITIES ARE INFINITE

www.fujitsu.com

*Source: IDC, December 1999. Who Will be Leading the Global IT Services Industry in 2000?: A Competitive Analysis by Mauro Peres, Sophie Janne Mayo.

B-SCHOOLS

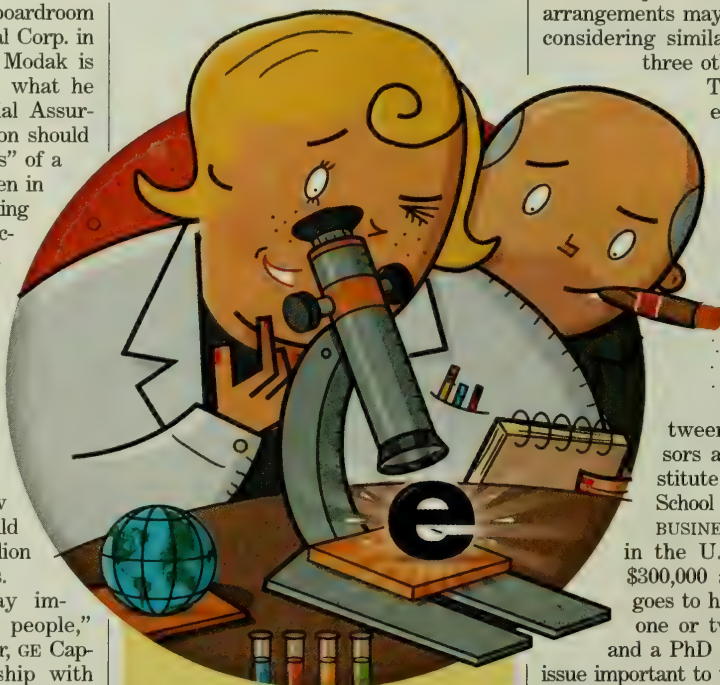
GE CAPITAL'S E-BIZ FARM TEAM

The company draws on UConn's tech whizzes

On a June morning in the boardroom at General Electric Capital Corp. in Stamford, Conn., Anand Modak is telling a group of executives what he dislikes about the GE Financial Assurance Web site. "The information should be available within three clicks" of a mouse, he says, instead of seven in some cases. Sitting nearby, soaking it all in, are top GE Capital executives such as CEO Denis J. Nayden and Chief Technology & Information Officer Michael W. Stout. But Modak, 33, isn't a GE Capital employee or a top-dollar consultant. He's a second-year MBA student at the University of Connecticut's School of Business Administration, brought in to show GE Capital executives how he and his fellow students could lend a hand with the \$56 billion company's e-business problems.

The GE execs came away impressed. "They've got smart people," says Nayden. Five months later, GE Capital has formed a partnership with UConn's B-school—and may establish a model for corporate and academic collaboration on new technologies. The company agreed to invest about \$2.5 million and has promised an additional \$1 million every year until 2005 to create and operate a new e-commerce lab on UConn's two-year-old Stamford campus, just minutes from GE Capital's main offices. Forty students will work full time during a semester to study various e-commerce technologies and issues. Other students at UConn's main campus in Storrs, Conn., will participate through projects. GE executives will be assigned to the lab, working closely with faculty to guide research.

For GE, the main benefit is a pipeline of potential recruits and an inexpensive team to noodle over e-biz solutions. "We're not interested in theoretical research—I need to transform my businesses radically, and quickly," says Nayden, who is an alumnus of UConn's



GE CAPITAL GOES BACK TO SCHOOL

Its \$7.5 million collaboration with the University of Connecticut is a boon to both outfits

WHAT GE GETS

- ▶ Inexpensive e-biz research
- ▶ A jump on recruiting students
- ▶ First dibs on tech developments
- ▶ Stimulating environment for tech stars

WHAT UCONN GETS

- ▶ Real case studies for classes
- ▶ Hands-on work with top tech execs
- ▶ Access to cutting-edge tech tools
- ▶ Prestige of link with GE

B-school. "If I did this myself, I'd have to hire new people, engage consultants, or take [existing employees] off of another project."

The venture is the largest between a GE unit and a B-school. GE Industrial Systems has given \$1.5 million to UConn's school of engineering, and Richard N. Dino, the UConn B-school's associate dean, says this school may soon become more involved in the e-lab, too. In this new venture, however, GE Capital execs have a continuing commitment and closer supervision. And more such arrangements may be on the way: GE is considering similar deals with two of three other universities.

The relationship pushes the alliance between corporations and B-schools, which are seeking out financing that allows them to conduct more relevant research.

Take, for instance, the year-old Center for eBusiness @ MIT, a venture be-

tween 16 corporate sponsors and Massachusetts Institute of Technology's Sloan School of Management, which in BUSINESS WEEK ranks No. 1 in the U.S. Sponsors kick in \$300,000 a year, half of which goes to have a faculty member or two master's students and a PhD candidate work on an

issue important to the company. The contracts involve fewer students than the GE e-lab, however, and don't focus on short-term business solutions.

REAL WORLD. Such collaborations are partly being driven by cost considerations. Faculty research alone costs the University of Maryland's Robert H. Smith School of Business \$10 million a year, for instance. Organizations and foundations donate an additional \$2 million to \$3 million for research. Only \$200,000 to \$300,000 of that comes from corporations. Smith School Dean Howard Frank wants to boost that share to \$1 million, but it's not as simple as saying "We're smart. Give us money," he says. "You build a value-added relationship."

For students inside UConn's 10,000 square-foot e-lab offices, that relationship includes real-world case studies and access to top GE executives. If e-lab projects are later spun off into products or services, the school has a chance to share in profits. GE Capital may buy innova-

YOUR NEST EGG. YOU'VE MANAGED IT WELL.

IT'S TIME TO RETIRE.

NOW WHAT?

**FIND OUT WITH THE T. ROWE PRICE
RETIREMENT INCOME MANAGERSM.**

It's one thing to build your retirement nest egg. Actually living off it, though, is quite a different matter. That's why T. Rowe Price has developed a powerful and acclaimed planning service for investors nearing or in retirement.

"THE BEST ADVICE AROUND."—*Business Week**

Using advanced computer technology, the Retirement Income Manager helps you plan an income stream you can rely on over the long term. Based on your goals, we'll prepare a window into what the future may bring, a window that reveals your specific financial situation and helps you see how your income will hold up against the rigors of inflation and changing markets.

"UP TO THE COMPLEXITIES OF THE TASK."—*Barron's*

With this comprehensive service, we'll also prepare alternate allocation and withdrawal strategies so you can compare their likelihood for success in various market conditions.

"AN INTRIGUING SERVICE."—*Mutual Funds Magazine*

In short, we'll give you an intriguing, personalized recommendation backed by our highly trained retirement planning team—all for a one-time fee of just \$500. So call for your free information kit today, and learn more about the Retirement Income Manager—planning to last a lifetime.

Request your free
information kit today.

1-800-354-2375

www.troweprice.com

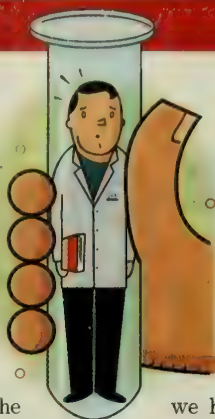
*Independent third-party opinion comparing similar advisory service products.
T. Rowe Price Retirement Income Manager is a service of T. Rowe Price
Associates, Inc., a registered investment adviser.

PRIM056743

T. Rowe Price 
ADVISORY SERVICES

tions that originate with faculty or that grow out of the e-lab. But the project also represents a bid for prestige for the 52-year-old UConn B-school, which has a \$16 million annual operating budget and a \$17 million endowment. That's tiny compared with the \$267.7 million endowment at the University of Michigan's business school, for example. UConn's Dino says he's trying to drive the unranked school into the top 50 schools nationwide: "That's what this whole thing is about."

FEEDBACK. Outside academics worry that too much hands-on involvement by executives in settings like the e-lab can skew results. "If executives are conducting research, then it is likely to be less rigorous," warns S.P. Kothari, professor of accounting and director of the New Economy Value Research Lab at MIT's Sloan School. But UConn faculty say any drawbacks are more than offset by the ability to test their ideas in real-world settings. They have the right to use research conducted in the e-lab as the basis for papers. "We're often approached to do research for money,"



PRESTO "If I did this work myself, I'd have to hire new people, engage consultants, or take [employees] off another project," says a GE exec

says UConn's James Marsden. "But we can't write about it...because we have to sign nondisclosure agreements."

Lab results also will be fed back into curriculum. This spring, for example, students can take New Technology Evaluation, a course co-taught by a UConn professor and a GE Capital manager. Students will handle dozens of GE Capital projects in areas such as biometrics, e-auctions, digital piracy, and Web-site design. And as projects demand, students will have access to early versions of new technology, such as souped-up Palm handheld computers and iris-scanning personal identification systems. Says GE Capital Chief Technology Officer Chris Perretta: "We get good toys."

In return, GE Capital should gain a

recruiting edge. Other close company-school relationships bear this out: Of the 200 MBAs that Maryland graduated last spring, 20% went to companies that the school had a close relationship with, says Frank. GE Capital's Nayden adds: "Students get a view of working with GE Capital, and we get a telescopic view into a talented pipeline. That's much different than a cold interview."

Just look at Modak, the second-year MBA. This month, he's wrapping up a feasibility study of a new idea from a GE Capital business. After he presents his findings on Dec. 8, Modak will focus on getting a job. Will he apply at GE Capital? You bet. And once dozens of students have channeled through the e-lab, other companies may want a peek, too.

By Mica Schneider in Stamford, Conn.

"When we call our communications provider
They don't break any speed limits
getting back to us."

"Quick! Talk to Focal."

What you need is a communications provider that specializes
in answers. And answers when you call.

Call Focal. The company built on responses. Not excuses.
You'll find out there are no limits to what Focal will do to save you
time, worry and money. Not someday; right away.

For data, voice and co-location services built around your company's needs...
at your company's pace... don't wait another minute. Call Focal.

FOCAL

www.focal.com Nasdaq: FCOM
877.98.FOCAL

Arlington, Boston, Chicago, Cleveland, Dallas, Detroit, Fort Worth, Houston, Los Angeles, Minneapolis/St. Paul, New York, Northern New Jersey,
Oakland, Orange County, Philadelphia, San Francisco, San Jose, Seattle, Washington DC, Northern Virginia.

The path to e-business success is easy to follow.

BusinessWeek online



BusinessWeek
e.biz

*Get on the fast-track with BusinessWeek e.biz, our resource
for everything you need to know about e-business.*

ebiz.businessweek.com

E-business moves at lightning speed. To stay ahead of it, you'll need e.biz at businessweek.com. The channel that's unsurpassed at offering timely information, analysis, and tools you can use every day. BusinessWeek e.biz's in-depth coverage and archives let you look into the future and learn from the past. Our award winning editorial staff makes sure you know what's important on a daily basis. And best of all, it's all free

to BusinessWeek subscribers. One click and you're armed with the power only BusinessWeek Online can offer to help make your e-business ventures successful. And make you a leader worth following. Activate your free subscription today.

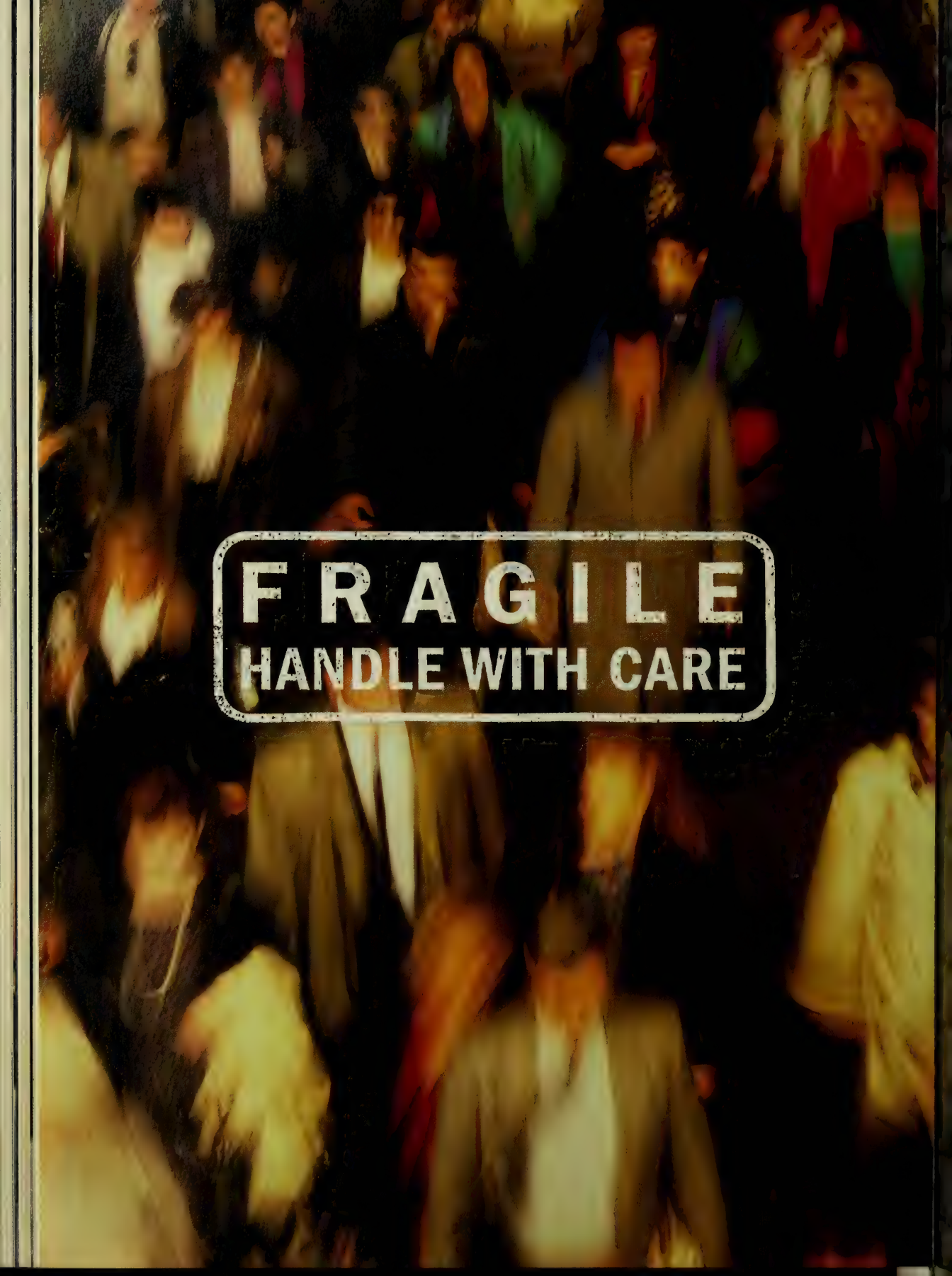


**2000 National Magazine Award Winner
General Excellence in New Media**

AOL Keyword: BusinessWeek
Internet Keyword: BusinessWeek ebiz

A Division of The McGraw-Hill Companies



A blurred, high-contrast photograph of a dense crowd of people, likely in a dark, indoor setting. The individuals are out of focus, creating a sense of motion and anonymity. The lighting is dramatic, with some areas appearing bright and others in deep shadow. In the center of the image, there is a rectangular sign with a distressed, white border and a dark background. The sign contains the text "FRAGILE" in large, bold, white capital letters, and "HANDLE WITH CARE" in smaller, bold, white capital letters below it.

FRAGILE
HANDLE WITH CARE

SO OBVIOUS, it's easy to miss: Beyond the hype about eyeballs and page hits are real customers with unique needs and preferences – customers that demand an improved online experience.

To gain market leadership, you must serve up unprecedented convenience. Personalization. Know customers one-on-one. Create Web interactions tailored to each – their wants and needs, perceptions and personal histories.

And do it dynamically. In real time.

The prize? Clear competitive differentiation. Solid brand loyalty.

Stonebridge solutions make it possible with compelling Web services, integrating back-end systems and processes with everything required up front to enhance Web experiences and cultivate customer relationships.

Act now. Before your customers click with someone else.

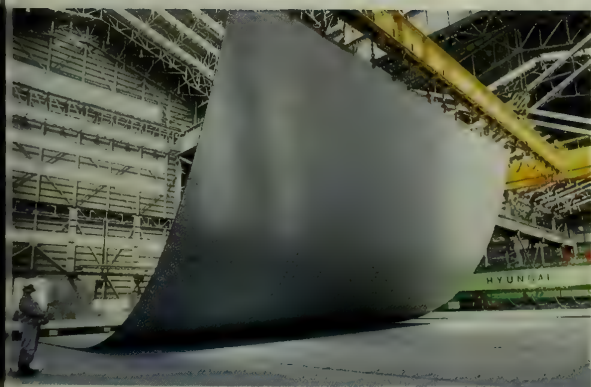
Visit www.sbti.com or call 800.776.9755 to learn more about electronic relationship management and other Web-centric solutions.

The Fast Track To e-Business.™

STONEBRIDGE
TECHNOLOGIES

MONSTERS





For hundreds of years, giant ships were shrouded in romance and mystery. Little of that romance has survived in an age where information is everything, and bits traverse the planet at the speed of light. That's a pity, for ships are more vital to the flow of goods around the world than ever before. Amid a boom in global trade, the schooners of yesteryear

DEEP

have been replaced with steel-plated freighters that dwarf most other man-made structures. South Korea is the source of some of the largest of these sea-going behemoths. Indeed, in an industry beset by hyperbole, Hyundai Heavy Industries stands out. It makes more of the biggest freighters than any other company on earth. Indeed HHI's \$6 billion in revenues are helping to keep the Hyundai Group, its cash-strapped parent, afloat. And through the first half of this year, thanks largely to its prodigious output, South Korea produced 6.8 million gross tons of ships, topping Japan's output by 3% and stealing the title of No. 1 ship-builder.

In the central image, two of workers perch atop a cherry-picker, hosing down the prow of the Ottoman Dignity, a Turkish-owned crude oil carrier destined for the Mediterranean. The ship's eight-story-tall hull still bears scarlike weld lines that trace the massive subsections of the ship's steel skin.



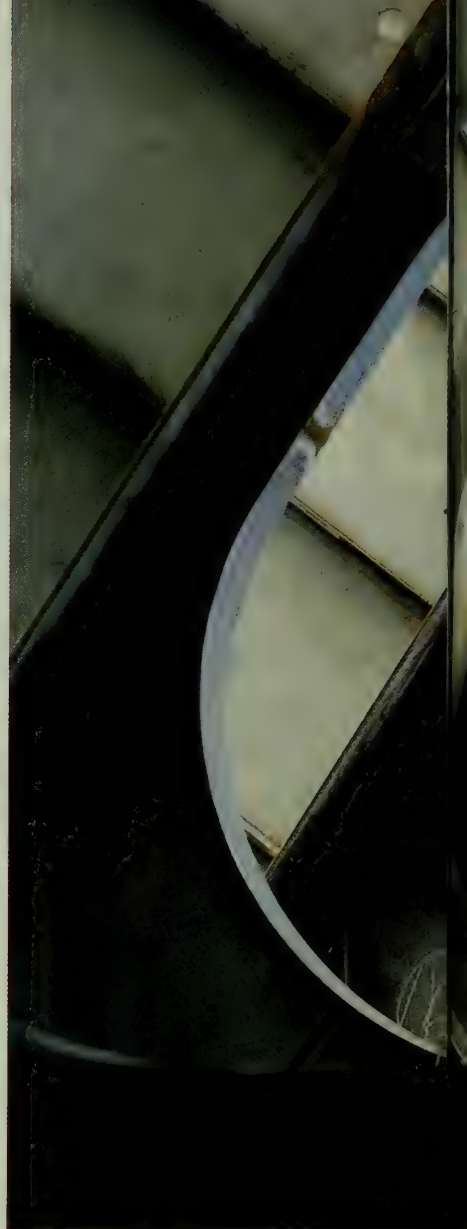
Photo Essay

At bottom right, a worker oversees the positioning of a single sheaf of steel that robots will cut and craft into a hull section. The steel bends like paper but weighs many tons. At bottom center, a technician squirms through a hole in the hull. Together with their families, an army of 26,000 workers lives in HHI's 800-acre company town adjoining the shipyards. During their one-hour lunch break, a sixsome, bottom left, grabs a game of basketball on one of the sprawling asphalt staging areas.

PHOTOS TOM WAGNER/SABA

PHOTO EDITOR ANDREW POPPER

WORDS ADAM ASTON WITH MOON IHLWAN

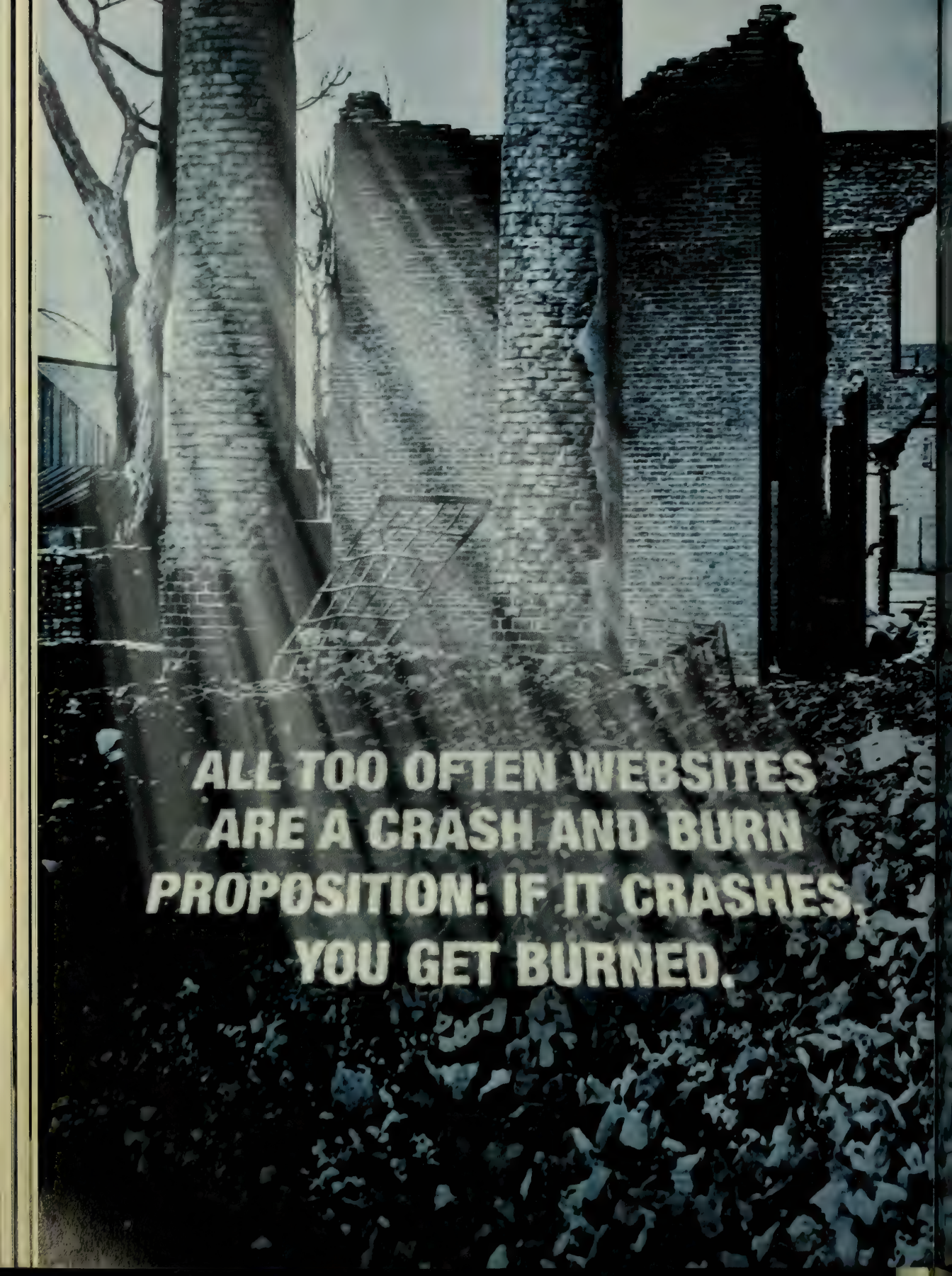




BUILDING BLOCKS

HHI has excelled at reducing the number of subsections—or blocks—that it assembles on the ground, before grafting them to the body of the boat. A typical block, top, measures 30 to 60 feet on each axis and can weigh up to 200 tons. One of HHI's large container ships, capable of holding the equivalent of 3,250 tractor trailers worth of freight, is made up of just 130 such blocks. Each of these is planned, assembled, and parked in the yard according to where it will fit into the giant puzzle of the construction job. A

computer tracks where each of a 1,000 or so blocks, destined for many different craft, are scattered around the yard. When needed, they are carried by an oversized flat-bed transporter, bottom, to the dry dock, where they are hoisted into place by one of HHI's Goliath cranes, capable of lifting 450 tons. This piece will become part of one of the internal ribs of a freighter. At left, compatible parts, matched to the millimeter, are fitted and welded together.

A black and white photograph of a destroyed building, likely a brick structure, with smoke rising from the rubble. The scene is dark and somber, with the smoke creating a hazy atmosphere. The building's structure is partially collapsed, and the ground is covered in debris.

**ALL TOO OFTEN WEBSITES
ARE A CRASH AND BURN
PROPOSITION: IF IT CRASHES,
YOU GET BURNED.**

There was a time when your website could crash and it wouldn't cost you a single customer. But that was during the prehistoric era of websites.

Oh, about five years ago.

Now, of course, the stakes are much higher. Countless customers can be gained or lost based on whose website is or isn't running. So as the leader of the digital generation, WorldCom helps prevent crashes from happening in the first place.

By teaming up Digex with our UUNET arm, we're able to offer you a comprehensive e-business solution.* Not just one of the most reliable IP networks in the industry. Not just data centers all over the world. But the far more critical, human element: an all-star team of web hosting experts that blue chip companies trust with their mission-critical applications.

In other words, you get a web hosting provider that's going to back you. Not burn you.

For more details, visit us at www.wcom.com/generationd.

generation d

WORLD.COMTM

Photo Essay



WORK YARD

HHI's success stems from a blend of manufacturing innovation and sheer scale of production. At its yards in Ulsan, South Korea, HHI operates the world's largest ship factory. The 1,000-acre operation houses nine dry docks of varying sizes. In 1999, these dry docks were the birthplace of 52 ships, about one a week. This year, HHI is aiming to build 55. Above, the largest dry dock, No. 3, is nearly a half mile long, 300 feet wide, and more than 13 stories deep—a volume large enough to handle six massive freighters at once. This is where the transporters deposit preassembled ship sections, or blocks. A Goliath crane then picks up these gigantic pieces and drops them into place in the bay. There, teams of welders join new sections onto the lengthening mass of the ship. At left, dry dock No. 9 is one of a number of newer and smaller work areas, capable of holding just four or so hulls. In August, 2000, the Ottoman Dignity began to take shape in the bottom of No. 9. In the foreground, the lower hull dwarfs a worker in a cherry picker who is inspecting surface welds.



REDLEAF
Where innovation lives.



**That's the thing about extraordinary ideas.
They rarely turn up in ordinary places.**

By comparing innovative ideas from all over the globe, we can
differentiate prodigy startups from tepid knock-offs.

It's comparative selection, and it's like no seed stage strategy on earth.

www.redleaf.com

- OR -

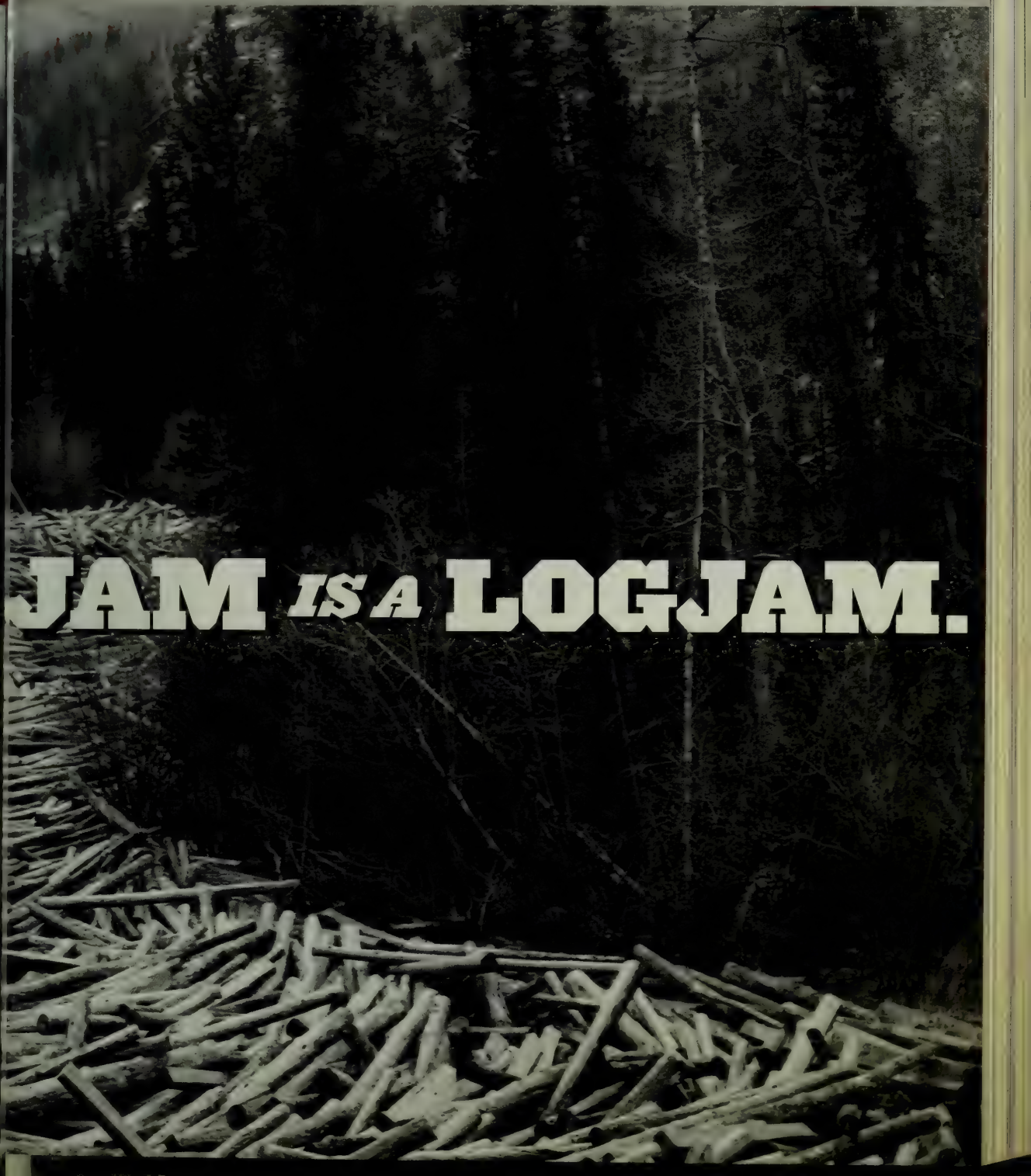
why we named an IT company after a guy who was good with a stick.



A LOGJAM IS A LOG

They were called jamcrackers: the specialists charged with keeping one of the major industries of yesterday free of bottlenecks. A hundred years later, we're helping keep today's businesses free of the same. By delivering IT and business solutions via the web—from remote access to email to sales force automation—then managing those applications so that they work together smoothly and seamlessly, we enable companies to run more efficiently. In the process, we free up IT people to focus on strategic, big-picture IT issues. Could your business benefit from a whole new way to work? *Sounds like a job for*

jamcracker
www.jamcracker.com



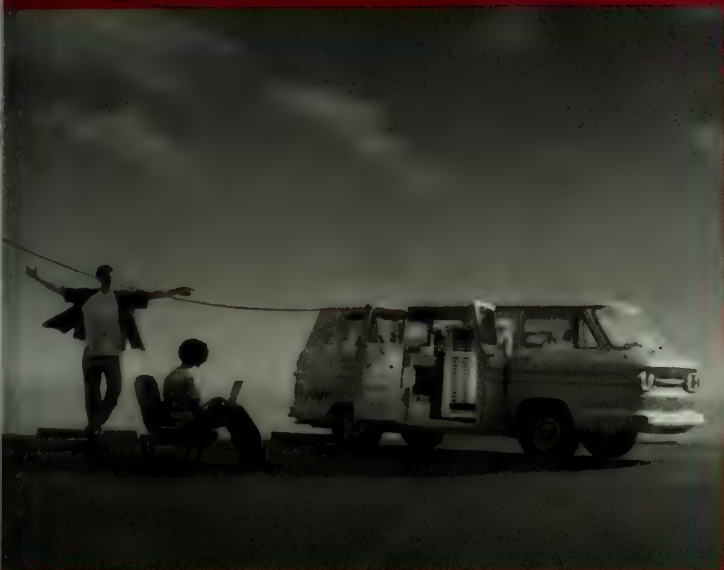
JAM IS A LOGJAM.

MIDWAY

A freighter looks finished long before it really is. If you slid it into the sea, it would float. But compared to the exoskeleton, the internal systems take far longer to string together. At bottom, workers hammer metal pegs into a special locking link that joins together sections of the anchor chain. Each link weighs some 180 pounds. About a week later, the ship will be floated. Right, the Ottoman Dignity gets wet for the first time. Technicians initially flood the dry dock to just a few meters. From inside the ship's hull, they check for tiny leaks. When the ship is fully floated, they will complete the highly technical work of installing piping, electrical wiring, and other internal systems. HHI also takes care to finish interiors—which may house up to 40 crew—with care. At top, workers put the finishing touches on the interior. They wear slippers so as not to scuff the floor of the new vessel.



Photo Essay



TECHNOLOGY SHOULD NEVER GET IN THE WAY OF A BIG IDEA.

*Sometimes, before you can think big
you have to think small.*

*Small, like the Compaq
ProLiant DL360 Server. With a
1.75-inch profile that fits everywhere,
you can have your*

big start-up idea anywhere.

Even in the back of a van.

Welcome to the new IT.

*Inspiration Technology
from Compaq.*

COMPAQ
Inspiration Technology

compaq.com

©2001 888-5858. © 2000 Compaq Computer Corporation. COMPAQ and the Compaq logo Registered in U.S. Patent and Trademark Office. ProLiant and Inspiration Technology are trademarks of Compaq Information Technologies Group, L.P. in the U.S. and other countries.



Photo Essay



CHRISTENING

It takes from 18 to 24 months for HHI to deliver a seaworthy ship from the drawing board into the hands of a captain. Three or four of those months are spent in dry dock. A new boat spends an equal amount of time floating quayside while technicians complete the installation of internal systems (top). It is a quirk of this sequence that the traditional christening ceremony—complete with Korean-made sparkling wine (left) and a company band—occurs when the ship is first floated out of the dry dock and left at quayside, rather than when it is technically finished. Last September, Ibrahim Gungen, CEO of Gungen Maritime & Trading of Ankara, Turkey, watched the christening of the Ottoman Dignity (bottom). The crude oil tanker, at nearly 890 feet long and 80 feet deep, is not one of HHI's largest. But it is among the most advanced of the current generation of tankers and was produced quickly. "They turn out 1,000-foot big ships here like a production line," says Gungen. The keel for the Ottoman Dignity, HHI's 1,227th vessel, was laid on July 18; the vessel was floated about 10 weeks later. The Ottoman Dignity's double hull meets all the newest and strictest U.S. specifications for oil tanker safety. Gungen's experience with HHI bodes well for South Korea's shipbuilders. The Japanese yards he has worked with in the past were unresponsive to customizations, but HHI will "build anything you want . . . any changes, no problem." For now, South Korea leads Japan. But both countries fear the emergence of low-cost shipyards in China.



THE SKEPTICS WERE RIGHT WHEN THEY SAID CRAIG VENTER
WOULD NEVER CRACK THE HUMAN GENETIC CODE ON SCHEDULE.
HE WAS TWO YEARS EARLY.



When you're trying to decipher something as complex as the human genetic code. And when the consequences of success are so important to the health and well being of everyone on the planet. Time matters.

So as Venter and his team from Celera Genomics began evaluating their technology needs they realized there were only two systems even capable of taking on a task of this magnitude. They suggested a benchmark test. One system ran the test in 87 hours. The Compaq Tru64 UNIX AlphaServer with Compaq StorageWorks solutions did it in 7.

The superior processing power that delivered this performance is the same technology that enabled Compaq to win four recent supercomputing projects around the world. And it's just one example of how Compaq Tru64 UNIX AlphaServers help people in all kinds of settings realize their inspiration.

That's what happens when you move beyond the limitations of Information Technology to something more inspiring. Welcome to the new IT. Inspiration Technology from Compaq.

COMPAQ
Inspiration Technology



You can do ANYTHING

It may come as a surprise at first. Everyone buying into your eBusiness vision quickly and enthusiastically. But that's how life is when you've got a Black Rocket.[™] The world's first Network Services Platform for eBusiness.

What is Black Rocket? A revolutionary new service from Genuity[™] that gives you the power to launch high-end Web sites and other eBusiness applications faster than ever. Which saves you time, money and headaches.

**GENUITY is the leading
Network Services Provider for
businesses changing the world.[™]**

Black Rocket combines critical network services like secure managed Web hosting with Genuity's state-of-the-art fiber optic global network into a single, secure and scalable platform. Black Rocket also comes with the industry's first platform Service Level Agreement.

Genuity delivers Black Rocket in 10 business days.



with a BLACK ROCKET.

ess, so you can jump-start your eBusiness initiatives. When your Web site or eBusiness application is completed, Black Rocket provides a secure, managed resilient eBusiness environment so you can get ahead — and stay ahead — of the competition.

There's nothing like Black Rocket.

That's why eBusiness leaders like IBM, Cisco and Gemini Ernst & Young are already joining together Genuity to offer eCommerce, eMarkets and other

eBusiness solutions built, deployed and managed on Black Rocket.

See for yourself. For more information, check out our white paper at www.genuity.com/blackrocket or call 1-800-GENUITY.

GENUITY™

ASIA'S F

It's set for a new technology-driven leap forward

Philip Yeo, chairman of Singapore's Economic Development Board, is by training a traditionalist. For most of his 14 years at the government agency, Yeo and his team of technocrats have geared the island's investment policies and education system toward the manufacturing of products that long ago lost their glamour in the U.S., such as chemicals and computer memory chips.

But drop by Yeo's office in downtown Singapore today, and you'll find a man bubbling with excitement. His desk is strewn with copies of pop-science books like *The Complete Idiot's Guide to Decoding Your Genes* and *Sex and the Origins of Death*. Yeo wants every school-age Singaporean to study the life sciences. The 54-year-old industrial engineer took time off himself last year to study biotechnology. "Every kid must understand genetics and DNA," he says.

Five thousand kilometers away, at the research headquarters of LG Chemical Ltd. in the central South Korean science hub of Taedok, executives are also preoccupied with the future. Like

many Korean companies, LG Chem had prospered for nearly 20 years by building ever larger plants to produce commodity products—in its case, chemicals used to make plastics and building materials. But LG execs have long since realized that they need to make a radical shift into advanced technologies. The company is investing heavily to catch up with Japan in sectors like state-of-the-art batteries and display screens. Next year its biotech division hopes to hit the U.S. with a new antibiotic for respiratory infections. "We have to reach a world-standard level in everything—including marketing and organization," says LG Chemical Research Park President Yeo Jong Kee. "Otherwise, we'll have a gloomy future ahead."

East Asia is on the move. In a multitude of ways, companies and governments from Singapore to Shanghai are embarking on a quest to find the technologies that will help drive a new wave of growth. Capital spending is roaring with heavy investment in the latest-generation technology of everything from computers to chipmaking equipment. S



FUTURE

t huge problems remain

on Smith Barney estimates that outlays on machinery and equipment in Korea, Singapore, and Taiwan will jump 50% a year. From Hong Kong's Internet-led boom in services to Japan's and Korea's high-tech manufacturing prowess, East Asia is positioning itself for the next leap forward.

WIND. The region is still burdened by staggering corporate debts and shaky financial systems, the legacy of old high-growth formulas that ran out of steam. To return to strong, sustainable growth in a new world of tumbling trade barriers and whirlwind technological change, East Asia must get serious about creating industries and business environments that leave Old Economy and old business styles behind.

is doing so with considerable vigor. The billions that Singapore, Korea, and Taiwan are budgeting for genetics and other sciences underscore a new appreciation for basic research. In Korea, R&D spending has grown from 1.9% of gross domestic product a decade ago to 2.7% now, with a goal of 3% by 2005, just short of Japan's 3.2%. So far, Asia's embrace of a technology-intensive economy does not show up in broad-based statistics. Old standbys like steel, petrochemicals, and end computer hardware have largely powered the recovery of Korea, Malaysia, Thailand, and Singapore.

The good news is that East Asia may now be poised to

Special Report



chart a new course in technology because the crash in regional dot-coms, following closely on the 1997-98 crisis, has prompted a permanent shift in the business mindset. "Long after the last doomed Internet startups run out of cash," says Donald Hanna, a Hong Kong-based economist for Salomon Smith Barney, "we expect the global IT cycle to contribute importantly to Asian economies and markets."

With market barriers falling, "manufacturers now understand that imitation is no good anymore," says Chung Seon Jong, president of Korea's Electronics & Telecommunications Research Institute in Taedok. "They must have their own products." In Korea small high-tech ventures account for only 4.8% of GDP now, but officials expect the sector to grow to 18%, or \$130 billion, by 2005, and employ 1.2 million people.

CELL MANIA. The shift in attitude is most apparent in once protectionist Asian nations. South Korea, for example, has thrown open its markets for fixed-line and wireless networks. This has unleashed a wave of telecom investment that has cut costs, enticed companies to introduce broadband networks, and spurred some of the world's highest usage of cell phones and the Web.

The new high-tech entrepreneurial culture is here to stay. Engineers from Seoul to Shanghai have now tasted the sense of accomplishment that a startup can provide. What's more, venture capitalists say there is still plenty of money out there to fund new ideas. Thus, Asia's best tech entrepreneurs are more likely to stay home to launch new products than head to California and New York.

Some sectors may now be as well-positioned as Silicon Valley to produce true breakthroughs. Soon, East Asia could rival Scandinavia as a source of innovative wireless multimedia devices, as well as the chips, software, and batteries that power them. Korean and Taiwanese electronics companies, meanwhile, have already become bigger production bases than Japan for liquid-crystal displays, now used in everything from mobile phones to car dashboards. Invest-

ment in broadband telecom infrastructure across the region means manufacturers could emerge as key players in equipment used in superfast optical-fiber networks.

There also is tremendous growth potential in enabling old-line mass producers to get more mileage from their technology. James B. Haybyrne, chairman of Hong Kong-based Strategic Thinking Group, is building a business that advises family-owned manufacturers on how to use their technological knowhow to move into more profitable businesses. One client is Hong Kong-based Kam Yuen's Watch Case Manufactory Ltd., which has been making metal watch casings for 30 years. Now, it has adapted its processes to produce moldings for high-tech telecommunications equipment.

The big winners in Asia's technology race, of course, will be economies that already possess strong engineering bases, high education standards, modern telecom infrastructure, and globally competitive corporations. These include Taiwan, Hong Kong, Korea, Singapore, and, increasingly, China.

It's an open question, though, as to how the rest of the region will fare. Education levels are low in nations like Thailand and In-

donesia. Computer use and Internet access in Southeast Asia lag way behind Japan, Korea, and most of Northeast Asia. And the corporate and financial sectors remain buried in bad debt, which means companies cannot afford to buy the technology required to keep pace with better-financed rivals elsewhere in Asia.

But if Indonesia and Thailand now seem at a disadvantage, they still have entrepreneurs who are trying to find their role in global information technology. In Bali, Indonesian entrepreneur Marina Budiman has founded BaliCamp, a compound of Web-linked bungalows overlooking shimmering rice fields, where programmers expect to produce some \$10 million in software this year. Vietnam is also starting to establish itself as a new source of software

SILICON BALI

Dancers eye PCs at the opening of software incubator BaliCamp



THE TECH FUTURE

East Asia is betting its growth on a quartet of high-tech industries.

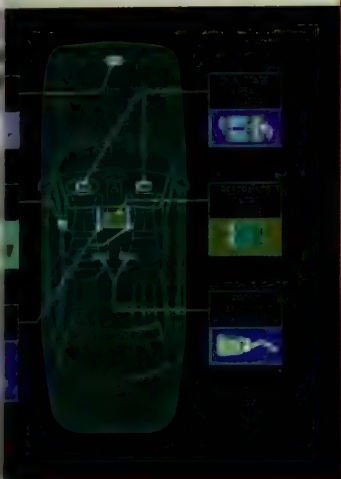
BIOTECHNOLOGY East Asia has lagged far behind the West in the life sciences. But the region's wealth of brainpower and low costs could make Singapore, Taiwan, China, and Korea global hubs for turning discoveries in genetics and molecular structure into commercial products.

WIRELESS INTERNET APPLIANCES East Asian electronics companies hope to be global players in a gamut of digital products that access the Internet.

SOFTWARE Countries like Vietnam and Indonesia hope to establish themselves as contractors to develop software applications, animation, and Web services.

SPECIALTY CHIPS Korea, Taiwan, and Singapore have been enormous suppliers of commodity semiconductors. Now they hope to rival Silicon Valley as producers of innovative and higher-margin multimedia chips.

DATA: BUSINESS WEEK



The
3,400-pound
bodyguard.



2001
sable

From the time you start the engine to the time you step outside its well-equipped interior, the 2001 Mercury Sable is busy looking after you and your passengers. Sable's Personal Safety System™ includes dual-stage airbags* that deploy at different rates depending on the driver's seat position and severity of the impact. Safety belt pretensioners and available side-impact airbags* help further reduce the risk of injury. Not surprisingly, all of these safety features helped Sable earn the government's highest crash-test rating†. Want to know more? Just click or call.



www.mercuryvehicles.com ■ 888.566.8888



Mercury
LIVE LIFE
IN YOUR
OWN LANE

*Always wear your safety belt and secure children in the rear seat. †Driver and passenger front-crash test.

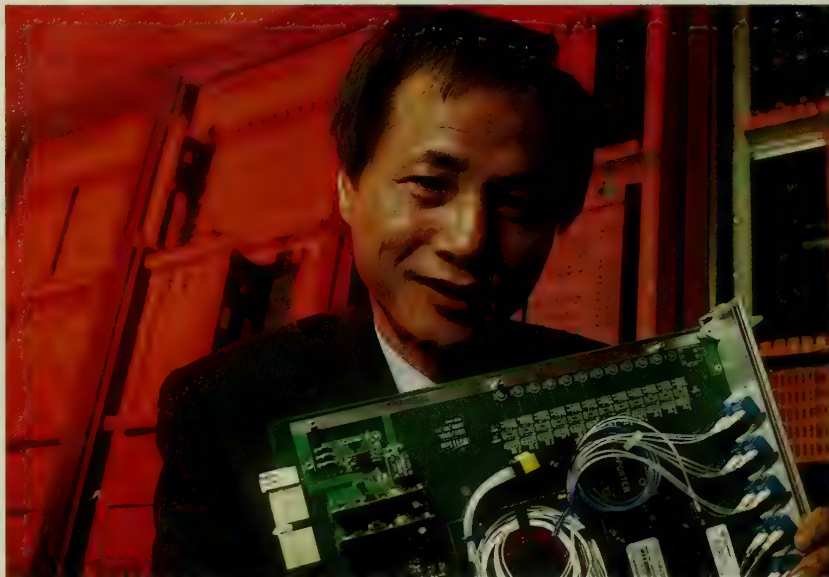
programming and animation work for foreign companies.

A harder case to judge is Malaysia. Its \$3 billion bet on the Multimedia Super Corridor was supposed to provide a New Economy boost with its state-of-the-art labs, fiber-optic networks, and tax-free zones, all designed to attract software and multimedia startups. The project attracted few foreign companies, so Malaysia is now trying to nurture homegrown talent with an incubator in Cyberjaya, the heart of the new tech zone. Today, that program boasts some 45 startups, yet overall the vaunted Malaysian project hasn't come close to its goal.

Not that this should discourage Asia: The region's un-

remitting search for competitive technologies and the creation of a business culture that allows workers and entrepreneurs to take advantage of them could usher in a new era of fast growth. True, when viewed from above, Asia seems far from achieving such a transformation. But on the ground, in a host of startups, enlightened conglomerates, and business-savvy research labs, the gritty task of building Asia's high-tech future has begun.

By Mark L. Clifford in Hong Kong and Pete Engardio in Singapore, with Daniel Lovering in Bangkok, Frederik Balfour in Cyberjaya, Sheridan Prasso in Hong Kong, and bureau reports



SOUTH KOREA

BEYOND THE LAB

Researchers hang up their white coats to start businesses

Some 150 kilometers south of congested Seoul, and further still from the smoke-belching steel, auto, and chemical plants that made South Korea an industrial powerhouse, Taedok Science Town sits like a Shangri-la. The burg is dotted with dozens of glistening, white modern research complexes nestled amid rugged hills and maple, gingko, and poplar trees. For two decades, since it was founded to fulfill the grand visions of late strongman Park Chung Hee, thousands of the country's brightest scientists have toiled in this serene setting. They are white-coated soldiers in Korea's campaign to close the gap with the West and Japan in technologies ranging from semiconductor materials to aerospace.

But life at Taedok has not been entirely idyllic. Most technology developed at the big labs there never made it to market. Starting in 1989, for example, engineer Kim Jae Guen was part of Korea's drive to catch up with the likes of

Lucent, Nortel, and NEC in superfast optical transmission systems. But bureaucracy at the state-funded Electronics & Telecommunications Research Institute (ETRI), where Kim worked, was achingly slow, and getting lethargic Korean telecommunications companies to use his technology was difficult. "It was frustrating," he says, "to have to sit on our research in this competitive area, where technology develops by leaps and bounds each month and prices drop by half within a year."

So last year, Kim, 48, decided to do what many Western scientists would have done years before: He recruited 10 other engineers and started his own company. After raising \$5 million in venture capital, Tellion Inc. is about to hit the market with a line of networking equipment that will transmit and receive 2.5 gigabits of data over optical telecom networks. Tellion Inc. hopes to generate hundreds of millions of dollars in annual sales. Although rivals include such fierce competitors as Nortel, Kim's goal is to drive down

the cost by half, shrink its size, and be there when the market is ready for 10-gigabit equipment.

A LOT OF DARING. Kim's risk is the kind of plunge being taken all around Taedok, where the aftershocks of the 1997 financial crisis are finally pushing hundreds of scientists out of their cloistered government- and conglomerate-funded labs and into new businesses. The result has been a welcome revelation: Long derided for its over-reliance on me-too industrial commodities and plodding, giant companies, it turns out that Korea Inc. is loaded with innovative technology and small entrepreneurs who are willing to take big risks. Indeed, given the opportunity, Korea's high-tech scene may be every bit as dynamic as Taiwan's.

ETRI has proved a particularly rich mine of entrepreneurs. In 1998, to cut its budget, the institute fired 400 of its 2,000 employees, mostly engineers and researchers. To help many of them get jobs, it set up incubators of-

Unrivaled



When business teams with technology...
VERITAS® gets you to the top.

The Data Availability Company™

In a rocky and fiercely competitive global economy, your data is your most valuable asset.

Unrivaled solutions from VERITAS give you the vital edge necessary to scale new business heights.

VERITAS, The Data Availability Company, provides you with essential, industry-leading software solutions, UNIX to NT, data center to laptop, to continuously access and protect your business critical data.


VERITAS™
BUSINESS WITHOUT INTERRUPTION™

Visit us at www.veritas.com

Copyright 2000 VERITAS Software Corporation. All rights reserved. VERITAS is a registered trademark of VERITAS Software Corporation in the U.S. and other countries. The VERITAS logo and Business Without Interruption and VERITAS are trademarks or registered trademarks of VERITAS Software Corporation in the U.S. and other countries. Other product names mentioned herein may be trademarks or registered trademarks of their respective companies.

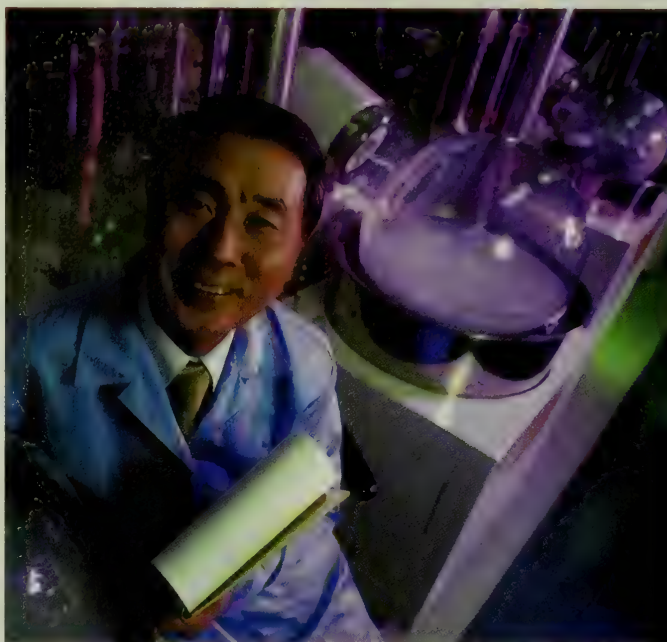
fering cheap rent and lab facilities. The government also changed rules that once prevented researchers from collecting royalties on their intellectual property, which in the past was simply given to Korean *chaebol*, or conglomerates, for free.

This year alone, former ETRI engineers have spawned 59 startups, compared with 13 in 1997. And they're not just dot-coms. The Taedok area is buzzing with specialty chip-design firms, makers of wireless and optical telecom devices, and software houses. And old-line *chaebol* are opening their wallets for big research collaborations. "We are so remote from Seoul that Taedok was almost forgotten by government officials for 20 years, and the *chaebol* didn't appreciate all the technology they got for free," says ETRI President Chung Seon Jong. "Now, Taedok is getting all sorts of attention."

Many new entrepreneurs are grateful to be liberated. Until he left ETRI in November, 1998, Ryum Byung Ryul, like Tellion's Kim, felt that he had been wasting his time. He had led Korea's decade-long bid to catch up with IBM and NEC in silicon germanium, a next-generation semiconductor material. "I developed a technology that was very comparable to IBM's," Ryum says. "But we failed to transfer the technology to any company." Now, Ryum has his own Taedok company, Advanced Semiconductor Business Inc., which owns 35 international patents. He is collecting royalties on his silicon germanium and production processes and is producing a variety of specialty chips. Among the most promising are devices for wireless telecom and for use in auto navigation systems.

Other Taedok labs also are generating spin-offs. The Korea Research Institute of Bioscience & Biotechnology (KRIBB), which boasts 150 PhDs in fields ranging from molecular biology to human genetics, began a small-business unit in 1998 that so far has generated more than 20 new ventures and hopes to produce 500 in the next three years. The institute is spearheading the government's plan to invest \$5 billion over the next five years on basic life-sciences research and development and industry collaborations in a bid to accelerate Korea's biotech industry.

One such tie-up is with Samyang Genex, a producer of corn syrup that diversified into biotech in the 1980s. Teams of KRIBB and Samyang researchers are working on



SHARED KNOWLEDGE

Lee of Samyang says the biotech company works closely with the KRIBB lab

gene therapy and programs for developing anti-cancer treatments from plant cells and an anti-arthritis treatment that now are in clinical testing. "The institute used to have a very poor concept of industry," says Samyang Executive Vice-President Lee Hyun Soo. "Now we work with them very closely and license their technology." Not all analysts are yet convinced that Korea has finally found the secret to a dynamic high-tech sector. One economist at the Korea Development Institute, a government think tank, contends that the country is still investing too much of its limited re-

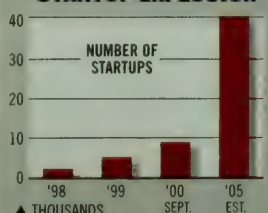
sources and human talent trying to develop from scratch technologies that would be more easily and cheaply attained by licensing them from the U.S. or by forging ventures with multinationals. That, he says, is because the state continues to allocate resources rather than letting the private sector do it.

LONG TRIP. If there is another flaw in Korea's tech environment, it's that many startups are still overly beholden to Korean companies for money and as customers for their intellectual property. Most lack the knowhow to sell globally, and are isolated from market trends in the U.S. And since few foreign technicians and scientists move to Korea, largely because of restrictive immigration laws, local upstarts can't compete with Silicon Valley for the best talent. Plus there is the tight supply of venture capital. "If I did this in Silicon Valley, I could have raised \$10 million," figures Choo Heung Ro, another former ETRI scientist who together with his partners had to use \$200,000 of his own savings to found XL Photonics Inc., a Taedok maker of chips used for transmitting and receiving light signals for optical networks.

Still, for such a tradition-bound business culture, Korea has come a long way in two years. What's more, few of Taedok's new entrepreneurs say they can imagine going back to academic isolation or to the *chaebol*. They also say that the new generation of scientific talent is even more determined to strike out on its own. Having lived an isolated and subsidized existence for so long, the time may finally be coming for Taedok to make its big contribution to Korea's economic future.

By Pete Engardio and Moon Ihlwan in Taedok

STARTUP EXPLOSION



DATA: MINISTRY OF COMMERCE, INDUSTRY & ENERGY

The Special Report continues on page 139



Your grandfather wore one.

Your father wore one.

You just saw one that is perfect
for you. And, in your dreams,
you're buying your son
an Elgin.

ELGIN
Keeping a watch on generations

For the store nearest you call 1-888-56ELGIN



DRAWN BY THE IMPRESSIVE HIGH TECH GROWTH FLOCKS OF TECHIES MOVE TO SAN DIEGO AND QUICKLY ADAPT TO THE CALIFORNIA LIFESTYLE.



Our focus today is an elusive, but wily species, commonly known as the Techie. With its superior brainpower, the Techie has come to recognize the San Diego region as a hotbed of innovation and migrated in great numbers. Known to travel in packs, many have established specialized habitats throughout the sunny locale. At times, different groups converge producing new species never before seen across the technological landscape.

Technology's Perfect Climate™

San Diego Regional Economic Development Corporation • City of San Diego • County of San Diego • San Diego Unified Port District
Cities of: Carlsbad • Chula Vista • El Cajon • Encinitas • Escondido • La Mesa • Oceanside • Poway • Santee • Vista
American Electronics Association • BIOCUM/san diego • San Diego Imperial Counties Community Colleges Regional Consortium • San Diego Tech Force

SPECIES



COMMUNICATIONS



BIOSCIENCE



SOFTWARE

In this inviting new habitat, one might expect diminished skills. Quite the contrary. A tanning of the skin suggests time spent out of the office, resulting in a refreshed attitude and clear head. Declining golf handicaps nourish collaborative business relationships. It's an ethereal equilibrium between business and pleasure that spawns a perpetual flow of ideas.

A network of academic institutions, including one of the nation's top research universities, is a breeding ground for new talent and the products and services of tomorrow. World-renowned scientific institutes, such as Scripps and Salk, add to the intellectual capital. And customers and suppliers alike blanket the countryside. Whether it's Bioscience, Communications, Software, the Internet, or Defense and Space, the future of science and technology is San Diego. For a virtual tour, visit www.techsp perfectclimate.org.



www.techsp perfectclimate.org



He can help you choose between a nine iron
and a wedge. But can he help you choose
between a CD and a money market account?

Some people are just good listeners. Now one of them can be your banker.

Not everyone whose game needs a little help can play a few rounds with the course pro. But, fortunately, those who need a little help with their savings can get the sound financial guidance of an expert at Bay View Bank. That's right, at Bay View you can still talk with real, live human beings. People who not only listen, but offer invaluable advice on how to invest your hard-earned money. Leaving you to concentrate on more leisurely pursuits.

Call 1-800-BAYVIEW for a branch near you or visit www.bayviewbank.com

BayView Bank.
Genuine InterestSM

**HAVING A SMALL BUSINESS
DOESN'T MAKE YOU
AN EXPERT ON WRITING
A BUSINESS PLAN.**

RUNNING YOUR OWN SHOP DOESN'T ALWAYS
MAKE YOU BUSINESS SAVVY. EXP BUSINESS
EXPERTS GIVE YOU REAL, PERSONALIZED ADVICE
AND SERVICES, FROM FINANCE TO MARKETING
AND HUNDREDS OF OTHER TOPICS.



exp.com

REAL EXPERTS. REAL HELP.™

REGIONAL FORECASTS TO KEEP YOU FROM GETTING SOAKED.

ASIA'S FUTURE
A BusinessWeek Worldwide Special Report

Issue Date: November 27 On Sale: November 17 Ad Close: October 30

**or advertising information please contact: North America—Connie Bennett, 212-512-3655,
or Joanne Bradford, 415-954-9711; Europe—Paul Maraviglia, 44-207-629-8630;
Asia—Alan Lammin, 65-530-6400; or e-mail adsales@businessweek.com.**

BusinessWeek

www.businessweek.com

AOL Keyword: BusinessWeek
Internet Keyword: BusinessWeek

A Division of The McGraw-Hill Companies





Iberia's Intercontinental Business Class. More space between seats.

Traveling and relaxing can be one and the same. Especially when you have ergonomically designed reclining seats and 52 inches of room between your seat and the one in front. Enjoy access to 300 plus VIP lounges worldwide, and when flying on Iberia, members of oneworld frequent flyer programs, such as AAdvantage® may earn and redeem frequent flyer miles along the way. Iberia's Intercontinental Business Class. Just Smile.

For reservations contact your travel agent,
call Iberia Airlines at 1-800-772-4642, or visit www.iberia.com/ingles

Business
INTERCONTINENTAL

Distance measured between rows.



All our flights are non-smoking.

IBERIA

THE BEST KEPT SECRET OF EUROPEAN TRAVEL



American Airlines® and AAdvantage are registered trademarks of American Airlines Inc. American Airlines reserves the right to change the AAdvantage program rules, regulations, travel awards and special offers at any time without notice, and to end the AAdvantage program with six months notice. AAdvantage travel awards, mileage accrual, and special offers are subject to government regulations. Any such changes may affect your ability to use the awards or mileage credits that you have accumulated. American Airlines is not responsible for products or services offered by other participating companies. For complete details about the AAdvantage program, visit www.aa.com



CHINA

THE CHIPS ARE UP

Shanghai is gunning to become a microprocessor powerhouse

Hao Min had plenty of Silicon Valley job offers. After all, the 35-year-old electrical engineer had attended one of China's premier institutions, Fudan University, and done postdoctoral work at Stanford University. Yet in 1998, Hao forsook the U.S. for hometown Shanghai. Why? Because he reckons that, over the next few years, the city will emerge as a global manufacturing and design center for the chips that power PCs and portable devices.

Hao is doing double duty to try to make that happen. He holds two jobs: one overseeing the semiconductor lab at his alma mater, the other running Shanghai Hua Hong IC Co., a state-controlled chip-design house. Over the decades, Hao notes, chipmakers chasing lower costs have moved from America to Japan to Taiwan. "Now," he says hopefully, "they will move to Shanghai."

BOLD MOVE. China is counting on it. In an effort to take the economy to the next level, Beijing has designated Shanghai as the heart of a 21st century electronics industry that will not only assemble PCs and cell phones but also design them and sell them to the world. The immediate goal is less grandiose: to boost factory capacity so Chinese companies won't have to keep sourcing three-quarters of their chipsets overseas. "We must do this," says Ge Qun, a 24-year-old graduate student involved with an incubator for chip-design startups. "We must make these chips by ourselves." China is

BETTING BIG

GOAL To make Shanghai the center of a 21st century electronics industry that will design, manufacture, and market everything from PCs to personal digital assistants.

ADVANTAGES Drawing on a pool of world-class electrical engineers, Shanghai already has five chip-fabrication plants and, thus, a head start on its Southeast Asian rivals.

CHALLENGES Providing the electricity and water that chip plants require, overcoming bureaucratic speed bumps, and keeping abreast of improvements in chip technology.

LOCAL TALENT

State chip-design house Shanghai Hua Hong is sending staff to night school

now looking to make special application chips for PCs, mobile phones, and a wide array of other products.

It's a bold move. While low labor costs give China an edge in PC assembly, the semiconductor industry relies instead on billion-dollar investments in delicate machinery. China's unreliable infrastructure can hinder the operations of a chip plant, which needs to run almost constantly to make money. And even as new Chinese plants gear up to produce 8-inch silicon wafers, Taiwan Semiconductor Manufacturing Co. and others are advancing to 12-inch wafers. "I don't see China catching up,"

says John-Paul Ho, managing partner of Crimson Ventures Ltd., a Silicon Valley venture-capital firm.

China is determined to prove the skeptics wrong. Last year it produced 16.6 billion chips, up 55% over the previous year. Sales grew 51%, to \$6.6 billion. Already, the city and the surrounding Yangtze delta are home to some five semiconductor fabrication plants, including joint ventures with the likes of Philips Electronics and NEC. Local demand for chips is growing as more and more Taiwanese PC makers shift their production to the Shanghai region. And finally, boosters say, the two leading universities, Fudan and Jiaotong, could play a nurturing role similar to the California institutions in Stanford and Berkeley.

Eager to woo investment, local officials are doing everything from overseeing plant construction and ensuring quick hookups to power and water to building new access

roads. "The support is excellent," says Richard Chang. His Shanghai-based Semiconductor Manufacturing International Corp. (SMIC) plans to open phase one of a \$3.3 billion chip foundry in 2001. IBM has announced a \$300 million chip factory for Shanghai, while Intel Corp. has broken ground on a \$200 million expansion of its current chip-assembly plant.

Not all the investment is going into foundries. Since last year, the number of Shanghai chip-design houses has doubled, to 56. A city government-backed incubator called the Shanghai Research Center for

Integrated Circuit Design hopes to have 41 tenants by yearend, according to Wang Ye, its director. One of them is Shanghai Fangcun Semiconductor, a startup that designs chips for a mainland company that makes personal digital assistants for schools.

BRAIN DRAIN. Foreign design houses are moving to Shanghai to take advantage of wages that are about 80% lower than in the U.S. Newave Technology Co., a Silicon Valley house that creates chips for telecom switches, has shifted all its research and development to Shanghai. The city has "plenty of talented people," says David Chen, Newave's new director of engineering. "And the market is here."

Still, there are problems. While Shanghai's two big universities spit out some 1,200 electrical engineering and computer science graduates each year, about half head for the U.S. The tech-worker shortage is so dire that

Hao Min of Shanghai Hua Hong is sending staff to night school. Red tape is another headache. The \$1.2 billion chip plant opened last year by Shanghai Hua Hong NEC Electronics Co. has trouble importing essential spare parts. "Customs clearance takes three to five days," says Toshio Ohta, an executive vice-president. "In Japan, it's one hour for urgent needs." That means one of Shanghai's largest plants is operating under capacity.

Hiccups and headaches aside, Shanghai's push into the semiconductor industry illustrates how quickly China is moving up the global food chain in the electronics industry. Semiconductor makers are making the billion-dollar investments required to put Shanghai at the center of a knowledge-based economy. Who knows? Pretty soon, China may be designing the world's electronic gadgets—from the chips to the plastic boxes they come in.

By Bruce Einhorn and Alysha Webb in Shanghai

CHASING THE DREAM TO SHANGHAI

Winston Wong's first idea was to build a chip-fabrication plant in the U.S. But his dream soured four years ago when this son of Taiwanese billionaire Y.C. Wang raised only \$200 million—not nearly enough to proceed. Switching his focus to Asia, Wong turned to some friends in high places.

In late November, Grace Semiconductor Manufacturing Corp. will break ground on a \$1.6 billion fabrication plant in Shanghai. Wong is GSMC's president, and his chief business partner is Jiang Mianheng, son of Chinese President Jiang Zemin. Also backing the project are state-owned Chinese lenders such as the Bank of China, China Construction Bank, and China Commercial Bank. By mid-2002 GSMC should be producing 50,000 eight-inch wafers per month.

OBJECTIONS. GSMC's target market is the growing number of Shanghai-based chip-design houses. Owing to the political problems between Beijing and Taipei, these designers do not use Taiwan foundries and are forced to look elsewhere. Yu Jun, vice-president of the Hong Kong-listed design house Shanghai Fudan Microelectronics Co., says the shortage of local foundry capacity is a big impediment to developing new products. "We can't do chip sets because you need close relations with a foundry," says Yu.

Wong plans to play a big part in that. "We are going to bring up



GRACE SEMICONDUCTOR'S WONG
His partner is the son of
Chinese President Jiang Zemin

the whole electronics industry," he declares. But he must tread softly. Taiwan prohibits its citizens from investing in mainland chip fabs. And Wong says neither he nor his privately held Taiwan company, Grace THW Group, has put money into GSMC. "GSMC has hired me as president" he says. "That's all."

Still, Wong's involvement in the project has prompted objections in Taiwan—especially his close relations to Jiang Jr. Wong has had to deny the surprising allegation that he and Jiang helped Beijing fund the campaign of President Chen

Shui-bian, in return for Chen's pledge to improve cross-Strait relations. And Wong defended Jiang to *BUSINESS WEEK*. "He is very low-key and sincere," Wong says. "He never thinks of his self-interest."

Fending off wild accusations is nothing new to Wong. He left his family company, Formosa Plastics Corp., five years ago amid a storm of publicity surrounding an extramarital affair. Since then, he has contended with other accusations about his personal and business dealings. "It's vicious," he says of the criticism. "Totally ridiculous." Wong, however, will have to learn to live in the spotlight if he is going to achieve his dream of building China's premier chip foundry.

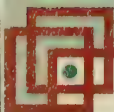
By Bruce Einhorn in Taipei



BLUE MARTINI
S O F T W A R E

NOW SERVING TWO TO TWENTY.

Shopping is simply more fun in a group. Now, Blue Martini's collaborative capabilities allow groups to shop online as well. With it, two people in different cities can browse their favorite site together, two dozen people can be taken through an online product demonstration simultaneously and customer service representatives can guide clients through their site. The uses are endless. Browsers turn into buyers. And nobody has to be lonely. To find out how Blue Martini's e-business solutions can improve your customer's experience, visit www.bluemartini.com/group.



TAIWAN

MINDS OVER MATTER

To combat industrial flight, Taiwan must transform itself into a knowledge economy

Over the past five years, First International Computer Inc., like many Taiwanese electronics companies, has been moving its production to China. The PC and peripherals maker now produces most of its motherboards on the mainland and is building an industrial park in Guangzhou that will make everything from PCs to Internet appliances.

Is there anything FIC doesn't make on the mainland? Well, it still does research and development in Taiwan—but maybe not for long. The company thinks China has enough talent to handle that as well—at a third of the cost. Before long, FIC's sole Taiwan presence may be its headquarters. And many of its corporate counterparts may follow it across the Taiwan Straits.

This is one of Taiwan's worst nightmares. While it survived the exodus of its shoe, toy, and sporting goods factories in the 1980s, the loss to China of high-tech manufacturers is worse. Taiwan weathered the Asian financial crisis of 1997-98 thanks to its role as a manufacturing center for the likes of Dell, Compaq, and IBM. But even then, a relentless hollowing-out of the industry had begun. Last year, only half of Taiwan's \$40 billion worth of PCs, peripherals, and semiconductors were made at home.

Now that China is taking over that role, Taiwan policymakers hope to marshal the island's brainpower, entrepreneurial skills, and capital to build an economy of ideas—specifically in software and biotech. "Taiwan does not have any choice," says Stan Shih, chairman and CEO of the island's top PC maker, Acer Group. By decade's end, Shih wants Chinese-language software to account for a third of profits.

COLLEGE TRY. To facilitate its ambitious transformation, the government is pouring hundreds of millions of dollars into research facilities and industrial zones. Last year, it opened a software park outside Taipei; a biotech park is to open next year near Hsinchu, where Taiwan's high-tech industry started life in the 1970s. University budgets are up 11% this year. And the government plans to boost R&D spending from 1.9% of gross domestic



SCIENCE PROJECT

State-backed startups like U-Vision can draw on a rich talent pool

product to 3% in 2010, compared with 2.7% in South Korea and 3.2% in Japan. "We hope [universities] will become the centers for knowledge transfer to industry," says H. Steve Hsieh, vice-chairman of the National Science Council.

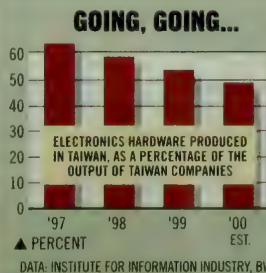
The government also is throwing money at companies. The state-backed Industrial Technology Research Institute (ITRI) has invested in several new startups. One is U-Vision Biotech Inc., a company that specializes in tests that divine genetic predisposition to a variety of diseases. Jerry Huang, U-Vision's chief operating officer, says Taiwanese biotech startups can get world-class scientists for half the salary paid in the U.S.

But Taiwan will need more than just a cost advantage. That's why some companies are trying to leverage the island's manufacturing prowess and its ties to Silicon Valley. Earlier this year, Terry Chen, 41, launched a Silicon Valley startup, Timogen Systems. It makes supply-chain management software that integrates multinationals with their Asian suppliers. Two-thirds of Chen's 60-member staff works in Taipei. Why? Because, he says, Taiwanese "know how to manage manufacturing better than anybody else in the world." Likewise, researchers at ITRI's Hsinchu labs are trying to develop biochip products that build on Taiwan's prowess in semiconductor fabrication.

It's all encouraging—yet Taiwan faces daunting odds.

For starters, South Korea, Singapore, and China also have software and biotech ambitions. And the latter is a notoriously difficult business. Moreover, while Taiwan's software industry is likely to grow 25% this year, the hardware business is 10 times the size. Despite their past successes, the Taiwanese may find their edge in hardware manufacturing won't easily translate into the new knowledge industries.

By Bruce Einhorn, with Macabe Keliher, in Taipei



STILL WAITING FOR HIGH-
SPEED INTERNET ACCESS?



JUST LOOK UP.



Tired of waiting for broadband? StarBand® is here now. StarBand is the first company to deliver two-way, high-speed Internet access via satellite to consumers. It's always on and it's available virtually everywhere. If you can see the southern sky, you can get StarBand. Just look up: StarBand is available now at selected DISH Network™ retailers and through MSN® HighSpeed - Satellite at your local RadioShack® store. For more info go to www.StarBand.com or call toll-free 1-800-421-3464.



STARBAND.

www.StarBand.com



SINGAPORE

A BIOTECH HUB

The country is heating up as a genomics research incubator

Singapore has a reputation for results. So some have wondered over the years why the government was lavishing millions of dollars on the Institute of Molecular & Cell Biology—a basic research organization that never seemed to generate a product. Over its 14 years of existence, however, the Institute has attracted some internationally renowned researchers. And in October, their work paid off. The Institute won a vote of confidence when it was invited to join a consortium with several prominent U.S. and British genetics labs to complete sequencing of the puffer fish genome—a project that may greatly advance human genome research. “People, money, and technology are finally coming together to make Singapore a key player in the genomics era,” says IMCB Director Chris Tan. “The opportunities for the takeoff are immense.”

Such successes are critical if Singapore is to achieve its aim of becoming a new global hub for biotechnology. Already it is a manufacturing base for global drug companies. Now, the government plans to spend \$4 billion over the next five years to develop a full-fledged biotech industry. The funds will be used to sharply boost the budget for basic research, seed new medical startups, and lure the world’s biggest multinationals to make Singapore their regional base for bringing new drugs to market. “What we’re lacking is drug discovery and development,” says Economic Development Board Chairman Philip Yeo. “To be ef-

fective, we need the whole value chain.”

The government hopes to build pharmaceuticals and medical devices into a \$7 billion industry in five years, ranking it alongside electronics, petrochemicals, and banking as a pillar of the economy. To nurture a critical mass of researchers, the government is expanding life-sciences programs at local universities and is sending 200 PhD candidates to the West on full scholarships.

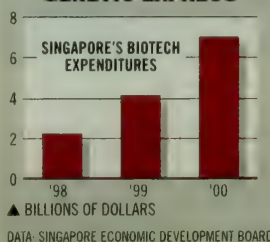
TOUGH COMPETITION. By 2010, Yeo hopes to lure 15 major life-sciences companies to build regional drug development centers. The approach is one that the city-state has employed to great success in sectors like semiconductors and chemicals: Singapore will help finance a multinational’s research operations, build low-cost facilities, and even contribute equity in a new venture. It also will grant a 10-year tax holiday. “They get to recover their investment and pay no taxes,” says Yeo. “I get jobs, exports, and economic activity.”

Considering Singapore’s small size and the tough international competition for biotech talent, it will be an uphill climb. “I question whether Singapore has the breadth and depth needed to build a world-class research culture,” says Chandru Rajam, who teaches management at the National University of Singapore Business School. “The only hope is to bring in a large number of foreigners.” That’s exactly what the government aims to do. Already, it’s a regional manufacturing base for seven of the world’s biggest drug companies. Among them they produce nearly \$4 billion worth of medicines annually. Over the next three years, Schering-Plough, Wyeth-Ayerst, and Merck Sharp & Dohme will pump nearly \$1 billion into new plants. Some companies also are using Singapore as a base for coordinating other operations in Asia.

Ultimately, Singapore wants to become a hotbed of homegrown biotech startups. But it will take years before new products start rolling out of labs such as IMCB. And there are no guarantees that Singapore will ever produce a blockbuster drug. But by generating international publicity through projects like the puffer fish genome—and many more years of patience—Singapore could well project itself onto the world biotech map.

By Michael Shari,
with Pete Engardio, in Singapore

GENETIC EXPRESS



do you have a
wing man

are you looking for a
security guard

need an
architect

Your Northwestern Mutual Financial Network Representative excels at a lot more than life insurance, bringing you expert guidance and the specialists you need for education funding and your family's financial security.



Northwestern Mutual
FINANCIAL NETWORK™

Jennifer Main
Financial Representative

Innovative solutions for personal finance, retirement, estate, and insurance. **Are you there yet?**

Social Issues



WORKERS IN



Europeans are only
now learning of the
horror of wide-
spread sweatshops
that use forced
immigrant labor

On a chilly December night almost two years ago, a desperate Chinese man appeared at military police headquarters in Bergamo, Italy, begging for help. His 25-year-old wife, Deng Xingmei, an illegal immigrant, had tried to flee slavelike working conditions in a garment sweatshop near Milan. But the Chinese gangsters who had arranged her illegal passage to Italy for \$25,000—and expected her to spend years working off her debt—captured her at gunpoint. The police tapped her husband's phone to trace threatening calls from Chinese mobsters, and five days later they freed a raped and beaten Deng.

GARMENT WORKER:
*Foreign laborers
in Italy may put
in 12-to-16-hour
shifts for little
or no pay*

BONDAGE



SLAVE TRADER: Joginder Kaile (above) smuggled thousands of Indians into Europe. Right: Immigrants crowding into Italy



Deng Xingmei's kidnapping turned out to be a vital breakthrough for the police. Building on information gleaned from Deng's imprisoned tormentors, Italian authorities launched a nationwide investigation. After 16 months of undercover

work, "Operation Sunrise" climaxed on Apr. 7 with raids on sweatshops in 28 cities from Milan to Rome. The

raids broke up a criminal network of some 200 gangsters in China, Russia, and Italy involved in bringing Chinese immigrants to Italy and forcing them to work 12 to 16 hours a day in textile, apparel, shoe, and leather factories for little or no pay. And the police are far from finished with their work: Similar raids continue to uncover illegal sweatshops every week, some revealing children as young as 11 working 20 hours a day. "The [immigrants] have no idea what awaits them," says Lieutenant Tiziano Benedetti, who headed Operation Sunrise.

HAVOC. And many Europeans have no idea of the horrors that unfold daily in thousands of sweatshops tucked into the grimy suburbs of the region's great cities. Western Europeans have always prided themselves on the high standards its governments impose on employers and in the workplace: Workers have far more rights and protections than workers in the free-

wheeling U.S. Those vaunted protections, however, are meaningless to the hundreds of thousands of immigrants now flooding into Europe from the old Soviet bloc, China, India, South east Asia, and the Balkans—from anywhere, in other words where millions of people are desperate to escape destitution.

These economic refugees pay dearly for their flight to the prosperous West. Tens of thousands wind up working as forced laborers in factories, sweatshops, and service industries run by mobsters throughout Western Europe's thriving underground economy. Many of these immigrants become part of a secret underclass of the exploited, which experts are now defining as tantamount to 21st century slavery.

This emergence of a new black economy of forced laborers

Social Issues

INVESTIGATIVE REPORT

THE ROUTE TO EUROPE

RECRUITMENT

Criminal gangs based in China, ex-Soviet countries, the Balkans, Africa, Asia, and Latin America recruit illegal immigrants through ads in local papers. They promise transit to "the good life" in the EU, counterfeit documents, and a job on arrival to pay part or all of the costs. The fee, based on distance, ranges from \$5,000 (from Egypt) to \$10,000 (Afghanistan) to \$25,000 (China).

1ST STAGE OF THE TRIP

Gangs fly illegal immigrants from Asia mainly to staging areas in Moscow and Belgrade where pools of immigrants spend several weeks or months being trained or working in factories run by criminal organizations. Those from the ex-Soviet Union transit through Eastern Europe. Immigrants from the Balkans and the Middle East gather in Albania, Greece, Turkey, or North Africa.

"It's the fastest-growing **criminal market** in the world," says a U.N. exec



NEW UNDERCLASS: A Chinese immigrant and her family in a Paris suburb. The housing was raided by immigration police

is a dramatic social setback for the welfare states of Europe. There is no doubt about it. We are faced with a modern slave trade that cannot be accepted or tolerated by civilized society," says Paul Higdon, director of the criminal intelligence directorate at Interpol, the international police force, in the French city of Lyons.

In a two-month investigation involving dozens of interviews with police, victims, immigration authorities, union officials, and industry leaders, *BUSINESS WEEK* has traced the emergence of this fast-spreading economic crime. Only recently have police and international agencies such as the U.N. started to sound an international alarm, while a series of raids and arrests across Europe in the past year have be-

gun to reveal a widespread problem. "We are just seeing the tip of the iceberg," says Pino Arlacchi, executive director of the U.N. Office for Drug Control & Crime Prevention in Vienna and author of the recent book *Slaves: The New Traffic in Human Beings*. "It's the fastest-growing criminal market in the world."

DARK CORNERS. Europe, of course, is not the only prosperous region afflicted by this underground trade. In the U.S., officials know that illegal immigrants are also pressed into debt servitude, but have trouble defining the problem. U.S. gangs have gotten more sophisticated, says Kingman Wong, head of the trafficking unit for the FBI in Washington. The traffickers let immigrants make a new life on their own, but if they fail to repay mafia bosses, their family members are at risk. That way, "there are fewer horror stories that deter others from coming," says Wong.

In Europe, where the trade is thought to be newer, horror stories haven't scared off the thousands seeking a new chance in a modern economy. The story of Europe's sweatshops and the people who toil in them reveals the dark side of the changes that have swept through the world economy in the past decade. A dangerous mix of factors has come together since the collapse of the Berlin Wall, allowing such bondage to flourish. One is the poverty that drives destitute classes in much of the world to emigrate at any risk. The collapse of ex-Soviet-bloc economies and the rapid growth of international crime rings specializing in the trafficking of human beings have also created an expanding supply of illegal immigrant laborers vulnerable to abuse.

It's a sick twist on free-market economics: Employers squeezed by global competition are desperate to cut

STAGE OF THE TRIP

Local gangs arrange the transportation of small numbers of illegal immigrants, usually 6 people, by airplane, bus, or lorry into the European Union. They often use counter-tourist visas and round-trip tickets so that local authorities are not alerted to any irregularities. Many would-be immigrants are lured to Italy under the guise of groups destined for Venice or Trieste.

INSIDE THE EU

Local units of the foreign gangs shunt arrivals into the underground economy, where they toil for years in sweatshops to pay off their debt. Sweatshops are run by a local cell of the foreign mafia or local crime rings that contract with the mafia for the supply of workers. Sweatshops often act as subcontractors to larger companies, making it hard to tell if larger companies are aware of immigrant slave labor.

Employers are desperate to cut costs, and syndicates are eager to **supply cheap labor**



NEW WORLD: Albanian immigrants arriving on the Southern Italy coast, June, 1999

costs, and middlemen—the gangs—are eager to provide illegal workers and slash the price of labor to nearly zero. Europe's rigid market regulations and its high labor costs are also fostering a healthy demand for illegal workers just when the opening of the world economy is putting

competitive pressures on Europe's second-tier companies.

So the sweatshops that once flourished only outside the rigidly patrolled borders of the European Union, in countries

such as Turkey and Morocco, are becoming common in the EU itself. Often, outsourcing production to such sweatshops is the only solution for small and midsize suppliers under intense pressure to match global competition on prices. "What has emerged is a stratum of slavery-like work that takes advantage of immigrants' vulnerability," says Francesco Carcedi, director of research for Parsec, a Rome research outfit working on a report on the trafficking in human beings.

It's impossible to say how many workers in Europe's hidden factories could be called contract slaves—paying with their own sweat the exorbitant fees traffickers charge—under

Social Issues

INVESTIGATIVE REPORT

A YEAR OF RAIDS

LONDON NOVEMBER, 1999 Raids on properties owned by racketeer Joginder Kaile reveal a finely organized system for exploiting illegal immigrants from India and Pakistan.

MILAN MAR. 14, 2000 25 Chinese immigrants are discovered in a rat-infested sweatshop in Milan.

GALLARATE, ITALY MAR. 15, 2000 After an angry boss burns a worker alive, investigators near Milan uncover what is thought to be an underground agency marketing immigrants for construction work.

ITALY APR. 7, 2000 Sweatshops in 28 Italian towns are busted after 16 months of undercover investigations. "Operation Sunrise" exposes a network of some 200 gangsters smuggling Chinese workers into textile, apparel, shoe, and leather factories.

PARIS MAY 10-11, 2000 Police raid a suburban warehouse where 17 workers toil six to seven days a week, 15 hours a day, with pay docked heavily for food and lodging.

MILAN JUNE 28, 2000 Investigators sequester ledgers from an "employment office" in Milan's

Chinatown, complete with lists of available illegal immigrants and job openings. Ten sweatshops were identified in the ledgers.

MILAN JUNE 28, 2000 Police raid a textile sweatshop in a 48-sq.-yd. windowless garage, discovering eight people using outdated sewing machines. Temperatures inside reached 98F.

MAIANO MONTI AUG. 1, 2000 Police discover that 11 Ukrainians had been "recruited" in their home country by an Italian "employment" agency, then forced on arrival to work 10-hour days, six days a

week, earning \$450 per month, living in a dormitory on the factory grounds.

MILAN AUG. 30, 2000 Four Chinese immigrants are arrested after police discover 26 illegal workers, including children, producing computer covers and house slippers.

ROME SEPT. 19, 2000 Twenty-eight Chinese immigrants are apprehended, and some 20 escape during the blitz of a depository on the periphery of the city. One 31-year-old man was freed from the 7-sq.-yd. room where he was locked in to sew precut garments.

*ingenuity*²

We develop software for the intelligent. We create e-marketplaces for the resourceful. We apply our own ingenuity to ingenious companies to make them faster, smarter and exponentially more valuable. So far, we've created more than \$16 billion in value for over 950 companies worldwide. Want some? Contact us at www.i2.com or 1-877-926-9286.



Powering the Bottom Line.™

the threat of violence against themselves or family members and earning little more than the food they eat. After all, immigrants through the ages have always worked in the worst conditions in their adopted countries, accepting the hardship as the first step up the economic ladder.

But hardship does not always translate into outright bondage. Certainly not all illegal immigrants become indentured slaves or suffer the fate of Deng. And there is a gray zone between what experts are call-

Social Issues

INVESTIGATIVE REPORT

ing "superexploitation" and slavery.

But no matter how you look at it, the problem is huge. Trafficking gangs bring hundreds of thousands of poor immigrants each year into the EU, many of whom are deceived by criminal recruiters who promise them a job. Illegal immigration to the EU has gone from an estimated 40,000 in 1993 to 500,000 this year. The biggest wave of illegal immigrants by far is from China, where highly organized criminal networks transport illegals and press them into work. According to conservative estimates by researchers and others, at least 100,000 illegal immigrants are working in contract slavery in the EU.

The basic method for trapping these immigrants is the same worldwide. Gang members in Asia and the old Soviet bloc agree to smuggle workers into Europe and find them jobs and lodging for a fee: Most illegals agree to pay charges ranging from \$5,000 to \$25,000 for passage into the EU. Some of the Chinese moving to Europe have enough money to pay the fee upfront and can start their new life debt-free. But most others are poor, ill-educated, and full of fantasies about life in the West.

Once the immigrants land in Europe, without papers, they are at the mercy of the gangs that transported them and the bosses who employ them. Anyone who balks at the dreary underground factories where immigrants often sleep and eat next to their machines may be beaten by the local ringleader who pays them enough only to survive while their debt is paid down. "Before your employer 'pays' you, he deducts an unspecified sum to pay the debt—that's the trap," explains David Ould, deputy director of Anti-Slavery International in London.

Poor immigrants are easily ensnared. One victim, Petronel Olteanu, fled abject poverty in Romania—not realizing he would become an indentured slave in Italy. He was smug-

gled into Italy by a "network" he refused to identify out of fear. The pale, despondent 25-year-old spoke to *BUSINESS WEEK* after his Italian employer was indicted on charges of murdering one of Olteanu's co-workers. "I knew the situation I was getting into was bad. But I felt like I was trapped," he says after nervously checking a reporter's credentials.

SLEEPING WITH RATS. Sent to Gallarate, 30 minutes north of Milan, Olteanu was forced to work 14 hours a day laying tile at construction sites around Milan for sustenance pay. His Italian boss hired thugs to intimidate and beat Olteanu and 10 co-workers and keep them from any thought of rebellion. At night, they were locked in a tiny, rat-infested room. Says Olteanu: "It was obvious that for [the boss] we were possessions." Olteanu was finally freed in a March police raid of the warehouse where he and his co-workers were held captive.

Trafficking in and exploiting workers like Olteanu is big business. Global profits from trafficking have zoomed to \$9 billion, according to a recent U.N. report, and now exceed drug profits, police say. In Trieste alone, investigators estimate, traffickers took in \$60 million last year, police believe.

Are the traditional mafia from Italy, Russia, and China involved? Police investigators in Europe are still trying to figure that out. It's clear that

highly organized gangs with tentacles stretching from Beijing to Milan recruit immigrants and transport them by plane, truck, and boat to work in much of Europe. Chinese gangs, which are worldwide, also cooperate with gangs in Eastern Europe, Russia, and the Balkans to arrange safe passage and false documents. They collaborate with underground employment contractors throughout Europe. What's not known is whether whole new gangs are springing up to run this illegal commerce. Italian police believe they recently nabbed one of the main bosses of a huge Chinese trafficking operation involving 16 gangs. (page 162)

Some traffickers operate independently. British Indian Joginder Singh Kaile, 39, smuggled thousands of fellow countrymen, crammed in vans or cars, 6,000 miles across Asia and Europe to Britain. He took their land in the Punjab as payment and forced them on arrival to work in his sweatshops, housing them in squalid conditions and squeezing more and more profit out of their cheap labor. Kaile charged \$10,000 a person for a journey. Investigators estimated he made a profit of nearly \$3,000 per person, becoming a millionaire in the process. Last November, police investigators nabbed Kaile, who pleaded guilty to multiple

Children as
young as 11 may
be working
as much as
20 hours a day



LIBERATOR: Sunrise's Benedetti

so simple.

In fact, it's literally a snap. Just pop it on your waistband or belt and start moving. Whether you race along

wilderness trails or visit every

co-worker, in every cubicle, on every floor, via the stairwell, twice a day, SportBrain records every step

of your activity.

After you've done all the legwork, snap SportBrain into its SportPort and it miraculously sends your data through the phone lines to your personal Web page. Chart your progress. See how you measure up against the guys (or girls).

Even earn rewards for every step, jog or sprint.

Now only \$99⁹⁹, with no monthly service fee. If the SportBrain approach to fitness is new enough to move you, call 1-888-235-9608, visit www.sportbrain.com or the store nearest you today.



INTRODUCING SPORTBRAIN.

It tracks your daily activity
and charts your progress on
the Web. Automatically.



S P O R T B R A I N™

Win

**your own SportBrain
(\$99⁹⁹ value)! Visit
www.sportbrain.com
to enter.***

ALSO AVAILABLE AT:

AMAZON.COM • ANY MOUNTAIN • BEST BUY • COMPUSA • COPELAND'S SPORTS
DATAVISION • FRY'S ELECTRONICS • J&R COMPUTER WORLD
MICRO CENTER • MVP.COM • RCS COMPUTER EXPERIENCE • REI • TIGERDIRECT • THE WIZ

*No purchase necessary. Must be 18 or older to enter. Open only to residents of the 50 United States and the District of Columbia. Void where prohibited. Sweepstakes ends 12/31/2000. See www.sportbrain.com for complete rules and regulations. ©2000 SPORTBRAIN, INC. SportBrain, the SportBrain logo and SportBrain are trademarks of SportBrain, Inc. All other trademarks are the property of their respective owners.

Rome police have received dozens of anonymous pleas for help

BACKLASH: Immigrants protesting working conditions in Rome



counts of trafficking. He is serving a 6½-year sentence.

With inadequate resources to patrol borders, former police states such as Albania, Russia, Slovakia, and Yugoslavia have become bustling transit zones for tens of thousands of immigrants from more distant regions. "Five years ago, controls were so tight you couldn't even move within Albania from one city to the next, let alone cross the border," recalls Albanian Justice Minister Arben Imami, who concedes that his country has become a major thoroughfare for illegal immigrants. Border guards and immigration officials earning only \$50 to \$80 a month in the ex-Soviet republics are easily bribed to let illegal immigrants pass.

Social Issues

INVESTIGATIVE REPORT

workers. Under intense pricing pressure and subject to sudden swings in demand based on fashion trends, European manufacturers large and small often outsource production to subcontractors—who in turn rely on a chain of other subcontractors.

Illegal-immigrant labor thus provides the low costs and flexible supply that Europe's tough labor regulations have outlawed. Police who have raided sweatshops and taken testimony from workers say these mini-factories produce on a just-in-time basis, responding to bulges in demand by clothing, leather, and shoe manufacturers.

The turnaround between demand and delivery can be as short as 12 to 24 hours and usually involves low-to-mid-priced clothing. When demand surges for a certain style of jacket, for example, manufacturers deliver patterns and expect finished products within hours, investigators say. "When a series of clothing runs out, a manufacturer will bring the pattern to a subcontractor and ask for 2,000 shirts overnight," says Pier Luigi Vigna, head of the National AntiMafia Commission in Rome. An illegal worker with no access to a union or legal papers may

Europe's \$80 billion garment industry is a prime target for traffickers who want to place semi-skilled

be paid only 65¢ per piece—and far less if his pay is being docked. Shirts that might cost \$25 from a legal subcontractor paying normal wages and taxes can be obtained for between \$1 and \$5 from sweatshops, police say. Meanwhile, the items may retail for \$50 or more in European shops.

So far, no major manufacturers have been prosecuted for tapping sweatshops staffed by illegal immigrants. But Italian and French investigators say that several large companies are under investigation and that recent raids have revealed links to brand-name apparel companies. "Many expensive retail shops are making use of sweatshops," claims Willy Bruggeman, deputy director at Europol's headquarters in The Hague. "It's always by subcontracting, so it's difficult to prove that the buyers knew the merchandise was produced by slave labor." Italy's Sunrise raid revealed sweatshops producing T-shirts and other articles of clothing with the insignia of Italian soccer teams. These popular items are sold to small shops or distribution companies.

DESPERATE PLEA. Sometimes, forced laborers grow desperate enough to reach out to the police. Rome Municipal Police Commander Antonio Di Maggio has received dozens of anonymous letters and phone calls from captive workers in recent weeks. Among a stack of letters piled on his desk, one typed on old crumpled paper with a manual typewriter pleaded, in broken Italian: "Help us. We are seven immigrant workers in trouble, forced to work long hours with little food and often abused. We are being kept in a warehouse and want to be freed."

Following such leads—as well as complaints from neighborhoods about the noise from machines that run all night—Di Maggio led 18 raids in September on sweatshops and warehouses on Rome's periphery, snaring 60 illegal workers, 40 of whom were laboring in squalid conditions and living in utter squalor. Of that catch, 18 were Chinese garment workers. In one bust, "the stench inside was like a slap in the face," said Di Maggio.

According to Chinese victims' testimonies taken with the

Think of Kyocera as a maker of **dot components.**



There's a lot more to the Internet than dot com. Capacitors, oscillators, fiber optic components, semiconductor fabrication parts and ceramic IC packages for a start. Glamorous? No, but they are essential to the technologies that make the Internet exciting. As a world-leading manufacturer of these components, the Kyocera group is behind the exponential growth enjoyed by e-businesses and service providers. By supporting those businesses, our components help make the Internet fun and profitable for everyone.

Our components are marketed under the **Kyocera**, **AVX** and **Elco** brands.

Pictured is the MINI-DIL optoelectronics package. A key component for linking people to the Internet through a wide range of optical telecommunication lines, from high-speed trunks to low-end subscribers.

www.kyocera.com



aid of an interpreter, the workers were locked into the sweatshop at all times and worked 12 to 14 hours a day. They were paid 50¢ a pair of trousers, or roughly \$250 a month. Their employer would arrive once a day with broth.

The same kind of sweatshops are proliferating in the poorer districts of Paris—in the city's 10th, 11th, and 13th ar-

rondissements and in the suburban neighborhoods to the north and northeast of Paris.

Here, abandoned build-

ings and factories have been transformed into clandestine workshops, many with hidden cellars, trapdoors, and underground escape routes in case of police raids.

Like Di Maggio, Lucien Contou, head of the division for the fight against illegal labor at l'URSSAF, France's social-security collection office, follows up leads about the strange nighttime noise of machines humming and reports by local residents of

foreigners walking the streets at 3 a.m., among others. "We go so many leads that we can't [follow] them all," says Contou.

In June, Contou raided a building in Pantin, just northeast of Paris. A small trapdoor under a shelf in the wall led to a workshop with 12 textile machines. Although the sewing machines were still warm, 10 of the 12 workers had already escaped through a small window leading to a back alley. The Chinese boss was fined \$6,500 and received a one-year suspended sentence. Another raid by Contou revealed a Paris sweatshop run by a Yugoslavian with false papers. He had locked 24 Laotian workers in a filthy cellar jammed with sewing machines and beds; the case is under investigation.

One illegal Chinese immigrant from southeast China spoke with BUSINESS WEEK on the condition of anonymity who described a furtive world in which it seemed impossible to pay off her debt. The 30-year-old woman had worked in 10 sweatshops for more than five years in Paris, sewing clothing and leather handbags. Because it was safer, she always per-

Social Issues

INVESTIGATIVE REPORT

WITNESSES TO A MURDER

For 40-year-old Ion Cazacu, the decision to flee Romania for Italy was a fatal one. An engineer by training, Cazacu hoped to provide a better life for his wife and two daughters by working in Italy. So he contracted with a criminal network to smuggle him over the border and line up a job for him. According to police reports, Cazacu ended up being indentured to an unregistered construction company in the province of Varese, about 30 minutes from the center of Milan. His job: laying tiles and building cabinets.

Working in Italy's black market turned out to be worse than being poor in Romania. Last March, Cazacu complained to his Italian boss, Cosimo Iannece, that he and his co-workers were not being paid promised wages. Iannece had been docking each worker's pay for everything from housing to transportation and locking Cazacu and 11 other workers in a 24-square-yard, rat-infested room at night. Enraged by Cazacu's confrontation, Iannece beat the Romanian, doused him with gasoline, and lit his body on fire in front of four co-workers, screaming: "I'm going to burn you." Cazacu suffered third-degree burns over 95% of his body and died in a hospital four weeks later.



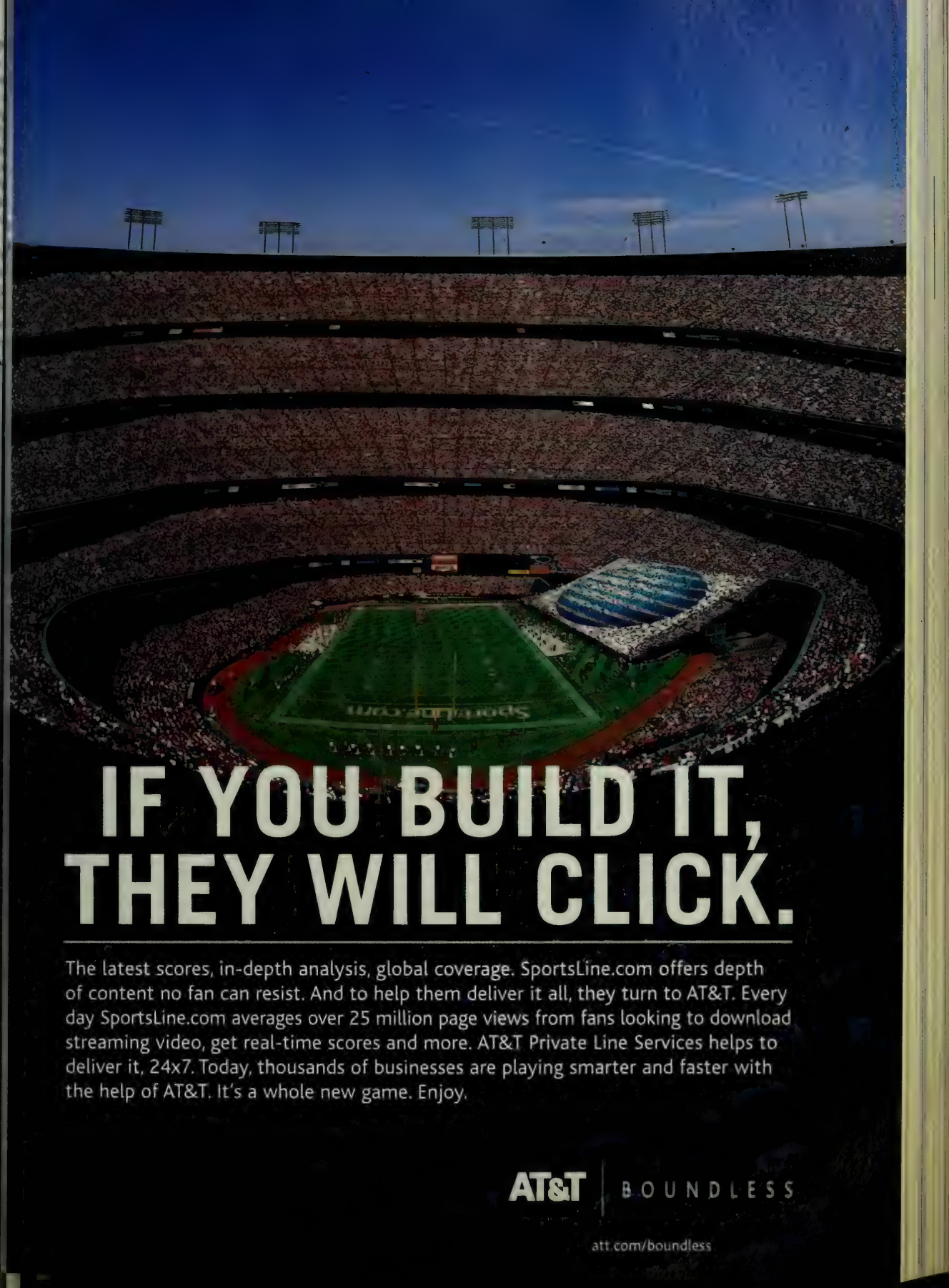
CO-WORKERS: Three Romanian victims of slave labor with photo of murdered friend, Ion Cazacu

death, and co-workers managed to send for his wife from Romania. Cazacu struggled to warn his wife in the hospital to leave Italy, because Iannece might try to harm her, too. "He kept telling me to be careful, even after he knew that Iannece was in jail," says his widow, Nicoleta Cazacu, a small woman with jet-black hair and dark eyes. She says Iannece already had tried to buy her silence, contacting her in the Romanian town of Rimnicul Vilcea and offering her \$5,000 to say nothing about the incident.

Overcoming their fear, Cazacu's co-workers defied Iannece and went to the police. Iannece is now awaiting trial on first-degree murder charges. In his home, police found more than 80 pages of documents containing the names of businesses and local construction companies that he and his brother allegedly assisted in

their search for illegal immigrant workers. "This dramatic case has kicked off a series of investigations that have opened our eyes to a situation more vast than we expected," says Giovanni Brogini, police chief in charge of criminal investigations in Gallarate. If so, Cazacu did not die in vain.

By Kate Carlisle in Gallarate



IF YOU BUILD IT, THEY WILL CLICK.

The latest scores, in-depth analysis, global coverage. SportsLine.com offers depth of content no fan can resist. And to help them deliver it all, they turn to AT&T. Every day SportsLine.com averages over 25 million page views from fans looking to download streaming video, get real-time scores and more. AT&T Private Line Services helps to deliver it, 24x7. Today, thousands of businesses are playing smarter and faster with the help of AT&T. It's a whole new game. Enjoy.

AT&T

BOUNDLESS

att.com/boundless

In Italy, the under- ground economy accounts for 28% of GDP

BORDER GUARD: Italy's
5,000-mile coastline is
difficult to patrol



formed her work at night to pay off the \$17,000 cost of her trip and her falsified documents. She earned \$21 a day for a 112-hour workweek. Now out of work—since her last employer was shut down by the police in October—she has had to borrow money from friends and survives on rice and bread. As for her \$17,000 debt, “I don’t want to think about it,” she says.

EU policymakers so far have done little to fight the exploitation of illegal immigrants. For starters, many politicians view the presence of immigrants as a social and economic problem in itself. Some are deported when discovered, and others—usually the most maltreated—are classified as victims and allowed to remain in the EU. Still, some illegal immigrants are actually starting to protest in public about their plight. Yet few laws are on the books to se-

But Prato’s newfound competitiveness also relies on a labor force that pays no heed to Italian labor or tax law, says Gregori, who maintains that the influx of arrivals is “growing exponentially and is very difficult to control.”

Some 1,100 Chinese-owned factories and workshops are legally registered in Prato, but officials at the local chamber of commerce believe the total is much larger, with some 40% of production underground. Legal Chinese workers total 8,000—but city officials believe some 4,000 illegal Chinese immigrants and their children may be working in even worse conditions, exploited as forced laborers until their heavy debts are paid.

WILD COASTLINE. While Europol says the exploitation of immigrants is widespread throughout Europe—including Austria, Belgium, Britain, and France—the problem is at its worst in Italy. Its 5,000-mile coastline is difficult to patrol. More important, Italy’s underground economy—at 28% of gross domestic product, by far the largest of any leading industrialized country—makes it a haven for mobsters intent on wringing big profits out of illegal immigrants. “The phenomenon of human trafficking and enslavement is expanding—a fact that we [Europeans] should be ashamed of,” says Italian Interior Minister Enzo Bianco.

Italian authorities have long tolerated a thriving black economy as a kind of social safety net that is preferable to unemployment, refusing to crack down on clandestine enterprises. But as Italy has become more prosperous, the local workers have moved up the social ladder, leaving harder, industrial jobs in the black economy—such as the toxic process of curing leather—to immigrants. Academics think illegal immigrants fuel as much as 70% of Italy’s underground economy.

Those recruiting illegal immigrants will concoct elaborate schemes to ensnare new victims. One Romanian immigrant, Maria, told *BUSINESS WEEK* she was lured to Italy in July, 1999, by a newspaper advertisement in her hometown that sought “young, ambitious workers looking for a better life.” Then Maria, 23, arranged to meet in a coffee shop with the

verely sanction the new forms of bondage. In the U.S., by contrast, President Bill Clinton recently signed a law raising penalties for traffickers in women and children.

One reason Europe’s policymakers may be loath to confront the problem is that a thriving underground economy helps power Europe’s growth and competitiveness. “We [Europeans] are benefiting economically,” says David Ould, deputy director of Anti-Slavery International.

Illegal immigrant labor, for example, has fueled economic growth in Prato, a leafy suburb of Florence, where companies owned by legal Chinese residents of Italy have rebuilt a moribund textile and garment industry. Unemployment in this prosperous community hovers around 5%, among the lowest rates in Europe. Chinese residents—legal and illegal—cram buses in the city center but live and work in a world of their own. “We have the world’s leading knitwear industry, with sales of \$1.2 billion. It is thanks to the Chinese that this sector has been revitalized,” says Giuseppe Gregori, General Secretary for the Italian labor union CGIL in Prato.

Social Issues

INVESTIGATIVE REPORT

NOW YOU HAVE THE STABILITY TO BOLDLY VENTURE INTO THE .COM AGE.

MISSION: CRITICAL

THE POWER OF SOLARIS 8

IS YOUR MISSION CRITICAL? OF COURSE IT IS. BECAUSE YOU NEED TO DELIVER MIND-BENDING SERVICE LEVELS IN A UNIVERSE WHERE AVAILABILITY AND SCALABILITY ARE NO LONGER BUZZWORDS — THEY'RE MATTERS OF CORPORATE LIFE AND DEATH. ENTER SOLARIS™ 8, THE INDUSTRIAL-STRENGTH OPERATING ENVIRONMENT. ITS 64-BIT ARCHITECTURE GIVES YOU A PLATFORM FOR LIGHT-SPEED GROWTH AND THE CONFIDENCE OF OTHERWORLDLY UPTIME. (HMM, COULD THIS BE WHY OVER 1,900 U.S. STARTUPS LAUNCHED THEIR INTERNET BUSINESSES WITH SOLARIS-POWERED "STARTUP ESSENTIALS"™?) WITH SOLARIS 8 RUNNING ON SUN HARDWARE YOU CAN RUN MORE APPLICATIONS WITH MORE USERS, MORE NETWORK CONNECTIONS AND MORE DATA. ABOUT THE ONLY THING YOU WON'T GET MORE OF IS DOWNTIME, BECAUSE SOLARIS 8 DELIVERS TELCO-INSPIRED SERVICE LEVELS AND IS LOADED WITH FEATURES TO LET YOU MANAGE, ADD AND REMOVE SYSTEM RESOURCES WITHOUT A DIGITAL HICUP. IT'S NO FLUKE THAT SUN HAS LED THE MARKET IN UNIX SERVER SHIPMENTS FOR OVER TWO YEARS. AND IT WON'T BE A COINCIDENCE WHEN SOLARIS 8 HELPS TAKE YOU BEYOND THE OLD DEFINITION OF "MISSION CRITICAL" — ON A JOURNEY TO INTERGALACTIC SUCCESS.



THE NETWORK IS THE COMPUTER. WWW.SUN.COM/SOLARIS ©2000 SUN MICROSYSTEMS, INC. ALL RIGHTS RESERVED. SUN, SUN MICROSYSTEMS, THE SUN LOGO, THE JAVA COFFEE CUP LOGO, THE SOLARIS LOGO, SOLARIS, SUN STARTUP ESSENTIALS, THE NETWORK IS THE COMPUTER, AND WE'RE THE DOT IN .COM ARE TRADEMARKS OR REGISTERED TRADEMARKS OF SUN MICROSYSTEMS, INC. IN THE UNITED STATES AND OTHER COUNTRIES. IDC, MARCH 2000 DATA.

We're the dot in .com™

employment agent who had placed the ad. He was an Italian who spoke her language and offered seemingly normal terms of employment. Smoothly drawing out her interests, he promised to help Maria eventually enter an Italian university and become a fashion designer.

Maria boarded a plane bound for Venice, along with three other young illegal immigrant women and the agent. She ended up in a sweatshop where one woman factory worker with chains around her ankles fearfully admonished her not to

stay. Alone with the agent, she implored him to allow her family to pay off her \$4,000 debt in cash and free

her from the agreement to work. Eventually he relented, but the criminals who transported Maria still pay her family threatening visits in Romania to keep her from exposing the network.

SPREADING TENTACLES. Sometimes, it's almost impossible to figure out when a factory is legitimate and when it is exploiting workers. In one French bust in April, 1999, dubbed Operation Cité Interdite—whose name echoes the Forbidden City in Beijing and also evokes the fortress-like nature of the buildings housing the workshops—a SWAT team found seven sweatshops in a cluster of housing projects in the Paris suburb of Seine-Saint-Denis. By day, the small-scale factories operated legally, employing regular workers. By night, however, machines continued to hum, operated by illegal Asian immigrants, some of whom are compelled to work 105 hours a week. The bust was organized by Armand Huby, police chief at France's Central Office for the Suppression of Irregular Immigration and the Employment of Illegal Immigrants. Last year alone, the group managed to uncover 18 international networks shuttling illegal immigrants into France.

In Europe, international trafficking gangs are now trying to extend their reach into the local economy, acquiring more factories, restaurants, and shops to launder money and recycle workers. Police and international agencies say that some slaves who eventually pay off their debt sign up with the very criminal organizations that smuggled them into the EU. Certain Romanians living in the Veneto region of Italy "run the sweatshops as mercilessly as when they were workers," says Ugo Melchionda, an immigration specialist at the International Organization for Migration, an intergovernmental organization.

Unlike the U.S., Europe faces the monumental task of coordinating police action across borders. Interpol, for example, has been tracking a Croatian trafficker named Jos Loncaric, who is believed to be responsible for bringing some 10,000 illegal Chinese immigrants into the EU. When he received a sentence in Croatia for smuggling 5,000 Egyptians through that country on the way to the EU, he fled to Slovenia, where he applied for and received citizenship. Loncaric is also wanted in Italy in connection with the transport of illegal immigrants.

Closer coordination among various police officers may have kept him from slipping through the net. At least the groundwork is being laid for tighter cooperation. The U.N. hopes to get members to sign a protocol on trafficking and exploitation of human beings in December in Sicily. Bruggeman's Europol unit recently arranged expert meetings to alert authorities in EU member states to the criminal gangs transforming illegal immigrants—including children—into slaves. And Interpol finally established a Children & Human Trafficking Div. last year.

But it's unlikely that trafficking in Italy and the rest of the EU will decline without a major legal crackdown. In the meantime, investigators say the growing profits from workers in bondage may get recycled into a new class of criminal organization. The twin businesses of trafficking and slave labor have already cast a dark shadow over 21st-century Europe.

By Gail Edmondson in Prato, Italy, with Kate Carlisle in Rome, Inka Resch in Paris, Karen Nickel Anhalt in Berlin and Heidi Dawley in London

Sweatshops are proliferating in the poorest districts of Paris



RAID IN PANTIN: Contou uncovered a host of clandestine textile workrooms

Ultimate – the most efficient bicycle ever made, having achieved a world record speed of 207.5mph. Made from pre-pregated carbon weave, a highly advanced material developed primarily for military purposes, it weighs a mere 10.8lbs.

ULTIMATE
aurora

Efficiency. High performance demands high efficiency. With 13,000 professionals across the globe, and expertise encompassing the diversity of investment banking and securities disciplines, a commitment to integrated communications becomes paramount. Instantly, seamlessly, effectively, we leverage our collective knowledge and channel it to one end. More client success.

www.ubswarburg.com

Success demands more.



UBS Warburg

ITALY: CENTER OF THE NEW SLAVE TRADE

Dark clouds and lightning cast a gloomy aura over the port city of Trieste on Italy's border with Slovenia. To the northeast, the 50-mile border running along the Julian Alps is ringed by dense

Social Issues

INVESTIGATIVE REPORT

forests, valleys, and caves—ideal terrain for gangs trafficking illegal immigrants into Italy. Each year, traffickers hustle an estimated 35,000 Chinese immigrants through Trieste from Eastern Europe and the Balkans—and from there many are shunted into Europe's black market economy as forced laborers, authorities say. Asian and other gangs revved up trafficking in the 1990s, after the collapse of the Berlin Wall. Migrants are flown, driven, walked, or boated across as many as two dozen borders between China and Italy. "We imagined there was a problem, but we didn't imagine this magnitude," says Nicola Maria Pace, head prosecutor of the Trieste Antimafia Force.

Pace is one of Europe's top authorities on the gangs that run these human trafficking operations. In three years, he and magistrate Federico Frezza and their team have crippled 16 Chinese gangs, arresting 103 members. The most recent coup: In January, they nabbed Xu Bailing, believed to be one of two overlords controlling 16 Chinese gangs that they had identified operating out of Trieste, together with Croat fugitive Josip Loncaric.

EFFICIENT. Pace doesn't just nab crooks. He studies them. Operating out of two rooms in the city's 18th century Palace of Justice, Pace's team is one of the first to systematically gather data on trafficking. He has accumulated 20,000 hours of wiretapped phone conversations between gang members since 1997.

Pace's research confirms that the trafficking rings are highly organized and global in their reach. The protocol is grim but efficient: Once they land in Italy, Chinese immigrants are held prisoner by the gangs until someone "buys" them, fronting the \$25,000 fee for their transit and extracting years of labor in return.

"It's big business, and it will continue because there is a big market for it," says Pace. In addition to the Chinese, his group also identified 27 gangs from Croatia, Slovenia, the Philippines, and Bangladesh operat-

Chinese immigrants, by contrast, tend to be shunted into sweatshops and restaurants. Pace also has come across cases of Chinese "selling" a family member into slavery for \$5,000 in their hometown. By the time they reach Europe, they are purchased for \$13,500.

NUMBERS GAME. Hard to believe? Pace has the database to prove it. The phone numbers his team tapped were found inside the shirt cuffs, shoe soles, or on Band-Aids worn by illegal immigrants who were busted crossing into Italy. Traffickers rou-

tinely strip immigrants of their papers, giving them only a phone number of a local contact. "The hidden phone numbers are the first thing we go for in a bust," says Pace. He will never forget the horror of a strange background sound on one of the tapes of a conversation between members of rival gangs. "It chilled us to the bone when our interpreter explained that what we were hearing was the sound of fingers being cut off" as punishment for stealing a competitor's slaves, Pace says.

The next step for Pace's team is to uncover possible links between traffickers and the Chinese triads, the Russian mafia, and the Italian mafia. Circumstantial evidence points to collaboration. For starters, Moscow and Kiev are major hubs for illegal immigrants headed for Italy. For that effort, however, Pace and other investigators will require significantly more resources. "We could dou-

ble arrests if we doubled staff," says Frezza. For now, they still face an uphill battle convincing others that trafficking and slavery go hand-in-hand in the 21st century—and that so many poor people are lured into servitude in the European Union. "If your choice is to die of starvation in your home country, being a slave in Italy could sound like paradise," says Pace.

By Gail Edmondson in Trieste



TRIESTE PROSECUTOR PACE (LEFT):
"We imagined there was a problem,
but we didn't imagine this magnitude"

ing in Italy and throughout Europe.

Another key finding: Italy, with its unpatrollable borders and rich underground economy, is the central receiving and distribution center of illegal immigrants for the entire European Union. Trafficked Eastern European women are lined up and auctioned off as prostitutes, much like slaves in the 19th century, to Italian racketeers on a stretch of road between Trieste and Venice.

"It takes more than one basket."



"One basket definitely isn't the right approach. For awhile you could do well by putting everything in growth stocks. But today's market demands a broader investment strategy.

"Value investing can be a good way to diversify. It gives you a significant upside potential because you buy equities when they're 'out of season.'

"When the market recognizes these stocks have been *undervalued*... suddenly their prices aren't so low anymore."

Dr. Bob Froehlich, Vice Chairman, Global Strategist
Kemper Funds Group

Kemper-Dreman High Return Equity Fund

KDHAX (as of 9/30/00)

**Past performance is no guarantee
of future results.**

10.39%

One
Year

16.49%

Five
Year

20.21%

Ten
Year

Talk to your financial representative about the long-term thinking behind every Kemper fund. And visit us at www.kemper.com for detailed market commentaries written by Bob Froehlich.

1-800-KEMPER5



KEMPER FUNDS

Long-term investing in a short-term worldSM
Mutual Funds - Annuities - Retirement Plans

The opinions and forecasts expressed are those of Bob Froehlich as of 8/00 and may not actually come to pass. This information is subject to change at any time, based on market and other conditions, and should not be construed as a recommendation of any specific security.

Due to the fund's concentration in the financial sector, the fund may be subjected to greater share price volatility than a more diversified portfolio. Adjusted average annual total returns as of 9/30/00. Investment returns and principal value will fluctuate, so shares, when redeemed, may be worth more or less than original cost. The returns include the maximum sales charge of 5.75% for Class A shares. The returns measure net investment income and capital gain or loss from portfolio investments assuming reinvestment of dividends. Different classes of shares are offered, and their performance will vary because of differences in loads and fees paid by shareholders investing in different classes.

Call the number above for a prospectus containing more complete information, including management fees and expenses. Please read it carefully before you invest or send money.

A Business Unit of Scudder Kemper Investments, Inc.

No chickens (or eggs) were harmed in the making of this ad.

©2000 Kemper Distributors, Inc. 1121080-A (10/23/00)

BANKING

MORE OF THE SAME AT LAZARD? DON'T BANK ON IT

Shareholder pressure has already forced a restructuring and the naming of a successor

La maison. The house. That's invariably how Michel David-Weill refers to Lazard Frères, the legendary international investment bank that the courtly Frenchman has run for almost a quarter of a century. The term fits the 123-year-old bank's view of itself as an intimate power broker of the corporate high and mighty in both Europe and the United States.

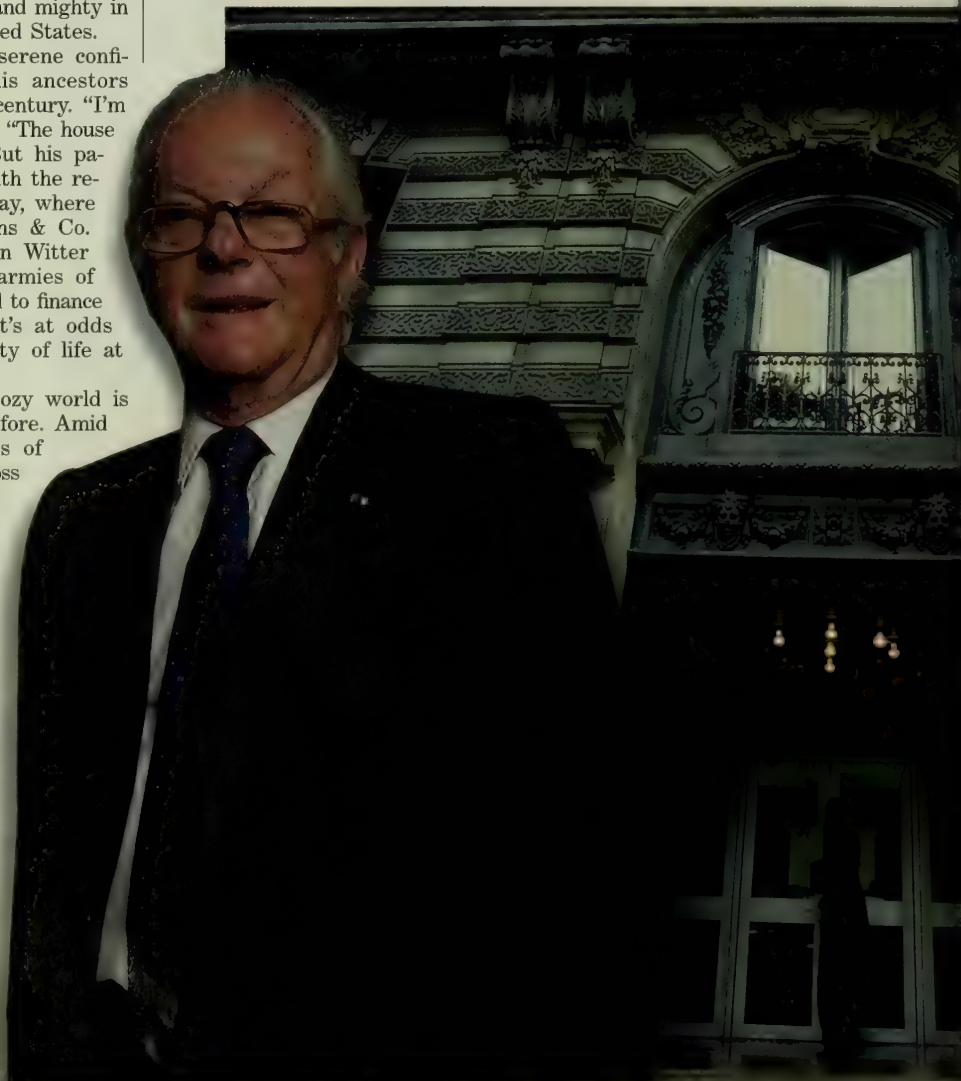
David-Weill professes serene confidence in the business his ancestors founded in the mid-19th century. "I'm rather optimistic," he says. "The house is working quite well." But his patrician world view jars with the reality of global finance today, where giants like Goldman, Sachs & Co. and Morgan Stanley Dean Witter & Co. woo clients with armies of experts and wads of capital to finance their deals. And lately it's at odds with the day-to-day reality of life at Lazard as well.

Indeed, David-Weill's cozy world is being shaken as never before. Amid an unprecedented exodus of talented bankers and the loss of key clients, particularly in the U.S., Lazard has slipped in rankings of global merger-and-acquisition deals to 11th place this year, compared with 6th place in 1997. And a revolt of shareholders in the web of publicly held companies that Lazard and four families control forced it to announce a reorganization of the structure on Nov. 13.

On the investment

banking front, David-Weill, 67, appointed Lazard veteran William R. Loomis as the bank's first American CEO on Nov. 15. The amiable Californian, who attended his first Lazard supervisory board meeting in Paris that day, says he and his partners are already drawing up plans to anchor star performers at

the privately held firm, whose once largely autonomous Paris, New York and London partnerships were melded into one this year. The moves will include granting options to invest in new equity and hedge funds the bank is setting up. Moreover, says Loomis, the bank is considering trimming the profit



OPTIMISTIC

David-Weill says his investment bank doesn't want or need to link up with a strategic partner

at flow to the four French families—including David-Weill's—who control 40% of the firm through direct and indirect holdings. The goal, says Loomis, is to attract the best people: "The idea is to keep the standards of partnership very high, but to lower them."

Loomis will remain in New York—in an office next to the one David-Weill keeps there. Geographically, anyway, that puts him at some remove from the turmoil in the company's Paris nerve center. That office fending off a public revolt by minority shareholders led by UBS Warburg and French dealmaker Vincent Bolloré. The mutiny has forced David-Weill to begin simplifying the controlled structure that holds some 50% of Lazard LLC and valuable stakes of blue chip outfits like French giant Danone, Italian insurer Assicurazioni Generali and British media giant Pearson. The shareholder activists are trying to unlock the value of the shares by forcing their sale (chart).

Though Lazard as a business isn't directly involved, the dispute has drawn unwanted attention to the way the private entities use labyrinthine structures to control public companies, hobbling minority shareholders in the process. "The way they have managed the holding companies makes it look bad," says a senior London-based investment banker.

David-Weill and Loomis staunchly defend the bank's practices and prospects, pointing out that business has never been so good. Loomis says that earnings this year will exceed \$500 million and that the backlog of business is at record levels.

EMBODIMENT. One thing is clear: The arrival of the loyal and mild-mannered Loomis' doesn't signal major change. "We've been through a period of turmoil and now need stability," says Loomis. "Without Michel's 100% backing, I couldn't be successful. He truly embodies the perspective of the firm."

Even with that acquiescent perspective, Loomis, who's not known as one of the bank's top rainmakers, might not get a chance to truly put his imprimatur on Lazard. For one thing, the French patriarch insists he has no plans to retire. Moreover, David-Weill has shown a discouraging lack of interest in sharing control with putative successors—who usually don't last long in their No. 2 roles. Early this year, vice-

LAZARD'S WEB

The Lazard Group uses outside vehicles to control key stakes in European assets

LAZARD PACT

Investment firm controlled by Lazard insiders.

52%

RUE IMPERIALE DE LYON

Publicly traded holding company. Raider Vincent Bolloré owns a 31% stake.

21.5%

EURAFRANCE

Core holding company that directly or indirectly controls stakes in the following:

DANONE

GENERALI

LAZARD LLC

MEDIOBANCA

PEARSON

*DIRECT STAKE

chairman Steven Rattner—a previous heir apparent—jumped ship, taking three promising young partners with him to start a private equity business. Even David-Weill's talented son-in-law Edouard Stern, who had tried to reduce overhead and bring in younger partners, walked away in mid-1997. "Michel," says one former partner, "has never developed the loyalty of people in the firm."

Similar frustrations are behind the



PATIENT

Loomis, now next in line to run Lazard Frères, may have some waiting to do. David-Weill has no immediate plans to retire

broader talent exodus, say other former partners. The defections read like a roll call of the best and brightest dealmakers on both sides of the Atlantic. In 1998, Lazard's star financial institutions specialist, Ken Wilson, bolted for Goldman Sachs, followed by Gerald Rosenfeld, now chief executive of Rothschild North America Inc. and Michael J. Price, who headed up Lazard's valuable telecommunications business. Most

recently, two high-profile departures rocked the staid Paris branch: Co-head of M&A David Dautresme, a Lazard veteran, resigned, as did top dealmaker Pierre Tattevin, who left to join Rosenfeld at Rothschild. "You can't afford that," says one former associate.

The talent drain in New York is one part of the now-global partnership's problems. The U.S. traditionally provided the lion's share of Lazard profits, so the merger structure assumed that the U.S. business was worth three times that of France and Britain. With the falling away of such stalwart clients as United Technologies, WorldCom, and Time Warner, New York-generated business has now fallen sharply relative to London and especially Paris.

AU CONTRAIRE. Loomis disputes the extent of these problems. Although acknowledging the loss of talent in New York, he notes that a dozen new partners have hired on there in the past 15 months, including prominent Washington insider Vernon E. Jordan Jr. And last year Loomis brought in the restructuring team from BT Alex. Brown following Deutsche Bank's merger

with Brown parent Bankers Trust. It is now advising on the restructuring of South Korea's Daewoo Group, one of the largest such deals in history.

As for Lazard's future, David-Weill and Loomis insist that the preference for ever-bigger investment banks is a passing fad. Clients, Loomis says, might use giant banks for more commodity-type transactions like bridge financing, while retaining Lazard for focused advisory work. And he says ambitious young bankers will always be attracted to elite operations like Lazard. "There are people who don't want to work in those huge places," Loomis says.

Certainly, a merger or an outright sale is not in the cards—even if various Lazard partners have quietly broached the issue. For instance, the \$1.4 billion Dresdner Bank is paying for New York investment boutique Wasserstein Perella & Co. generated much interest in Lazard offices. David-Weill—the last word at Lazard—says he has no intention of selling, and certainly not for the \$4 billion accounting group Ernst & Young says the firm is worth. "If we were to sell, let's say I'd be disappointed to only get that much," he notes with a smile. But it remains to be seen whether he and Loomis can restore the luster of the Maison Lazard.

By John Rossant
in Paris

FRANCE

WHITHER EUROPE? ASK FELIX

Ambassador Rohatyn talks about convergence and reform

In a Europe that is undergoing wrenching change, few Americans have been as well-equipped to represent the U.S. as Felix G. Rohatyn, the former head of Lazard Frères & Co. in New York. In December, Rohatyn will be ending a three-year stint as the U.S. Ambassador to France. With his stellar contacts and Continental background—the Vienna-born banker spent several years in France before reaching the U.S. in 1942—Rohatyn has helped defuse the oftentimes anti-American rhetoric of the French Establishment. He took some time out to reflect on France, the European Union, and transatlantic relations with *European Regional Editor John Rossant*.

Q: With the euro, France and Europe are entering into uncharted territory. How much is France really opening up?

A: It's hard to generalize, but the political leadership and a vast part of the public still have profound questions about capitalism and markets. This is somewhat in contradiction to the needs of a globalized economy. [Yet] companies that I never thought would be privatized, like Air France, France Télécom, and Aerospatiale, are now all private.

Work needs to be done on basic issues like creating pension funds. The pay-as-you-go system here, especially with the demographics, will lead to a catastrophe. And one of the results is that American pension funds own a greater and greater portion of French equities, which politically will be a problem over time. In this, and on the need to lower taxes, the Germans are conceptually ahead of the French.

Q: How much of the euro's continued slide is based on capital flows?

A: The large capital flows toward the U.S. are results of the success the euro has had in creating very big capital markets. This has spurred growth. European companies are now making big investments in the U.S., creating a net outflow of long-term capital without a counterbalancing reverse flow.



ROHATYN: He'll probably go back to business

“We...were overoptimistic... that with the arrival of the euro, Europe would ‘happen’”

The picture of tomorrow's Europe is becoming more hazy—and markets require as much certainty as possible. We—including myself—were overoptimistic in thinking that with the arrival of the euro, Europe would “happen.” We were wrong. Convergence of things like labor legislation and economic policy is only slowly beginning to take place.

Q: The U.S. is a political role model for the Europeans. Will the electoral impasse between Gore and Bush change European perceptions of American democracy?

A: That will depend on how this turns out. So far, one effect has been to confirm the view of a lot of Europeans who question our social and political structures. I've been trying to explain that what happened showed a system that actually works quite well in an

anomalous situation.

Two things that were shocking [to Europeans] were the network making wrong calls on the election not once but twice. Also outrageous is the amount of money that went into these elections. Television and politics are becoming Siamese twins and that is shocking to Europeans. Unfortunately, it leads people here to criticize the whole system and question the legitimacy of our leadership.

Q: What factors will affect transatlantic relations under a new Administration?

A: There is an integration taking place in business and investment, both within Europe and between Europe and the U.S., that will far outpace the political integration in Europe—and will drive it. And those investment flows to the U.S. will mean hundreds of thousands of new Americans working for European companies, in addition to the 3.5 million to 4 million who already do so. Look at the mergers taking

place in Europe. These are forces that will be driving European and transatlantic structures. Business needs, for example, common [structures] for drug and food approvals. Probably we need a joint U.S.-European antitrust authority.

Q: What do you plan to do when you get back to New York?

A: I have a lot of friends on both sides of the Atlantic, and a number have proposed we do some things together. I will probably work on a book about the things I've done and seen. Coming here as ambassador has brought me, in a way, a full circle: In 1940 and 1941, we were able to flee occupied France. Then, 60 years later, I return as U.S. ambassador. A pretty good first and last chapter. In between, of course, I've seen the evolution of the U.S. financial system.

Some people don't think twice about going to American Airlines for help changing their Qantas ticket. **Are you one of them?**



Plans change. Minutes count. Wouldn't it be nice to belong to an alliance that allows

you to rely on any of its airlines for assistance, no matter which one you're flying?

You can. Welcome to **oneworld**™.



American Airlines

Aer Lingus

BRITISH AIRWAYS

CATHAY PACIFIC

FINNAIR

IBERIA

LANCHILE

QANTAS

Eligible fares only. All oneworld benefits are only available to passengers on scheduled flights that are both operated and marketed by a oneworld member airline. (Marketed means there must be a oneworld member airline flight number on your ticket.) American Airlines, Aer Lingus, British Airways, Cathay Pacific, Finnair, Iberia, LanChile and Qantas are all trademarks of their respective companies.

www.oneworldalliance.com

PHARMACEUTICALS

AN ABOUT-FACE AT AVENTIS

Setbacks have it seeking a retreat from the much-ballyhooed "life sciences"

Aventis was going to be the hold-out. As rivals such as Pharmacia & Upjohn in the U.S., Novartis in Switzerland, and AstraZeneca in Britain sold or spun off their agricultural businesses during the past month, Strasbourg's Aventis didn't budge. After all, when France's Rhône-Poulenc and Germany's Hoechst formed Aventis last December by merging their drug and agricultural businesses, they proudly proclaimed their new company the world leader in "life sciences." By applying the same kind of gene-based technology used in drug discovery to agriculture, their thinking went, Aventis could realize major cost savings and a host of promising new products, including enriched seeds and disease- and insect-resistant grains.

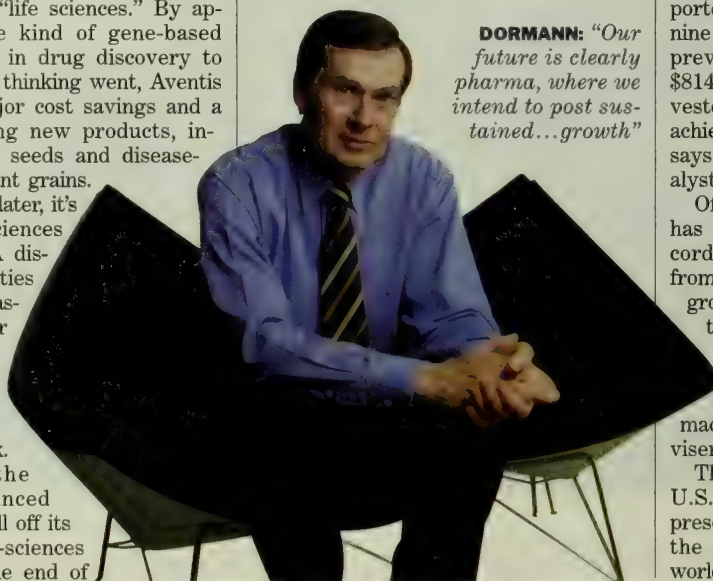
Nearly a year later, it's clear the life-sciences model is dead. A distressed commodities market and increasing consumer fears about genetically modified foods have forced Aventis to follow the pack. On Nov. 15, the company announced Aventis would sell off its \$2.7 billion crop-sciences operations by the end of 2001. Aventis is currently in discussion with Germany's Schering, which owns a 24% stake in Aventis Crop Sciences, about possibilities, including an initial public offering.

TAINTED TACOS. The recent fiasco surrounding StarLink, a genetically engineered corn developed by Aventis for animal feed, most likely played a part in the decision. Aventis, Europe's second-largest drug company, found itself embroiled in controversy in October, when traces of StarLink corn showed

up in taco shells in the U.S. Aventis no longer produces StarLink, and has withdrawn its registration with the Environmental Protection Agency. "Our future is clearly pharma, where we intend to post sustained double-digit, top-line growth," says Jürgen Dormann, chairman of the management board.

But unloading the agriculture division is no easy task. An outright sale to a major rival would face antitrust problems because Aventis Crop Sciences

DORMANN: "Our future is clearly pharma, where we intend to post sustained...growth"



controls about 15% of the global market. And market conditions are unfavorable for floating shares. When SynGene, the merged agrochemicals businesses of Novartis and AstraZeneca PLC, went public on Nov. 13, its market valuation was around \$5 billion, roughly half of what its parent companies had anticipated.

EURO BOOST. Until recently, however, the life-sciences approach had served Aventis well. On Nov. 9, Aventis reported sales of \$13 billion for the first nine months of 2000, up 12% from the previous year, with pretax profits of \$814 million. The good news for investors is that Aventis "is on target to achieve 40% earnings growth for 2000," says Commerzbank European drug analyst Mark Clark.

Of course, the weakness of the euro has certainly helped exports. But according to analysts, savings derived from the merger are fueling earnings growth. "The challenge will be making the right moves to maintain top-line growth once the merger story has played out," says Mark Ravera, an analyst at Mehta Partners, pharmaceutical and biotech investment advisers in New York.

That means expanding sales in the U.S., the world's biggest market for prescription drugs. Although Aventis is the sixth-largest drugmaker in the world, with a 4% share of the market, it ranks a mere 12th in the U.S.

Aventis also must bring a steady flow of new drugs to market. And its recent record is good. Two drugs put on the market four years ago, allergy medication Allegra and anti-bloodclotting drug Lovenox, are expected to reach \$1 billion in annual sales this year. A drug company counting on drugs, not ag products? That's what you call focus.

By Kerry Capell
in London



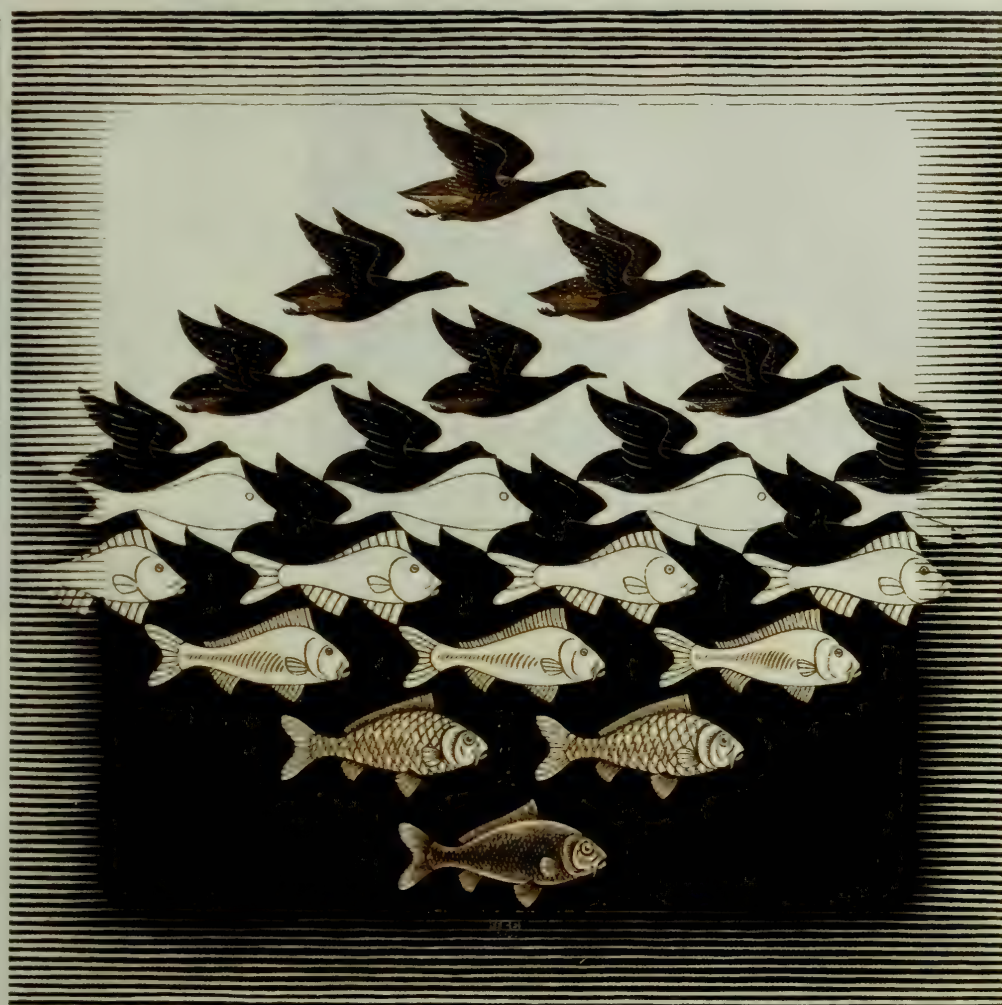
REVAMPING AVENTIS

AGROCHEMICALS Maker of the controversial StarLink bioengineered corn (left), Aventis owns the second-largest agrochemicals business in the world. But executives say they'll spin it off and focus on drugs.

U.S. SALES Ranked 12th in the U.S. by sales, it needs to establish a stronger position in the world's most lucrative prescription-drug market—and pronto.

WEAK PIPELINE Aventis will need to license new drugs from biotechnology companies or rival drug companies to ensure steady sales growth.

DATA: COMPANY REPORTS, BUSINESS WEEK



Integration problem? What integration problem?

We've done the near-impossible in the 10 years we've been in the business: integrate 1300 customers globally (like Nike, Barnes&Noble.com, PETsMART), handle a record-setting 10 billion transactions in one day, integrate thousands of disparate platforms and win Product of the Year from *eAI Journal*. SeeBeyond is also the strategic partner of choice for the top three independent systems integrators. So we're pretty sure that whatever your problem, it'll be no problem for us. Call 1-877-676-2877, or go to seebeyond.com.



JAPAN

HOW MUCH IS THAT ROBOT IN THE WINDOW?

Sony is lowering its price and raising its goals for AIBO

When Sony introduced AIBO in Japan last year, it quickly became the consumers' best friend—that is, for those who could get their hands on one of the \$2,500, limited-edition critters. Japan's allotment of 3,000 sold out in 20 minutes. In the U.S., Sony's servers crashed as millions tried to buy the 2,000 AIBOs allocated for America. Sony has gone on to sell 40,000 more. Japanese fans account for 90% of the purchases of AIBO, which means "companion" in Japan and also stands for Artificial Intelligence Robot. This was no simple Furby-like toy, but a sophisticated robot that could chase balls and bark for attention. Not since the Walkman and PlayStation has a Sony product created such a stir.

Now the madness seems about to start anew. As Sony sees it, the overwhelming response last year demonstrates that the world—or at least Japan—is ready for entertainment robots. So on Nov. 16, Japan's best-known brand began taking orders for its second-generation AIBO, the first model to be produced in unlimited quantities. This time the robot is not part of the canine family but resembles a lion cub.

The new AIBO boasts a 64-bit micro-

processor and 32 bytes of memory, putting it in the same league as a high-end PC. This digital 'bot is more dexterous than its predecessor: In addition to all the usual tricks—heeling or chasing a ball—it does a little dance and waves a front paw on hearing its name. Speech-recognition software lets it learn up to 50 commands.

And, of course, there's the lower price: \$1,500 or so, but that's expected to fall if these AIBOs are a hit. "In Japan, the market will be very large," predicts Toshi T. Doi, president of Sony's Digital Creatures Laboratory and AIBO's creator. "As the price goes lower, I think the same thing will happen in the U.S. and Europe." And as the technology becomes more sophisticated, it could be adapted to uses besides entertainment. Some predict that future generations of home robots could do the laundry and assist the elderly and handicapped.

Sony may be on to something big. There are already dozens of Web sites

A NEW TRICK
Toshi Doi, AIBO's creator, predicts robots in every home

dedicated to the digital creature, plus the AIBO Club with over 30,000 members. Earlier this year, Sony Chairman and CEO Nobuyuki Idei approved the creation of Entertainment Robotics Co. to oversee the marketing and production of the AIBO

series, which will grow to include a variety of sorts of animals, including dragons. "We're under a lot of pressure to succeed," admits Satoshi Amagai, president of the new venture.

ROBO-KITTY. Sony's top brass wants AIBO to turn into the next big company hit, on a par with PlayStation, which now earns \$5 billion a year. Yet with PlayStation Sony built on the well-established base of the video-game industry. Pioneering a new market poses a different set of challenges: Sony needs to nurture a tier of third-party vendors that can develop programs and interchangeable parts for AIBO. To that end Doi, the Sony scientist who has helped organize Robodex 2000, a robotics conference set for Yokohama in late November. He has invited venture capitalists and other robot designers to attend in the hopes of spurring the new industry.

But before generations of robots start walking off the store shelves, Sony has to create widespread demand. Hitoshi Kuriyama, Sony analyst for Merrill Lynch Japan, believes the price must eventually drop to something like \$300 before AIBO will have international mass appeal. Sony plans to start manufacturing 60,000 units a month, all at the VAIO notebook-PC factory in central Japan.

If Sony discovers a mass market, rivals won't be far behind. Matsushita Electric Industrial Co. is working on a robocat as a companion for senior citizens. Honda Motor Co. will soon announce a new version of its stair-climbing humanoid robot, the P3. And NEC Corp.'s cute R100 is a moving remote control that can change television channels or turn on lights. Within a decade Doi predicts, every household in Japan will have as many as three robots. Who knows? Maybe they'll be aces at PlayStation too.

By Irene M. Kunii in Tokyo



SMART PET

With add-on software, it can take digital photos on command

Corp.'s cute R100 is a moving remote control that can change television channels or turn on lights. Within a decade Doi predicts, every household in Japan will have as many as three robots. Who knows? Maybe they'll be aces at PlayStation too.

By Irene M. Kunii in Tokyo

COMMENTARY

By Brian Bremner

THIS TIME, THE REBEL WITH A CAUSE COULD WIN

Veteran observers of Japanese politics might be forgiven for playing down the recent turmoil in the ruling Liberal Democratic Party. Yes, Koichi Kato, a reformer and senior member of the LDP, has launched an internal rebellion to provoke the downfall of Prime Minister Yoshiro Mori's LDP government. But plenty of other efforts to cure the LDP's addiction to pork have failed miserably. Why should things be different this time?

The cynics are right to be wary. But the 63-year-old Kato may have a better chance than earlier reformers of forcing some change. That's because his predecessors tried to rein in the LDP at a time when Japan could still afford the party's fondness for over-the-top public spending.

This time around, the government is plain tapped out—and Kato and his allies are bold enough to say so. "If we wait any longer," says Kato's senior adviser, Hiroshi Ueki, "the Japanese economy will collapse."

Kato certainly has the facts on his side as he plots to oust Mori and set up a new LDP-led coalition that would push ahead with market reforms and take a wrecking ball to Japan's public-works edifice. The budget deficit is now clocking 10% of gross domestic product. Bankruptcies are at a postwar high. And the Nikkei is down 21% since the beginning of the year. The LDP has responded with more public-works schemes, but this attempt to goose the economy is having less and less impact, especially since local governments are too broke to pay their share for the latest projects.

The looming crisis is spurring LDP rank-and-filers to join Kato's cause. Most of his 45-member faction, plus the 19 lawmakers in a smaller group

run by ally Taku Yamasaki, are backing a no-confidence vote against Mori that's expected from the opposition Democratic Party of Japan (DPJ) this month. The opposition controls about 200 votes, so a Kato-led defection could prove lethal in the 480-member lower house of the Diet. If Mori went down, the LDP would have the option of calling a general election, or, more likely, installing another revolving-door Premier.

Kato would be a strong contender

with scandal after scandal, including the resignation of his right-hand man, Cabinet Secretary Hidenao Nakagawa, who quit in disgrace last month for tipping off his mistress about an impending drug investigation by prosecutors.

The dilemma for the LDP is that the party represents the kind of coddled businesses—construction companies, retailers, and distributors—that have the most to lose from the kind of deregulatory shock therapy

backed by Kato and his allies. Other executives, meanwhile, aren't in the mood for full-fledged political crisis—not with the economy still stumbling along. Mitsubishi Motors Corp. Chief Executive Officer Takashi Sonobe, who believes Kato will fail, says "if the Prime Minister changes, it won't affect economic policies much."

Nonetheless, some fear a Kato-led rebellion could delay passage of \$44 billion worth of supplementary public-works spending expected by yearend. "If that's stalled, the shock to the market will be severe," says Shigenori Okazaki, a political ana-

lyst with UBS Warburg Japan Ltd.

Kato isn't flinching, however. Should he manage to grab the Premier's chair, his immediate priority will be ordering up the kind of spending cuts needed to get the central government's budget mess under control, while opening the economy to greater competition. Long-range, of course, that's what Japan needs. In the shorter term, it means more turmoil. Kato may not succeed. But more and more Japanese are listening to the disturbing things he has to say.

Bureau chief Bremner covers Japanese politics and finance from Tokyo.

REFORM Kato wants to push ahead with market-opening measures and end Japan's dependence on public works



CONTENDERS: Kato (left) may bring down Mori (right)

for the throne, but opposition inside his party is fierce. While the Harvard-educated career politician has long been considered for the top job, the LDP detests mavericks. Undaunted, Kato has taken his case to the Japanese media and baldly stated that if the LDP doesn't back him, he may bolt for the DPJ and set up a reformist opposition government with that party's Yukio Hatayama and Liberal Party chief Ichiro Ozawa.

There is no denying that Mori, the current Prime Minister, has been nothing short of a disaster for the LDP since he assumed the job in April following the death of his predecessor, Keizo Obuchi, from a stroke. Mori's cabinet has been beset

americanexpress.com ▼

**OFFER
ZONE** ▼

BARNES & NOBLE .com
www.bn.com

buy.com

FedEx
Express

 **flooz**.com

 **FTD.COM**

 **OMAHA STEAKS**
SINCE 1979

priceline.com

red ENVELOPE

THE SHARPER IMAGE

ticketmaster

 **wine.com**
The best of wine™

see more ►

One-stop holiday gift giving for your business. The Offer Zone. SM

A gourmet basket for your client. A gift certificate for your employees. Whatever is on your business gift list — get it at the Offer Zone for Small Business. The American Express® Corporate Card for Small Business lets you take advantage of free shipping and handling, savings of up to 35%, and even valuable gifts with purchase. And the Card's **Online Fraud Protection Guarantee** means you're not responsible for any unauthorized charges. So for great holiday gifts, visit the Offer Zone for Small Business at americanexpress.com/sbofferzone.



**Small Business
Services**

EDITED BY ROSE BRADY

MEXICO: CAN FOX GOVERN WITH THE PRI IN A SHAMBLES?

For most of a century, the Institutional Revolutionary Party (PRI) was Mexico's most powerful political institution. But now the PRI is in a shambles: Not only is it stilleling from the shock of losing the presidency for the first ne to National Action Party (PAN) candidate Vicente Fox it July, but it is leaderless, nearly bankrupt, and bereft of a fining ideology. The next several months will determine whether the PRI can pull itself together to become a viable opposition force—or whether it is doomed to splinter, or even disappear.

The PRI's struggle for survival has profound implications for Mexico as it ends seven decades of one-party rule when Fox takes office Dec. 1. You would think the new ministration would cheer the party's disarray. After all, feuding factions of hard-liners, technocrats, and reformers can't even agree on how to choose a new leader of the PRI, which has traditionally been headed by the Mexican President.

But Fox's allies fear that a divided PRI could actually make life far harder for the new administration to implement key economic and political reforms. Says Felipe Calderón, PAN leader in the lower house of Congress: "Until the PRI rebuilds itself and determines who truly leads the party, their decision-making will be tortuously difficult, and it will slow us down." The first signs of trouble could appear on Dec. 2, when debate begins on next year's budget. Anticipating a slowdown in the U.S., Fox is planning an austere budget with sharp spending cuts. But the PRI's sizable faction in Congress could hold the budget hostage to demands for more social spending. That could scuttle plans to keep the deficit low, possibly looking investors. Fox also faces battles on tax reform and opening the electricity industry to private investment.

As long as he has no anointed PRI leader with whom to ne-



FOX AND MADRAZO:
They may square off

gotiate, Fox will have to horsetrade with competing groups of PRI deputies to win approval for reforms. Bound by party discipline in the past, PRI deputies usually voted as a bloc. Now, until the party's fate is decided, the PRI's 211 congressional deputies and 60 senators will be free to vote as they like.

RADICAL MAKEOVER. That may only accelerate the fight for the party's heart and soul. Already, PRI reformers are calling for a radical makeover. "We want a new party name, a new party emblem, and a totally new, democratic party structure," says Agustín Basave, a leader of the PRI's "Renewal" faction. If reformers fail to transform the PRI, they are expected to form a new social democratic party.

Old-style PRI pols will resist a dramatic makeover. Tabasco Governor Roberto Madrazo, a leading contender to head the party, has pledged a more modest overhaul to give more power to regional party bosses. But moderate PRIistas think he's the wrong man for the job: He is linked to several elections marred by allegations of fraud.

Moderates would prefer someone like 46-year-old Dóro Carrasco, Interior Secretary for outgoing President Ernesto Zedillo. Madrazo could have a chance of beating Carrasco, though, because many party members are furious at Zedillo for allowing the PRI to lose the presidency. "Zedillo may look like a democrat internationally, but he was an authoritarian party leader who was responsible for the PRI's downfall," grumbles Senator Manuel Bartlett, a PRI hard-liner.

The showdown will likely take place next spring, when the party is expected to hold a national assembly. However it plays out, there's no doubt that a major remapping of Mexico's political landscape is under way. After years of fighting the PRI's one-party rule, the new Mexican President must gear up for the rough-and-tumble of democracy.

By Geri Smith in Mexico City

GLOBAL WRAPUP

GOING PRIVATE

► Norway's ruling Labor Party voted on Nov. 12 to privatize up to one-third of Statoil—the state-owned energy company. The decision was a big win for Prime Minister Jens Stoltenberg as well as the company. Statoil wants to have private shareholders to reduce political interference in the company and force better performance. And it wants to use shares as currency for alliances and acquisitions.

Managers are worried that mergers in the industry have left Statoil too

small to compete with the likes of BP Amoco PLC and Exxon Mobil Corp.

Stoltenberg still has to overcome nationalist skeptics in the parliament. But the company thinks the privatization—probably in the form of a new share issue—could occur by next summer. If Statoil were to be completely privatized today, its market value would be \$17 billion, analysts say.

SIGH OF RELIEF IN SPAIN

► Big Spanish investors in Latin America are breathing a sigh of relief now that it's clear the International Mone-

tary Fund plans a package to keep Argentina from defaulting on \$20 billion in debt payments due next year. Shares of Banco Bilbao Vizcaya Argentaria had slumped 12%, while those of Banco Santander Central Hispano fell 10% after jittery investors began dumping Argentine bonds and rates soared in late October. Both banks are heavily exposed to Argentina. Their shares have since recovered part of their loss.

Even so, Spanish Finance Minister Rodrigo Rato is in talks with the IMF on how to participate in the rescue package.

SIEMENS



When you're having one of these, you'll want to ha

Automation • Automotive Electronics • Energy • Information and Communications • Lighting • Medical Systems • Power Generation • Transportation

These days, state-of-the-art healthcare begins many months before birth and lasts for a lifetime. It's delivered by medical professionals who use a vast array of technology—tools that represent a modern revolution in diagnosis, monitoring, and treatment. Siemens is a leader in the revolution,

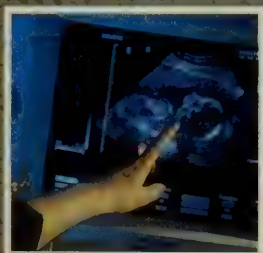
with major advances in ultrasound and related diagnostic imaging techniques, as well as in critical care, respiratory care, oncology, cardiology, urology, audiology, and surgery. Our goal is simple: to provide care givers with the technical resources they need to make the world a healthier place.

We're Siemens. We can do that.™

this



this



and this.



www.usa.siemens.com

UNFAMILIAR TERRAIN

Critics question why Malone's company ventured into areas it didn't understand, such as real estate and franchising



INVESTING

CAN LIBERTY MEDIA GET ITS GROOVE BACK?

John Malone's baby has been burned by bad investments

Dealmakers at John Malone's Liberty Media Corp. used to joke that a secretary working there was worth \$2 billion. That's when the market valued Liberty and its skeleton staff of 40 at a robust \$80 billion. No more. Since earlier this year, Liberty's stock has taken a beating, falling by 68% as its portfolio of more than 75 media and technology companies has lost favor with the market. To get to that \$2 billion-per-employee level now, "we'd have to lay off a lot of people," says Liberty President and Chief Executive Officer Robert "Dob" Bennett. "And that isn't going to happen."

Worse yet, Liberty, long revered among stock analysts for its nearly infallible ability to pick winners, seems to have lost its way. Recent investments have gone sour, from Internet startup Price-line.com to business phone-service provider Teligent Inc. And in its biggest black eye, Liberty put \$500 million into ICG Communications just seven months before ICG's Nov. 14 bankruptcy petition. That raised questions among Liberty's faithful as to whether the company had lost its magic, rushing to catch hot sectors instead of doing its traditional due diligence. "The issue is not that ICG cratered, but why was John there in the first

place," says one long-time associate of Liberty Chairman Malone.

But a day later, on Nov. 15, Malone got some good news. AT&T announced that it intended to spin off Liberty. For most of the last year, since AT&T bought Malone's cable company Tele-Communications Inc. for \$52 billion, Malone has been angling for just that kind of freedom. Being appended to AT&T and its large cable holdings, Liberty executives say, was crimping Malone's style as regulators weren't likely to allow him to buy TV stations or satellite businesses. Now, the spin-off is likely to recharge his dealmaking batteries.

He already has his finger in just about

every media pie, from his 9% stake in Time Warner to a 21% stake in Bar Diller's USA Networks. These were amassed after trading small stakes in strategic companies, such as the 18% stake in News Corp., which began with Malone's holdings in regional sports channels and ownership of a tiny satellite link center.

But Liberty's more recent buys seem to have strayed from that successful formula. It rushed into a badly overcrowded telecommunications market and made investments in sectors that critics say it didn't understand, such as the \$400 million bet on franchising company Cendant Corp., now whittled to just \$115 million. **MARKET CONFUSION.** For now, Liberty insists that it's on the right track. Bennett points to its record of picking winners and sees more gains in Liberty's portfolio. "We are long-term asset builders," says Bennett. "We see investing to build value, not to sell six months down the road." And the company still has its supporters on Wall Street. UBS Warburg analyst Christopher P. Dixon puts Liberty's asset value at more than \$50 billion, nearly \$5 a share above its recent price of \$15%. Also on Nov. 15, Liberty announced net income of \$2.62 billion on gains from its assets, vs. a \$213 million loss in the year-ago period. Its stock rose just 0.4%.

What's ailing Liberty? Even Malone's confidants are no longer sure its *keiretsu* style works today, in which Liberty buys stakes in disparate companies that it pushes to work together. For one thing, media companies, already heavily consolidated, have less need to partner with Liberty outfits. Liberty's falling stock price also reduces its currency to make deals. Moreover, smaller companies have easier access to capital than in the 1980s, when Liberty backed upstarts such as Ted Turner and BET Holdings Inc. founder Robert Johnson.

That doesn't mean Liberty has given up on wheeling and dealing. Bennett says Liberty is still on the lookout for companies it can take stakes in, especially after the spin-off expected in the second quarter of 2001. "We are still interested in content, last mile distribution, and technology companies," he told analysts on Nov. 15. "And we will revisit investments we had to pass over before" because of Liberty's ties to AT&T. Of course, before that happens, Liberty will need to figure out where the bottom is for what it holds now.

By Ronald Grover in Los Angeles

Malone's Incredible Shrinking Portfolio

LIBERTY MEDIA HOLDINGS	DATE OBTAINED	ORIGINAL VALUE (\$MIL.)	CURRENT VALUE (\$MIL.)*	LOSS
EMMIS COMM.	1999	150	65.5	84.5
IDTC	March	130	111.9	18.1
ICG COMM.	April	500	5.0	495.0
PRIMEDIA	April	200	83.0	117.0
PRICELINE.COM	August	95	12.2	82.8
TOTAL LOSSES FOR THESE HOLDINGS:				\$797.4

*AS OF NOV. 13

DATA: COMPANY REPORTS



**Light is the source of life.
With Alcatel Optronics, light is also
the source of the Internet.**

With the Internet or telecommunications networks, you need to communicate instantly. Alcatel Optronics designs and produces components that transport information in the form of light via optical fibers. By providing ultra-fast and reliable data transport solutions, Alcatel Optronics, one of the world leaders in optical components, gives the Internet its real speed: that of light.
Alcatel, world leader in optical networking.



ARCHITECTS OF AN INTERNET WORLD

HOW AOL TIME WARNER WILL SHAKE UP THE NET

There will be fewer ISPs, but a healthy rivalry will remain

The interminable haggling by regulators over the long-pending merger between America Online Inc. and Time Warner Inc. may seem like just the usual noise out of Washington. But as the Federal Trade Commission and the companies cobble together a settlement to unleash the \$183 billion deal, the resulting blueprint could end up reshaping the future of the Internet industry.

The parties may not come to a final agreement until early December, but the elements of the regulatory compromise are now emerging. And they suggest hopeful news: The next generation of the Internet may not be as hyper-competitive as today's Web-access businesses, but neither will the lights go out on healthy rivalry.

MUST-DO LIST. That's because, according to industry sources, the FTC is demanding that AOL Time Warner hook up at least one independent Internet service provider (ISP) to Time Warner's high-speed cable pipes. That way, AOL, the nation's largest ISP, won't automatically dominate broadband. The FTC is also likely to require the new company to sign up two additional ISPs within 90 days. And the feds want some of those ISPs to be national-scale providers, not just smaller players that present little competitive threat. Already, Time Warner is trying to strike a deal with EarthLink, the nation's No. 2 ISP after AOL (table). And in Columbus, Ohio, Time Warner Cable is conducting a small-scale test of technology that allows it to carry multiple ISPs on its system there.

Then, to ensure that AOL Time Warner doesn't stop at just three competitors, any subsequent ISPs that may be having problems reaching agreement with the new company will be able to demand arbitration. Regulators are focusing on cable because it is more widespread than competing broadband technologies such as the telephone companies' digital subscriber lines (DSLs) and satellite.

True, the FTC's proposed provisions don't guarantee that the 7,000-ISP market of today survives intact—and may even hasten more consolidation. Indeed, unless the FTC requires AOL Time Warner to sign up at least one national, one regional, and one local

ISP per market, the company may end up with just a handful of national ISPs—those with the biggest businesses, such as EarthLink, Microsoft Network, and Prodigy. "Most ISPs will never end up on Time Warner's networks," says Charles Arda, CEO of Juno Online Services Inc., an independent ISP that is putting the finishing touches on an access agreement with Time Warner. "There are only 10 to 20 of any size." Adds Jeff Chester, executive director of the Center for Media Education: Most ISPs "would be digital toast. You might as well make room in cyberspace for 6,999 graves."

Yet the small fry, which

make up the bulk of the ISP industry today, may not automatically wither on the vine. They could team up in joint ventures to capture the cable guys' attention or opt for broadband with DSL. Indeed, DSL operators may step up to the plate and vie more aggressively for these ISPs' business by undercutting cable's prices. Already, ISPs are dissatisfied with cable's terms. Typically the cable companies charge online services a big cut of their retail revenues. For instance, Time Warner Cable takes about 70% of Road Runner's subscriber fee leaving the online service, a Time Warner unit, only 30%.

FATTER PROFITS. By contrast, DSL providers offer a more favorable wholesale pricing scheme—generally charging ISPs a flat fee for each subscriber somewhere around \$25 a month. That gives ISPs more flexibility to fatten profits, especially as phone rates head down

because of relentless competition, notes Juno's Arda. "We're not thoroughly convinced that cable would be a viable commercial option," says Stephen A. Heins, marketing director at NorthNet Internet Service in Oshkosh, Wis., an ISP with 2,500 subscribers.

"There's no incentive for us to do it if it isn't profitable for us."

But regardless of how many ISPs are signed up by AOL Time Warner, Washington's goal isn't to replicate today's crazy-quilt dial-up ISP market in a broadband world. While regulators can't guarantee that tomorrow's Web access business will be as competitive as today's, they can try to ensure that AOL doesn't dominate the medium right off the bat. Ironically, through an AOL Time Warner pact, the FTC may be able to spur more competition in the high-speed Internet world than the market alone would have wrought.

By Catherine Yang in Washington with Roger O. Crockett in Chicago

DSL operators may push harder for ISPs' business

Vying For Access

To win approval for its merger with AOL, Time Warner might have to open up its high-speed cable links to rival ISPs.

SOURCE: JUPITER RESEARCH; BY



AMERICA ONLINE

25.0



EARTHLINK

4.6



MSN

3.5



PRODIGY

2.7



JUNO

2.4

NUMBER OF SUBSCRIBERS IN MILLIONS

Go Ahead. Host Your Web Site With Another Company. It's Your Money.

Making Money On The Web Begins By Not Wasting Money On The Web.

Unless you've got money to burn, Interland is the way to go. Our complete solutions include everything from shared hosting to dedicated and high-availability hosting to Web site design, all at an unbeatable value.

That's why we're rated #1 by *PC Magazine* and *Windows NT Magazine*. So whether you're already on the Web or ready to get started, call us to learn how we can make the Web work for you today, and grow with you well into the future.

The Interland Standard

- Unconditional 30-day, money-back guarantee
- E-mail accounts for your Web site
- 150 MB starting at \$19.95
- 24/7 toll-free support
- 99.9% uptime

Call Today Toll Free
877.887.3866
www.interland.com

NASDAQ: ILND

interland
We make the Web work for you.



November 1, 1999 September, 1999



WHO'S STILL STANDING?

Our semiannual IT update finds champs—and chumps

Dot-com stocks may have melted down, but don't think for a minute that the e-business phenomenon is over. To the contrary, many outfits providing tools that help companies get onto the Web are still flying. Take Micromuse, a San Francisco-based seller of software that monitors and manages far-flung data networks. Its business is roaring because corporations moving to e-commerce insist on reliable, high-quality Internet connections—which Micromuse can help deliver. That has won it customers such as America Online, British Telecommunications, and Global Crossing, helping to

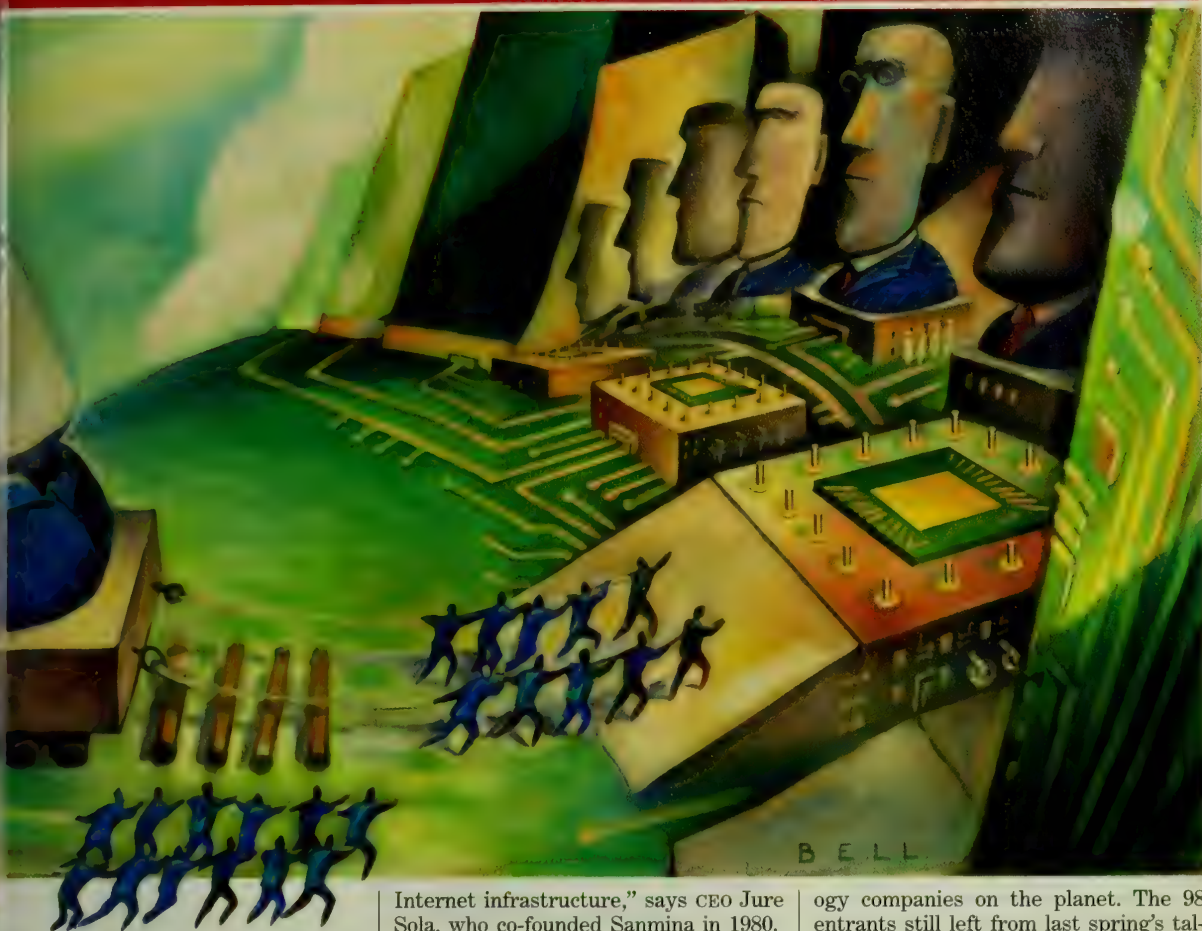
more than double Micromuse's revenues this year. Crows Chief Executive Gregory Q. Brown: "Market demand has been very, very high."

He's not the only one smiling. Despite the tech-stock wreckage, companies ranging from e-commerce software makers to sellers of networking equipment are continuing to grow and profit mightily off the rush to e-business. The most successful among them are helping brick-and-mortar stalwarts get online. EMC Inc., for instance, ships scads of data storage machines to companies that are moving their operations to the Web, such as the 216-year-old Bank of

New York, founded by Alexander Hamilton. After a slow start in e-business, Global 2000 companies "have started to play offense," says EMC Chief Executive Michael C. Ruettgers. While a slowdown in the Net sector might trim demand for storage and reinvigorated competitors such as IBM and Hitachi Data Systems could soon start wresting market share, for now, EMC is seeing boffo returns. Sales in the first half of this year climbed 32% from the same period in 1999, to \$4.4 billion, and profit surged 52.5%, to \$887 million.

Results that good or better are typical of the top-performing companies in the BUSINESS WEEK Info Tech 100. Our semi-

**INFO
TECH
100**



annual checkup of the top tech players is 30 whose shares beat the Standard Poor's 500-stock index during the past months, including some that have appreciated more than 40%. The best-performing sectors: software and services. It's not hard to figure out why. No matter what happens to the market or the economy, companies have to invest in Web technologies—or risk getting crushed by their competition. "There's tremendous pressure to Internet-enable business operations," says analyst David Weiner of Prudential Volpe Brown.

The rise of e-business enriches more than just sellers of Web tools. Consider the No. 1 stock performer on our IT 100 date, contract manufacturer Sanmina in San Jose, Calif. Its shares have soared more than 65% since May, thanks to blistering revenue and profit growth. Sanmina's focus on building the equipment that powers the Net. Unlike other shops that churn out low-margin products, Sanmina gets 80% of revenues from making pricey communications products for customers like Cisco Systems, Nortel Networks, Motorola, and Sun Microsystems. "We make bricks for building the

Internet infrastructure," says CEO Jure Sola, who co-founded Sanmina in 1980.

Still, the aggregate performance of the IT 100 is a far cry from the glory days of the tech-stock boom. The annual BUSINESS WEEK list, released in June, uses a combination of revenues, revenue growth, profitability, and stock return to rank the 100 hottest technol-

ogy companies on the planet. The 98 entrants still left from last spring's tally—two have been acquired—sagged by an average of 19% between May 12 and Nov. 13, compared with a 4.4% decline in the S&P 500 and the Nasdaq's 16% drop over the same period. A year ago, when tech issues were sizzling, our IT 100 companies rose 37% in six months.

CREAMED. Blame a loss of faith in the Internet. Although the dozen Net companies on the IT 100 posted revenue growth of more than 60% in the last two quarters, a third of them showed a loss and four others barely eked out a profit. Sales growth alone isn't enough for investors these days, who knocked an average of 38% off the group's shares. The worst performer on the list was New York-based e-mail marketer NetCreations, down 79%. Despite more than quintupling its revenues and tripling profits, NetCreations got creamed in the dot-com collapse and agreed in October to sell out to DoubleClick for \$191 million. Its market cap peaked at nearly \$1.1 billion in March.

Other down segments further underscore Wall Street's skittishness. The 26 semiconductor companies in this year's IT 100 together posted delirious 56%

The 10 Top Performers

RANK/COMPANY NAME	6 MONTHS TOTAL RETURN	12 MONTHS TOTAL RETURN	JUNE RANK
1 Sanmina	65.1	72.5	85
2 NVIDIA	48.1	269.1	4
3 Network Appliance	45.2	267.9	13
4 Micromuse	43.9	117.8	95
5 BEA Systems	41.6	273.0	72
6 Comverse Technology	37.4	73.9	70
7 Siebel Systems	36.3	180.6	2
8 Jabil Circuit	32.9	40.2	49
9 Ciena	32.3	272.1	81
10 Celestica	31.8	69.9	54

MORE RANKINGS ON PAGE 186

revenue growth in the first half of this year compared with 1999. They were led by memory-chip maker Micron Technology, contract fabricator Taiwan Semiconductor Manufacturing, and communications chip darling Broadcom. Yet investors, spooked by concerns that the industry is hurtling toward overcapacity and slower profit growth in 2001, drove shares for the IT 100's semiconductor makers down an average of 28%. So it went, too, for makers of computers and peripherals, whose 24% revenue growth was answered by a 22% stock plunge.

"PROFIT SIDE." So where were the most lucrative corners for tech stock returns? By all measures, the first place to look is among companies serving up software. The top of the IT 100 chart is loaded with them—and not just No. 4-ranked Micromuse. Siebel Systems, a



maker of programs that help companies manage customer relationships, placed No. 7. And at No. 5, there's BEA Systems, a five-year-old company that started out making esoteric software plumbing for corporate networks and now has an estimated 70% share of the market for Web servers that run Java programs. Chief Executive William T. Coleman III exults that after 50 years of being viewed as corporate overhead, information technology finally is recognized as a strategic imperative. "Now, for the first time, we're on the profit side," he says. That's helping to drive explosive growth in Web software tools. BEA, for instance, saw sales climb 80%, to \$340 million, in the last six months.

Some sellers of Internet hardware also remain Wall Street favorites, despite worries of a spending slowdown for communications gear. Tucked into the top of the IT 100 is Ciena (No. 9), a leading maker of optical networking systems. It saw sales surge 74%, to \$419 million, in the past six months as carriers turn increasingly to speedy optical technology to handle their crush of Net traffic. No. 3 Network Appliance, meanwhile, makes specialized Net server computers that manage oceans of e-mail and other data flowing around wired businesses. NetApp registered 122% half-year sales growth, although some investors worry that it may get pummeled by giant EMC.

Don't ignore the contract manufacturers either. Four of them—Sanmina, Jabil Circuit, Celestica, and Flextronics International—rose into the top 20 of the IT 100 over the past six months. Why

A 20-YEAR-OLD OVERNIGHT SUCCESS

No doubt Paul Levy, chairman of Rational Software Corp., thinks these heady days are long overdue. After nearly 20 years as a little-known, slow-growing software company, Rational has turned into a speed demon. What was a \$50 million business just five years ago could top \$800 million in annual revenues in fiscal 2001, ending next March. The reason? Rational's software—tools that help other people build programs—has become essential to turning established companies into e-



RATIONAL SOFTWARE

IT 100 RANK 15

CHAIRMAN Paul Levy

THE BUSINESS Makes software tools that help companies create and test e-business applications such as Web inventory management programs

Rational
the e-development company™

ESTIMATED 2001* REVENUES
\$800 million, up 40% from 2000

ESTIMATED 2001* PROFITS
\$133 million, up 48% from 2000

*Fiscal year

DATA: CREDIT SUISSE FIRST BOSTON

businesses. Thanks to the Net, Rational's boring stuff is cool. "The market has finally come to them," says analyst John McPeake of Prudential Securities.

NOT CHEAP. That has certainly spruced up the company's financials. For fiscal 2000, Rational delivered \$85 million in profits on \$572 million in revenues—sales growth up 40% over 1999. Its stock had a similar pop over the past six months, though it was hit by the broad sell-off in tech

issues in recent weeks. Rational's shares climbed from \$36.72 to a peak of \$69.50 in late September before settling at \$44.88 on Nov. 13—making it No. 15 on the six-month update of BUSINESS WEEK's top 100 info-tech performers. "Some of it is foresight," says Levy. "Some of it is luck. And some of it is persistence."

Levy's foresight was to spot the importance of the Net four years ago and revamp his products so they work well on the Web. With Rational's tools, a company can build its

Net software with the latest technologies, manage the project, test it, and make sure it works before putting it online. The software, including Rational's Data Modeler, is not cheap. A sale can run more than \$100,000. But by using it, a company can build its e-business applications up to 50% faster, analysts say. And it helps them sleep easier, too. "Nothing is more expensive than putting out something that breaks," says customer Matthew Hildenbrand, director of quality assurance at e-marketplace host VerticalNet Inc.

All of this has helped Rational dominate the \$1.2 billion market for Net software tools. It has

only a few sizable rivals, including Sterling Software Inc. and Telelogic AB. The result: Rational has a 38% market share, according to researcher International Data Corp. The other two have just 8% each.

For the old-timers at Rational, success is sweet. Levy and U.S. Air Force Academy classmate Michael T. Devlin, Rational's CEO, started the company after they left the military in 1980. Fortunately for them, the computer technology they used was similar to Net technologies. "All the stuff Rational had been working on became key to making the Internet breathe," says Levy. The partners waited out a two-decade countdown for what is turning out to be a rocket ship ride.

By Jim Kerstetter
in Cupertino, Calif.

Philip Morris Introduces PaperSelectTM

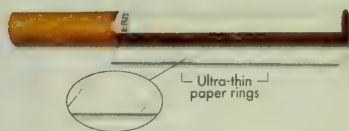
Now Featured on Merit Cigarettes.



Cigarettes made with PaperSelect may be less likely to ignite certain fabrics.*

PaperSelect features ultra-thin paper rings that work like speed bumps, causing the

cigarette to burn slower when the lit end crosses over them.



It may even put itself out when resting in an ashtray. You still get the same rewarding taste,



only now with our patented cigarette paper.

Look for Merit cigarettes now made with PaperSelect.

Cigarettes made with this paper were evaluated under a laboratory test method designed by the National Institute of Standards and Technology to measure the likelihood that cigarettes will ignite the three test fabrics specified in this test method. Under this testing method, these cigarettes produced fewer ignitions of the three test fabrics as compared to the same cigarettes made without the special paper. It is important to note that the test fabrics are not necessarily representative of the kinds of fabrics one might find in a particular home or elsewhere. These cigarettes are not "fire safe." Do not handle or dispose of cigarettes made with this special paper with any less care than other cigarettes. Anything that burns, including cigarettes or cigarette ashes, can cause a fire if handled carelessly.

SURGEON GENERAL'S WARNING: Smoking Causes Lung Cancer, Heart Disease, Emphysema, And May Complicate Pregnancy.

© Philip Morris Inc. 2000

For more information about PM USA and its products, visit www.philipmorrisusa.com or call 1-877-PMUSAWEB.

Ultima: 1 mg "tar," 0.1 mg nicotine—Ultra Lights: 5 mg "tar," 0.5 mg nicotine—Lights: 8 mg "tar," 0.6 mg nicotine av. per cigarette by FTC method.

so hot? "In two words, Internet infrastructure," says analyst Jerry H. Labowitz of Merrill Lynch & Co. He argues that contract manufacturers are largely immune to the ebb and flow of demand. The reason: No matter what happens to the economy in the next few years, equipment sellers will outsource more production to cut costs.

At the other end of the scale are the scores of companies whose six-month stock performance lagged behind the S&P 500 and Nasdaq. Many are chipmakers, but some are providers of telecom services, such as WorldCom and Sprint PCS Group, which face rapidly

eroding prices. The bottom 10 performers run the gamut from Internet companies to PC peripheral makers to Apple Computer, whose stock plunged 64% on fears that its comeback might be running out of steam. Most of the poorly performing companies were hammered for missing quarterly sales estimates or warning of slower growth. Web content syndicator InfoSpace (No.94) and portal Yahoo! (No.91) were hurt by fears of lower Net ad growth. No.97, Viant, got dragged down by a collapse among Net consulting outfits—worsened by its overreliance on shaky dot-com customers.



The six-month returns of the IT 100 suggest a market that's awfully fickle. Even though the stock performance of many companies appears out of whack with their fundamentals, the market deserves some credit for consistency. Fourteen of the top 20 six-month performers also rank among the top 20 for the whole year, while half of the bottom 20 also are in the basement for 12-month stock returns. The trick for investors is to spot those patterns—and now, always, they can hardly do better than by investing in companies that help other businesses make more money.

By Andy Reinhardt in San Mateo, Calif., with bureau reports

SONICBLUE IS SINGING A NEW SONG

Kenneth F. Potashner knew it was time for a change. His company, S3 Inc., was having a good run selling graphic accelerator chips for multimedia computers. Investors had bid shares up by more than 1,500%, pushing S3's market cap to \$2.3 billion in March from \$150 million 18 months earlier. But after the current-model chip, his engineers had nothing in the pipeline—the kiss of death in the cutthroat semiconductor business. "It's a pretty hostile environment," Potashner says. His solution: Buy Diamond Multimedia Systems Inc., a customer that accounted for 16% of S3's sales. If he owned Diamond, Potashner reasoned, he'd have a captive market for his chips.

Then a funny thing happened on the way to the deal table. After seeing the gusto with which his 15-year-old son downloaded songs from the Internet, Potashner realized that Diamond's Rio—the first portable MP3 player on the market—was the company's real gem. Now, Potashner is selling off his chipmaking assets and focusing on consumer gadgets, Internet access devices, and home networking equipment. To underscore the change, on Oct. 31 he shed the geeky S3 moniker for the trendier-sounding SONICblue Inc. The name, Potashner says, sounds "aggressive, fast, with a real deep foundation."

BAD TIMING? Sounds great. Trouble is, investors aren't impressed. Despite the new business and spiffed-up name, SONICblue's stock has tumbled 29% in the six months ended Nov. 13, dropping the company

to 54th in BUSINESS WEEK's Info Tech 100 from No.19 in June. The problem: SONICblue, based in Santa Clara, Calif., made the shift just as Wall Street soured on the Internet. Music-industry lawsuits seeking to ban Web sites such as Napster and MP3.com from offering free song downloads didn't help either. "If there are no freebies, why buy an



SONICBLUE (FORMERLY S3)

IT 100 RANK 54

CEO Ken Potashner

THE BUSINESS The former maker of semiconductors for gadgets such as MP3 players and handheld computers is shifting gears: It'll skip the chips and make the gadgets.

EST. 2000 REVENUES* \$157 million, up 76% from 1999

EST. 2000 NET LOSS* \$114.1 million

*Continuing businesses only

SONICblue

DATA: FIRST CALL

MP3 player?" says Lehman Brothers Inc. analyst Joe To.

Still, the music hasn't died entirely at SONICblue. Analyst To predicts that the company can increase revenues 150% annually for the next two years from this year's projected \$157 million in sales. He expects SONICblue to get back into the black by the middle of 2001, up from a loss of \$114 million this year.

Why the upbeat tune? An October deal between Napster and Bertelsmann to create a subscription service for Napster users could give Internet swapping of MP3 files a new lease on life. And the Rio player outsells all other MP3 players, say researchers Cahners In-Stat Group, besting offerings from the likes of Sony and Samsung.

That's just for starters. SONICblue also is licensing its products to companies such as Nike Inc. For the shoemaker, it's building a tiny oval-shaped player that Nike is flogging as a stocking stuffer for runners and other jocks this Christmas. And Potashner plans to take digital data far beyond the PC. In November, he bought British-based empeg Ltd., which makes MP3 players for cars. And soon he'll launch the "WebPad"—a handheld Net appliance. "We needed to jettison our history" to build the business, Potashner says. He has clearly broken with the past, but whether Wall Street likes the future remains in doubt.

By Cliff Edwards in Santa Clara, Calif.



WHEN EMPLOYEES ARE HAPPY WITH THEIR 401(K) PLAN, IT SHOWS. They work harder and stay with you longer. We should know. As the nation's 401(k) leader, we've been helping growing businesses and their employees secure their financial futures for over 50 years. No wonder more companies choose The Principal® for their 401(k) plans.* Investment options, recordkeeping, loan services, plan member education and asset allocation—we've got what you need, plus personalized service and local support to make the process easy. What's not to love? If you'd like to hear what a 401(k) plan from The Principal can do for your employees, call 1-800-986-3343 (ext. 80080). One of our representatives will be happy to help, no matter what you're wearing.

WE UNDERSTAND WHAT YOU'RE WORKING FOR™



www.principal.com

HOW THE REST STACK UP*

RANK	COMPANY NAME	6 MONTHS TOTAL RETURN	12 MONTHS TOTAL RETURN	JUNE RANK
11	SBC Communications	30.7	16.0	90
12	Cognos	30.3	143.8	76
13	Veritas Software	26.0	118.6	43
14	EMC	23.7	90.8	26
15	Rational Software	22.2	102.8	73
16	Broadcom	9.4	81.3	17
17	i2 Technologies	8.3	211.1	44
18	Flextronics International	8.2	47.2	31
19	Xilinx	6.1	40.1	9
20	Scientific-Atlanta	4.9	103.8	38
21	Solectron	4.8	-18.8	86
22	Sun Microsystems	4.7	43.0	11
23	VoiceStream Wireless	3.7	20.0	69
24	Maxim Integrated Products	2.8	40.9	92
25	Art Technology Group	2.3	38.6	88
26	Amdocs	0.2	76.4	12
27	Hon Hai Precision	-1.3	15.6	27
28	Take-Two Interactive Software	-2.5	1.4	93
29	IDT	-3.1	45.3	48
30	Microsoft	-3.5	-25.5	75
	S&P 500 Index	-4.4	-2.1	
31	Tellabs	-5.3	-20.9	66
32	VeriSign	-7.2	29.5	96
33	America Online	-11.2	-34.0	78
34	NTT DoCoMo	-13.2	-4.8	40
35	CDW Computer Centers	-15.4	66.4	6
36	Logitech International	-15.7	194.4	42
	Nasdaq Composite Index	-15.9	-7.7	
37	Cisco Systems	-16.0	20.7	25
38	China Telecom (Hong Kong)	-16.3	46.7	21
39	Compuware	-16.7	-71.3	82
40	SCI Systems	-17.4	17.2	80
41	PC Connection	-17.7	71.0	7
42	Tech Data	-18.0	30.0	61
43	Integrated Device Technology	-19.0	84.3	56
44	Asustek Computer	-19.6	-31.9	59
45	Powerwave Technologies	-20.1	132.1	18
46	JDS Uniphase	-20.9	36.0	23
47	SK Telecom	-21.3	49.0	53
48	Analog Devices	-22.0	55.4	10
49	Nortel Networks	-25.9	6.4	55
50	CTS	-25.9	-37.0	16
51	Lattice Semiconductor	-26.1	-5.0	84
52	Murata Manufacturing	-26.5	-17.9	47
53	Gateway	-26.9	-52.1	83

RANK	COMPANY NAME	6 MONTHS TOTAL RETURN	12 MONTHS TOTAL RETURN	JUNE RANK
54	SONICblue (S3)	-29.4	-8.4	19
55	Nextel Communications	-30.4	-28.0	68
56	Nokia	-30.8	23.3	1
57	ADC Telecommunications	-31.0	74.9	41
58	Legend Holdings	-31.3	95.2	8
59	Altera	-32.8	-12.9	52
60	STMicroelectronics	-32.9	23.2	20
61	Oracle	-33.3	52.0	3
62	Hewlett-Packard	-34.5	12.6	98
63	KEMET	-36.0	41.1	35
64	Symantec	-36.8	-26.0	28
65	BroadVision	-36.9	-2.1	34
66	Cypress Semiconductor	-37.2	4.0	22
67	Taiwan Semiconductor	-37.3	-24.6	5
68	Conexant Systems	-38.8	-59.0	77
69	Atmel	-39.4	3.8	63
70	Computer Associates	-39.6	-51.6	51
71	Texas Instruments	-40.0	-15.9	50
72	Chartered Semiconductor	-40.1	-18.9	57
73	AVX	-40.3	19.1	39
74	Ericsson (L M) Telephone	-40.8	1.4	29
75	Sapient	-41.2	-34.1	91
76	Getronics	-41.5	-40.8	45
77	Tokyo Electron	-43.8	-15.0	60
78	Infineon Technologies	-44.6	NA	46
79	LSI Logic	-45.1	-16.2	37
80	Titan	-46.4	-14.3	62
81	Micron Technology	-46.7	-11.9	14
82	NetCom AB	-49.9	-27.5	32
83	Amkor Technology	-50.1	-12.4	33
84	Advanced Micro Devices	-50.3	60.5	36
85	Vignette	-51.3	-26.2	89
86	Sprint PCS Group	-51.5	-38.9	71
87	Dell Computer	-51.6	-42.2	24
88	ATI Technologies	-51.9	-17.9	64
89	Yahoo! Japan	-52.6	-44.8	15
90	Citrix Systems	-55.0	-39.6	67
91	Yahoo!	-56.0	-43.8	94
92	Lexmark International Group	-56.7	-52.8	79
93	WorldCom	-60.3	-72.1	97
94	InfoSpace	-61.0	28.5	100
95	Apple Computer	-64.0	-57.2	58
96	Internet Capital Group	-66.6	-87.4	30
97	Viant	-76.1	-89.1	87
98	NetCreations	-78.8	-67.7	74

* TWO COMPANIES, BURR-BROWN AND NETWORK SOLUTIONS, WERE ACQUIRED

DATA: STANDARD & POOR'S COMPUSTAT, BLOOMBERG

? Think about it

Datek Online. Built to trade.



Perhaps it's no surprise that an online broker is specifically designed to execute trades. The real news is that too many online brokers still aren't. In fact, they often have little to do with executing your trade at all. Rather, they may send your order to trading desks, market makers or other middlemen who execute the orders the old way. Datek, however, has developed proprietary technology that automatically routes your order in an effort to get you the best available price in the current market. That's why Datek pledges that if your marketable online order is not executed within 60 seconds, they'll waive the \$9.99 commission*. To learn more about how Datek is truly built to trade, visit www.datek.com.

www.datek.com

1-877-88-datek

Built to trade™

DATEK
ONLINE



*Sixty-second commitment applies to online orders that are marketable after 9:45 A.M. Eastern Time. The order cannot be a short sale and the market must not be closed, locked or halted. Certain restrictions apply. See Datek's website for details. All online trades are only \$9.99 up to 5,000 shares. High volumes of trading and volatility may result in execution prices significantly away from the price quoted or displayed at order entry. System response and access times may vary due to market conditions, system performance and other factors. ©2000 Datek Online. Member NASD/SIPC.

Announcing...

The Tenth Annual Forum of Chief Financial Officers

February 28-March 2, 2001

The Breakers, Palm Beach, FL

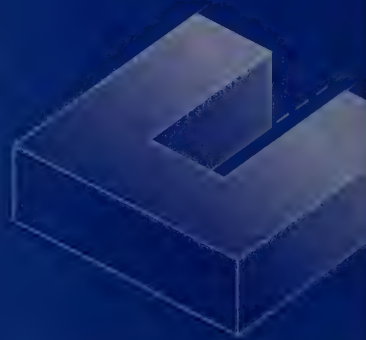
The Premier Corporate Finance Event

CFO as e.biz Architect



From February 28-March 2, 2001, BusinessWeek will gather together America's top Chief Financial Officers in Palm Beach, Florida for the year's most prestigious corporate finance event. ■ This private, invitation-only forum at The Breakers will focus on the ways in which CFOs can take "e.biz" to the next level, guiding their companies toward utilizing the Net's full potential for speed, efficiency and innovation.

Conducted in a retreat-like setting, the forum encourages collegial interaction so that participants may gain the well-founded knowledge that is only derived from exchanging ideas, sharing experiences, and engaging in compelling discussions. ■ Topics include: "Finding an E-Business Model that Works", "Supply-Chain Management Comes of Age" and "The Implications of Going Wireless." The Annual BusinessWeek Forum of Chief Financial Officers is an exclusive event reserved for today's elite financial leaders. ■



BusinessWeek

EXECUTIVE PROGRAMS

THE 2001

CFO
FORUM

If you have received an invitation, we urge you to RSVP today. If you have not received one, but believe you should attend, please contact us. Simply call 212.512.6673.



IN PARTNERSHIP WITH
Zurich Financial Services

SPONSORED BY
LeapSource
Milliman & Robertson, Inc.

WITH SUPPORT FROM
GetThere



SPEAKER



ROBERT H. BRUST
Executive Vice President and CEO
Eastman Kodak Company

SPEAKER



THOMAS MALONE
Patrick J. McGovern Professor
of Information Systems
Sloan School of Management, MIT

SPEAKER



WARREN C. JENSON
Senior Vice President and CFO
Amazon.com Inc.

SPEAKER



HEIDI G. MILLER
Chief Financial Officer and SEVP,
Strategic Planning and Administration
priorline.com Incorporated

SPEAKER



JERRY M. KENNELLY
Senior Vice President, CEO
and Secretary
Inktomi Corporation

SPEAKER



JAMES A. PARKE
Vice Chairman and CEO
GE Capital



AUTOS

WHERE'S MY DREAM CAR?

Why built-to-order autos aren't rolling out of cyberdealerships

THE MARKET EXISTS

Carol Sage found the car that she wanted on the Web—using a Ford pilot program

and it's easily two months before your custom car is delivered. Auto makers now are trying to cut the delivery time in half, but it could be up to 10 years before true build-to-order systems are widespread. Mark T. Hogan, president of GM's e-GM e-commerce unit, concedes, "It's still in the formative stages."

EASIER SAID. That has led many observers wondering if carmakers were just blowing a lot of e-smoke last year. Lost, they say, was a realistic sense of just how much companies would have to tear things up. Auto makers have been laying the groundwork to build custom cars, but they are finding that connecting dealers, assembly plants, and

All Brenda Clough wanted was a new Toyota Celica without a tacky spoiler on the trunk. But not one of the six dealerships near her Northern Virginia suburb could come up with one, even though spoilers are listed as an option on the car. "I told my dealer it was a deal-breaker," says Clough, 45. Just as shocking, though, was when the science-fiction writer discovered that it took three months of surfing the Internet and old-fashioned phone calls to Toyota dealerships in surrounding states before she could find a Celica sans spoiler. Clough bought the car, even though it lacks anti-lock brakes, side-impact air bags, and a winterizing package—all of them options she would gladly have paid a few thousand dollars to get.

Such buying experiences were supposed to soon become a thing of the past. It has been more than a year since Ford Motor Co. and General Motors Corp. announced with much fanfare that they would harness the Internet to revolutionize the way they built and sold cars. The companies said they would spend millions to explore how to deliver cars the way Dell Computer Corp. spits out computers—taking a customer's order,

building exactly that vehicle, and delivering it within a couple of weeks. The goal: Let customers use the Web to get what they want and feed that information back through the system to dealers, suppliers, designers, and factories to smooth out the entire process.

Yet today the way you buy cars has changed hardly at all. Close to 90% of car buyers still get their cars out of existing dealer stock, and 40% make some kind of compromise on styling. And nothing has changed if you want to order a car that's not available in inventory: It takes 30 days before the auto maker's order system accepts the request and 10 more to get the order into the production schedule. Add 3 days to build and 15 days for shipping,

suppliers in one seamless Internet chain is no simple task. "To move to a true build-to-order system will take a monumental change," says Michael Robine, managing director of automotive research outfit CSM Forecasting Inc. in Northville, Mich.

Auto executives say they haven't given up. Limited build-to-order systems may be in place in the next couple of years. GM, for instance, is starting to build custom versions of its Celta compact in Brazil. Starting early next year it plans to offer one-week delivery, which is possible because the car has only a few combinations of options. But it will take GM several years to implement similar plans globally, says Anthony C. Koblinski, GM's executive director of order-to-delivery projects. In time, he says, "We think we can make it easier for customers to choose, and reduce the complexity that the factories face."

Meanwhile, Detroit is moving forward with less ambitious Internet buying initiatives. These test programs work to find the desired vehicle within existing inventory—with the right combination of colors, options, and amenities—and get it to the buyer the same day. There's no schlepping around, since the inventory is

Now, Detroit's sights are lower: Don't build the car to order, find it on an online network

A woman with dark hair and a slight smile is looking out of a car window. The background is a blurred, high-angle view of a city at night, with lights from buildings and streets creating a bokeh effect. The sky is dark with some clouds.

A car
that can see
and talk?

"Very responsive."

Delphi Automotive Systems is working to make vehicles respond to drivers as well as the road. Our Communiport® Mobile MultiMedia Systems can navigate, download, read, listen and speak. Our Forewarn® Collision Avoidance Systems will help drivers see 360 degrees around them. And our 42-volt system can power all this...and more. To find out more about how these future technologies can respond to you, visit www.delphiauto.com.

DELPHI

Automotive Systems

Driving Tomorrow's Technology



marketplaces

WHAT A GREAT LOCATION



Introducing the e-marketplace alliance: IBM, i2 and Ariba. Three o

OR AN E-MARKETPLACE.



Best names in e-business working together to help make your business
efficiently — whether you buy or sell ships, sleds or seafood. It's b2b×3.

ibm
i2
ariba

www.ibm-i2-ariba.com or call 877 426 2676; priority code: emarket1



Carmakers must learn what consumers want sooner

all listed online. And by agreeing to join the network, dealers—who have resisted the idea of building cars to order—already have agreed to trade cars at prices that are available on the Web.

Car execs insist that such systems could still make a big difference for customers—and if applied on a wide scale, could save billions for car companies and their support systems. “The big money,” says Gary E. Dilts, Daimler-Chrysler’s vice-president for retail strategies and dealer relations, “is your ability to react to the market.”

COSTLY COLORS. That means forget Dell for now. The auto makers would be happy to become as advanced at meeting demand as Wal-Mart Stores Inc. The Arkansas-based retailer excels at tracking the buying habits of its customers and making sure the right stock is available where and when it’s needed. The car companies, by contrast, currently plan production with an educated guess at what demand will be for certain models. If they’re wrong—and they often are—dealers sell cars with unwanted colors and options by cutting deals. “Today, we build a certain number of vehicles and try to sell them,” says Brian P. Kelley, a Ford vice-president and president of the company’s Consumer Connect e-commerce unit. “Tomorrow, we will build vehicles that there is demand for.”

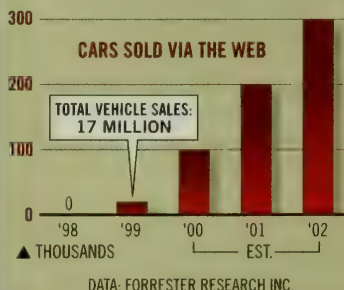
Some experts doubt that building truly customized cars on demand will ever attract mass interest. What buyers really want is to go to a dealership and find a vehicle that has the right color and perhaps a couple of options, says Maryann Keller, who resigned as president of Priceline.com Inc.’s auto retail group in early November. Most consumers who bought cars from Priceline had strong preferences for color, interior amenities, engine size, and safety equipment, but didn’t care about customizing the rest, she says.

So it may be that auto makers just need to do a better job of matching inventory to demand. And in that regard,

Detroit is working to get ahead of the Japanese. Ford has launched a pilot program in Canada that will locate an exact vehicle for a customer’s specs—currently confined to Focus compacts, Taurus sedans, and Windstar minivans—and get it to a nearby dealer. It worked for Carol Sage, who found her Windstar minivan online using Ford’s program. A single mother in St. Catharines, Ont., Sage says she doesn’t have time for car shopping. She was happy to let the dealers find her exact car choice after she plugged her specs into a Web site. Says Sage: “If you don’t have four or five hours to go to the dealership, it’s the way to go.”

KICKING THE TIRES OVER THE WIRES

You can’t get a car custom built fast, but you can custom order it on the Web



Ford plans to expand the system, called FordDirect.com, and roll it out in California next year. GM has a similar pilot program in Minneapolis, where Oldsmobile Alero buyers can choose a car from the inventory of one of several dealers in the area. In a couple of months, GM will add a feature that allows build-to-order of sorts: If your car of choice can’t be found in one of the seven pilot dealerships, GM’s assembly plant in Lansing, Mich., will custom build it with a target delivery time of 15 to 30 days. Meanwhile, Toyota, which announced plans for a five-day delivery system last year and then

recanted, is working with Seattle dealers to pool inventory and trade cars to satisfy customers.

But if they hope to expand such systems beyond local markets, carmakers will need more sophisticated technology to track consumer shopping habits and match them with inventory. That’s what Ford has tapped software maker Trilog to set up a system similar to the one used by Wal-Mart. “The auto manufacturers still don’t have great information about what consumers are shopping for,” says Chris Porch, CEO of the Ford-Trilog venture.

LESS GUESSWORK. The potential payoff is big enough, though, that they’re likely to keep trying. Andersen Consulting estimates that auto makers could boost per-vehicle profits by as much as \$850 if they had the right vehicles in inventory. Forrester Research Inc. estimates that the dealers and manufacturers could add \$7.7 billion to their bottom lines if they didn’t have to drop the price to sell a vehicle that wasn’t what customers wanted. Says GM’s Hogan: “If you’re more precise with inventory, customers will be less concerned with price.”

That would also play to the concern of local dealers, who have so far proved remarkably resistant to predictions that they would be supplanted by e-tailing of national car-sales chains. Dealers balk at build-to-order schemes—after all, the last thing they want to do is tell a customer to wait for a newly built car when they have cars on the lot to push. “The instinct is, we’ve lost a sale,” says Cliff Johnson, a Fort Worth Ford dealer. However, he says dealers are willing to trade within their inventory under FordDirect.com.

Cars probably will be sold pretty much as they are now for the foreseeable future. Detroit may not be able to deliver yet on its futuristic vision of custom-built cars, but someday soon it could at least have more of the right vehicles in stock. And even that would save buyers like Clough some truck-size headaches.

By David Welch in Detroit

LAST DAYS OF THE INDUSTRIAL RAJ?

India's dynasties may lose control of their empires—thanks to hostile-takeover fever

For the scions of India's sleepy, Old-Guard companies, the last six weeks have been most unpleasant. On Oct. 10, Arun Bajoria, an upstart dealer from Calcutta, revealed that he had bought 14% of languishing textile maker Bombay Dyeing & Manufacturing and would seek a board seat. Bajoria hasn't disclosed his

plans, but the 121-year-old group is now more attractive for the pricey land its Bombay mills sit on than for its cloth, analysts say.

The market has only gotten scarier since. On Oct. 13, Renaissance Estates, a young New Delhi construction company, revealed that it had accumulated more than

5% of Gesco, a real-estate spin-off of venerable Great Eastern Shipping Co. and would bid 60¢ a share for a 51% stake. Gesco's share price has since nearly tripled to 90¢.

CHEERING SHAREHOLDERS. Then, in early November, news broke that cigarette maker and hotelier ITC Ltd. had bought 5% of posh East India Hotels Ltd. since the start of the year. ITC coolly called the buying "routine treasury operations." Aware of ITC's moves, the Oberoi family, East India's founders, has boosted its stake to 39%, from 36%, in the past few months.

Hostile-takeover fever has finally hit India, and long-abused minority shareholders are cheering. The three ambushes have helped boost the benchmark Bombay Sensex index 13% since Oct. 20, its first good bounce since February. How far would-be raiders will get is still uncertain. India's takeover regime is still largely untested, and the old industrial families retain great power. But if raiders have their way, the Bombay market could witness



Few founding families own more than a small part of their company's shares

If raiders have their way, the Bombay market may witness a wave of takeovers that rocks the Establishment

a wave of takeovers that rocks the Establishment.

Technically, hostile takeovers have been legal since securities regulators adopted a new merger and acquisition code in 1997. But upstart companies didn't bother with India's industrial elephants until now. Hot tech stocks were everyone's preoccupation. As those stocks have fallen, however, aggressive Indian businessmen have taken a new look at the national champions that have long dominated their sectors via government-granted monopolies. Many of these companies' share prices are below their net asset values per share—sometimes drastically so. That makes takeovers a cheap way to buy real estate, ships, factories, and dominant, if often poorly run, businesses.

Hostile raids are especially tempting because few founding families own more than a small part of their shares. Instead, big blocks are held by family allies in the state financial institutions such as the Unit Trust of India and Industrial Development Bank of India. The rest, usually 40% to 60%, is in public hands.

The banks and fund companies, which hold some 40% of Indian share capital, are the key to cracking the dynasties' grip—or at least boosting returns for other shareholders. For decades, the families have run the companies like fiefdoms, giving scant attention to share price. The financial institutions, which together with family nominees dominate corporate boards, seldom question decisions.

However, should they decide to break ranks and sell to a top-bidding raider, a takeover could succeed. That's more likely now because some financial groups have nonstate shareholders—including foreigners—to whom they must also answer, and those new shareholders are showing growing signs of restlessness.

No wonder the investment bankers—including those at big Western banks—now consider all top Indian groups vulnerable, including industrial conglomerate Mahindra & Mahindra and the Tata and Birla groups, which are leaders in the truck, chemical, and

cement markets (table). Tata unit Telco, India's largest truckmaker, for instance, has a market cap of about \$430 million, down from more than \$1 billion early this year. But its book value is \$645 million. "Anyone who owns less than 20% of their company is a potential target. They had better worry," says Jay Daniel, head of research at Corporate Database, a Bombay data-analysis firm.

The recent ambushes have jolted the family-run concerns. Gesco's Ghanshyam Sheth, the nephew of the company founder, and Nusli N. Wadia, the head of

test case for India," says Abhishek Dalmia, a managing director of the company, who says he has a \$50 million wallet to play with.

Even if the raiders' bids are unsuccessful, minority shareholders—individuals and funds—benefit from increased demand for the shares. The Ambani brothers, who run Reliance Group, which has \$5 billion in annual revenues, said they'll increase their stake to 51% from 40%. The Tata group has been buying back shares in its 43 quoted companies. The share price of unprofitable Telco has risen more than 20% in November.

CORPORATE ARISTOCRACY

Minority shareholders can't resist counting their chickens. "Shareholders will make money in a hostile takeover," says Mahesh Keswani, a private investor from Bombay who has held a block of Great Eastern Shipping shares for 20 years. He watched helplessly as his shares in Gesco's parent company sank from \$6.50 in 1994 to about 70¢ now. That includes a recent 20% bounce after Great Eastern announced a buyback.

Is this the dawn of a period of forced consolidation? Some skeptics doubt it. Af-

ter all, financial institutions watched passively for five years as their holdings in the old corporate aristocracy lost up to 75% of their value. And even if India's blue-blooded industrialists wanted to sell, they probably wouldn't out of snobbery, says Kayu Mehta, head of private equity at Bank of America in India. Selling to a mere jute trader from Calcutta would be intolerable. "DuPont may have been more welcome," he says. For the moment that's not an option, since foreign companies still can't make takeover bids in India.

For all that, the taboo against challenging the industrial rajahs is shattered. The next test will come when regulators rule on the validity of the bids for Gesco and Bombay Dyeing. If they go through, the game will have truly begun—and the old families will ignore the market at their peril.

*By Manjeet Kripalani
in Bombay*

CIRCLING THE WAGONS

The market caps of some old-line Indian groups are smaller than their book values. Now raiders are appearing.

COMPANIES	SECTOR	SHARE PRICE*	BOOK VALUE*
GREAT EASTERN SHIPPING	Shipping, Real Estate	0.72	0.80
EICHER	Tractors	0.34	2.10
INDO GULF	Minerals, Fertilizer	0.81	1.48
BOMBAY DYEING	Textiles	2.50	3.35
GRASIM	Cement, Textiles	4.95	6.58
MAHINDRA & MAHINDRA	Tractors, Real Estate	3.16	3.62
TELCO	Trucks	1.91	2.52

DATA:WALLETWATCH, SMIFS, CORPORATE DATABASE
*DOLLARS/SHARE

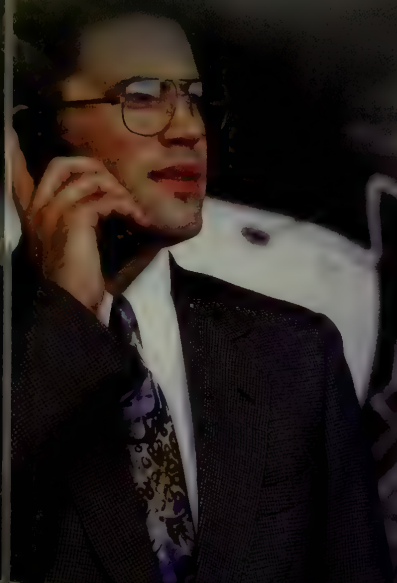
Bombay Dyeing and the grandson of Mohammad Ali Jinnah, founder of Pakistan, rushed to India's securities regulators, alleging that their companies' potential acquirers had violated the takeover code by disclosing their intentions too late. They also claimed that the code was unfair and demanded that it be changed. The regulators don't seem to have been swayed, so far.

Covering all their bets, on Nov. 7, Gesco's Sheth family countered Renaissance Estates' move. The family announced it will team up with Mahindra on a tender offer for the shares needed to build a stake of 51% in Gesco. The deal would give Mahindra control but let Ghanshyam Sheth keep running the company. This is not a sellout, says Sheth: "[It's] a joint venture that will enable us to become a huge player in the real-estate market."

But Renaissance Estates isn't showing any signs of backing off. "This is a

e-Travel Bookings Take Off

REDUCING COSTS, INCREASING TRAVELER SATISFACTION



Quick Flight Search
Number of passengers
Service
Class

e-Travel Bookings Take Off

E-travel is soaring. Last year, 2.2 million business travelers spent \$3 billion booking on the World Wide Web. This year, that number is expected to quadruple. By 2003, it's estimated that online business travel purchases will reach a staggering \$20 billion.

Why such explosive growth?

Companies are finding that by using the Web for corporate travel purchasing, they're able to control direct and indirect costs in ways they never were able to before. By reducing their reliance on travel agencies – which now charge hefty fees for bookings – companies can slash their travel management costs even while improving traveler satisfaction. New B2B corporate travel portals allow consumers to review virtually all their choices of travel inventory whether it's an airline seat, hotel room or rental car, giving travelers exponentially improved choice.

The Web is also a brilliantly efficient tool that correlates all travel management functions: purchasing, administration, and reporting. Web-based systems, from expense reporting “solutions” to data warehousing, arm companies with the information they need to make advantageous deals with travel suppliers. The Web is also a means by which travel suppliers can build and maintain relationships with corporate customers, allowing frequent and targeted communications with travelers and travel managers, and improved customer service and quality control, all while shifting purchasing power from supplier to buyer.

Want to learn more about e-travel management? Read about:

HOW THE NEW B2B MARKETPLACE AFFECTS TRAVEL PURCHASING:

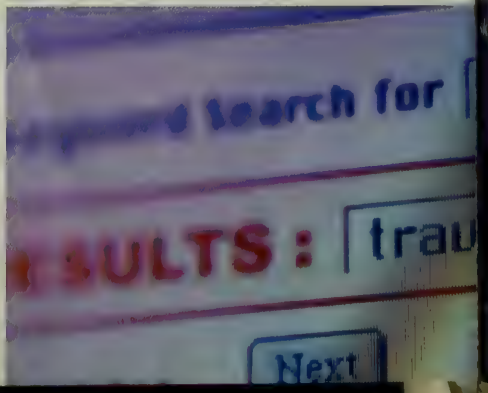
The Web is providing strategic alternatives to the traditional ways of buying travel.

SURFING THE TOP TRAVEL SITES:

The best sites for booking, mapping, meeting planning, even last-minute travel arrangements

INNOVATIONS IN THE WORLD OF 'E':

How travel suppliers are inventing new technology products and services to streamline purchasing and improve the overall travel experience.

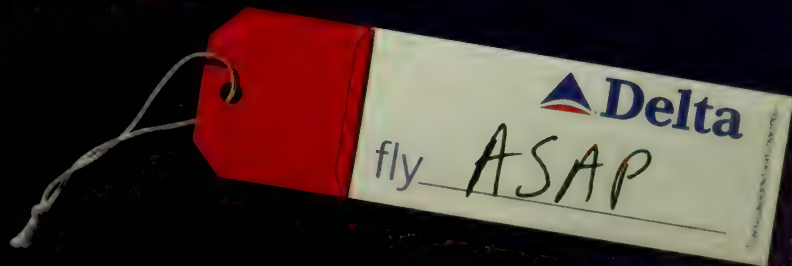


passenger request:

Anything but more lines

Delta means:

- checking in at the curb w/your  ticket*
- getting your boarding pass at the curb w/your  ticket
- going straight to the plane from the curb w/your  ticket
- skipping any lines on your way there



How the B2B Marketplace Affects Travel Purchasing

Strategic Alternatives to the Traditional Ways of Buying Travel

FIVE YEARS AGO, if you were going on a business trip, you picked up the phone and either called airlines and hotels directly, or you called a travel agent, who made the arrangements and took a commission – paid for by the supplier – for their trouble.

Today, if you make a booking through a travel agent, you're likely to pay somewhere around \$50 per transaction for the privilege, now that commissions have dwindled to a trickle. Multiply that \$50 by several hundred (or thousand) travelers taking five (or 50) trips a year, and it's easy to see why companies of all sizes are looking to alternatives to travel agencies to handle the reservations part of the travel purchasing process.

Many of the world's best run corporations are now using purchasing portals and empowering their employees to, in essence, act as their own travel agents. A click on the "travel" icon on the portal home page or a link off a corporate intranet allows these travelers to tap into a powerful database similar to the ones professional travel counselors use. The intranet may have been built by a high-tech specialist in corporate travel applications, like TRX, or by the IT specialists at a mega-agency like

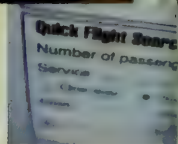


American Express or Maritz, or by a Global Distribution System, like Worldspan or Sabre. (If you work for a small or mid-size company, you're more likely to use a travel Web site like Expedia, Travelocity, trip.com or biztravel.com.)

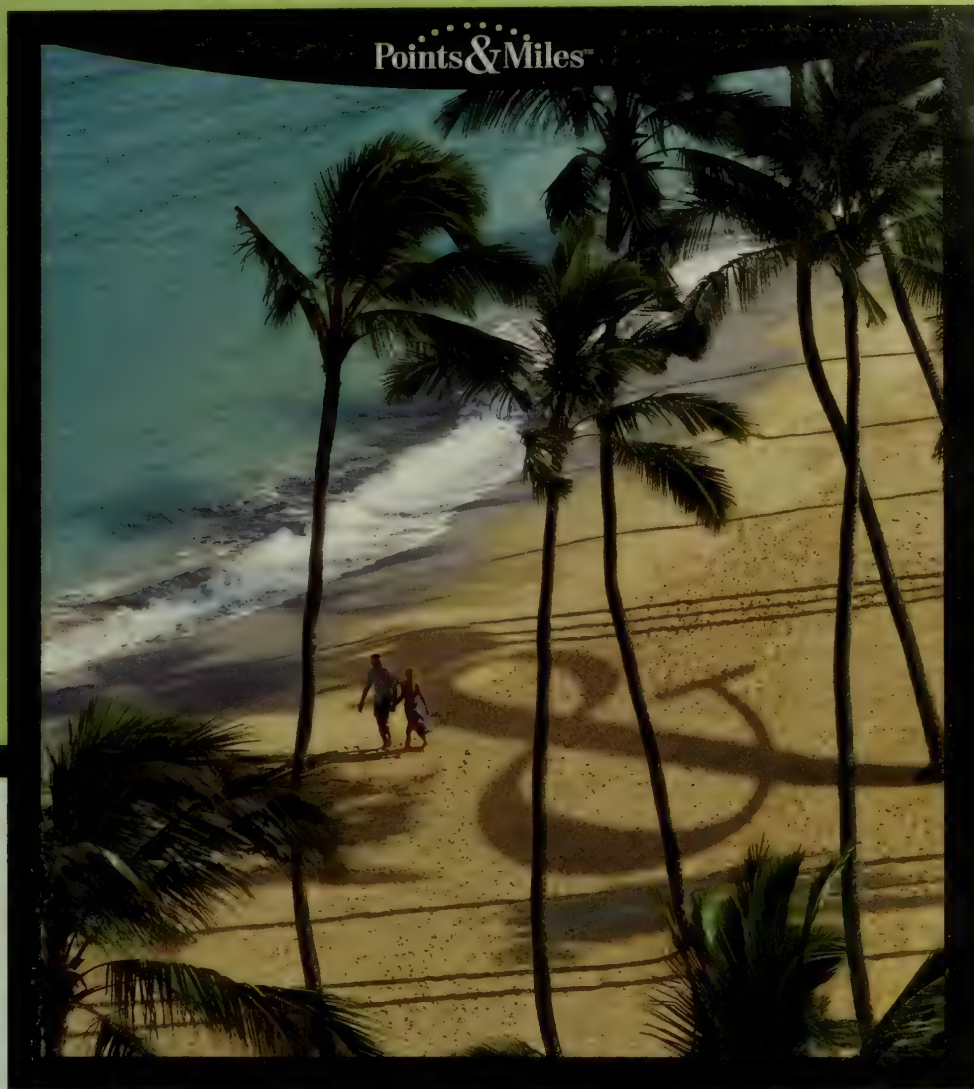
Still, whichever "reservation engine" you use, you'll be able to find the flights and fares, hotel rooms, cars and limousines you need and still remain within your company's purchasing guidelines, which get downloaded in such a way that employees cannot make a reservation out of corporate

policy without special permission. Users can also find all the information they could possibly want on restaurants, nightlife, currency, safety and weather conditions in their destinations. It's even possible to click on a map that shows where your appointments are in relation to the airport, hotel, favorite restaurant and regional office. Click on another icon and an expense report template pops up on the screen, already filled in-prepopulated, in expense wonk parlance – with spending details off a Web-based credit card feed. Add out-of-pocket expenses, click on send, and an expense report is done in less than a minute.

The B2B marketplace and corporate travel are natural partners. The Web helps streamline awkward processes, such as multiple backing-and-forthing with travel agents on the phone to hammer out itinerary specifics, or clogging the accounting department workflow with paper expense reports. The Web also adds price transparency to the mix, allowing travelers to make informed and sound point-of-sale purchasing decisions. Meanwhile, that B2B/corporate travel partnership is being enhanced as suppliers improve their interfaces, add to their menu of services and create interesting new relationships with



Points & Miles™



Earn a free vacation faster. Get both hotel points & airline miles for the same stay at over 2,000 hotels in the Hilton HHonors® family.



Hilton HHonors

Points & Miles™



To enroll in Hilton HHonors or to make reservations, call your professional travel agent or call 1-800-HHONORS.
Or, receive a 1,000 point bonus by enrolling online at www.hiltonhhonors.com.

Online enrollment bonus offered through December 31, 2000. Hilton HHonors membership, earning of points and miles, and redemption of points are subject to HHonors Terms and Conditions. ©2000 Hilton HHonors Worldwide

complementary supplier partners.

One of the best examples of strategic partnerships in the B2B environment has been made by **e-Travel**, a subsidiary of Oracle. It teamed up with Continental Airlines, Delta Air Lines, Hertz, Amtrak and Pegasus Solutions (a hotel representation/booking firm) to enable multiple participants to buy and sell travel products on the Web, including airline and rail tickets, hotel rooms, rental cars and chauffeured car services. e-Travel eliminates many of the costs (and inefficiencies) associated with intermediaries in the traditional travel distribution chain.

There are essentially four components to the e-Travel Marketplace: links to travel suppliers that allow

Cisco, Lucent, MetLife, Nike and Xerox) with the world's leading airline, hotel, retail and car rental suppliers. The GetThere Marketplace also provides value-added services for the corporate traveler, such as wireless access, online ground transportation and restaurant reservations.

Other interesting new partnerships include

Worldspan, the Global Distribution System (GDS), and FlightTime.com, a global provider of air charter services, recently formed a partnership that will allow Worldspan agents to book executive and commercial air charter services on more than 2,000 aircraft, including jets and

turboprops, on behalf of their clients. FlightTime's features include a frequent flyer program and a search function that matches all suitable aircraft to the customer's needs.

Concur, the automated expense report expert, has launched The Concur Business Advantage which consolidates travel purchasing for small and mid-size companies, negotiates discounts with travel suppliers and runs orders through Concur's workflow and approval process. Concur's partners in this effort include Microsoft which will offer "marketing and research and development resources," Nortel Networks and Safeco, each of which invested \$35 million in the venture. ●



Many of the world's best run corporations are now using purchasing portals and empowering their employees to act as their own travel agents.

corporations to interact directly with suppliers to purchase and pay for travel services; additional Internet-based corporate travel management services hosted by e-Travel, such as expense reporting; additional services hosted by partners, such as Internet-based meeting planning services offered through StarCite; and an online community to define and communicate best e-practices in corporate travel management. e-Travel services are used by several major global corporations, including Ingersoll-Rand, The Philip Morris Corporation and Joseph E. Seagram and Sons, Ltd.

Similarly, the **GetThere** Marketplace, the world's largest Internet marketplace focused on B2B travel services, is a framework that connects major buyers of corporate travel services (including Boeing, Chevron,



Life is hectic enough.
Here's how to stay in
control of your trip.

Sabre
virtually
there

TRAVELLER
BENEFITS

Access your real-time
itinerary anywhere

Check flight arrivals,
departures, and gates

Retrieve and send
itinerary by e-mail

Access by laptop,
PDA, or Web phone

From the creators
of Travelocity.com

Introducing Sabre Virtually There

It's everything you need to make your travel experience simpler, easier, and more enjoyable. It's the personal travel website that puts you in control. And it's free. With *Sabre Virtually There*, you have access to a world of travel information—via your PC, PDA, or Web phone. You're always connected to your itinerary, weather information, flight times and gates, dining and entertainment options, and other destination information. And so are your co-workers, family, and friends. Ask your travel professional or visit us online. And find out why more and more travellers are finding *Sabre Virtually There* to be virtually indispensable.

www.virtuallythere.com

Sabre

The Sabre logo, Sabre, Sabre Virtually There and Travelocity.com are trademarks and/or service marks of an affiliate of Sabre Inc. Sabre Virtually There operates with handheld devices with Palm OS® Version 3.X or Microsoft® CE. ©2000 Sabre Inc. All Rights Reserved.



finally, a room with

Explore it all with our

STSN® is Marriott's preferred provider of high-speed Internet access.

© 2000 Marriott International, Inc.

ew. of the world.

-speed Internet service powered by AT&T.



You met with the clients. You made the presentation.
You clinched the deal. Now, what are you going to do for you?

At Marriott and Renaissance Hotels you've
got the whole world at your fingertips. With super-fast high-speed
Internet connections powered by AT&T, you can
check out what's going on in town, read your local newspaper or
just sit back and watch the sun set in Hawaii.

All from the comfort of your room.* Enjoy yourself a little.

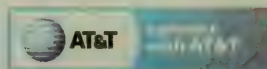
You've worked hard today. In fact, go ahead,
book a flight online and watch that sunset in person.
For more information and reservations visit marriott.com
or call your travel agent or 1-800-228-9290.

thinking of you

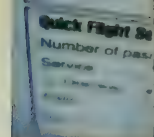

RENAISSANCE.
HOTELS • RESORTS • SUITES


Marriott.
HOTELS • RESORTS • SUITES

High-speed Internet access is being rolled out
at all Marriott hotel brands around the world.



Innovations in the World of E



E-INNOVATIONS for corporate travelers aren't just about making reservations, although there are now more ways to buy an airline ticket than most people ever dreamed possible: at auctions, blind, reverse and otherwise; through virtual travel agents which offer the entire range of corporate travel suppliers (air, hotel, car, etc.) at one portal or through individual vendors, whether they be boutique hotels, car rental companies, corporate jet charters or even peddlers of corporate travel information. You can even use the Web to find someone to water your plants (and your cat) while you're on an extended business trip. Here are some of our e-picks.

New Ways to Buy Tickets

Delta Air Lines (www.delta.com) has formed a partnership with new barter Web site **BigVine.com**

(www.bigvine.com), allowing the carrier to make unsold airline seats available on the site. Don't have enough barter credit on BigVine to book a flight for your next business trip? BigVine partner, **American Express**, will set up credit lines for prospective barterers.

You don't want to pay full fare, but you

don't want totally distressed inventory either (like the 11:00 pm Friday night flight to Sheboygan) on a brand you can't choose, the way you have to at blind-auction Web sites.

That's why there's **Savvio.com**, a new site that provides discounted air fares that continue to drop in price in real time, as you watch, until a buyer steps in. The display shows options by airline, flight number, aircraft type and availability before you enter a bid, so you know exactly on what you're bidding. An e-mail notification feature alerts you when the ticket you covet reaches a specified price; the AutoBuyIt feature automatically snags a fare if and when the price you've determined arrives. Something else to like: you can also earn frequent flyer miles on most flights booked at the site.

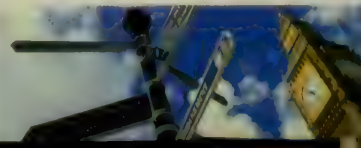
Yatra (www.yatra.com), a start-up B2B corporate travel marketplace,

pools participating companies into an enormous "virtual buyer" with significant purchasing power. Travel supplier then target Yatra users with service upgrades and discounts as high as 40 percent. A fuzzy logic-driven "value assessment" engine considers 50 factors (such as departure time, airline and airport) at point of sale to optimize purchasing decisions. Yatra's real-time information capabilities are a hit with travel managers tracking corporate travel spend; its concept (and technology) was just selected as a "Pundits Pick for New Whiz Bang Technology" at the recent eTravelWorld conference in Orlando.

Interesting Ways to Stay Wired When You're on the Road (Or in the Air)

Infliht Internet content provider **inflightonline**, intent on being the biggest company in its space, has recently added 17 new content partners to its existing 50 and expects to double that number before the end of the year.

Business travelers can use inflightonline to stay in touch with the office via real-time e-mail, book transportation through elimousine.com or make a dinner reservation through Restaurantrow.com. Shoppers will be able to connect to all sorts of purveyors



ags.com, GourmetMarket.com, llage.com, OfficeMax.com, alEstate.com, Lycos, Fidelity estments, Lands' End, Hertz, and gdog.com. News addicts will be able browse Hoover's Online business ws, sports scores, stock quotes and er interactive information sources. d soon, airline schedules, booking vices, airport gate information and ections will be available through pQuest.com. Inflight Internet nections will cost a fraction of the st of typical airphone connections, ompany spokesperson said.

details (such as aircraft type and meal information) and book their flights.

An Innovative Way for Real-Time Flight Info to Boost Service

Flight delays and even the odd early arrival can cause a ripple effect for travelers even after they get off the plane – especially if they've rented a car. To keep customer service levels high even when airports have been socked with delays, **Hertz** is using a new satellite technology called Flight Arrival Notification Systems to provide #1 Club Gold personnel at airport

booked online a reasonable amount of time to make fixes. **Travelocity**, for example, allows complimentary changes to the first ticket purchased.

Meanwhile, **Galileo** launched ViewTrip™ (www.viewtrip.com), a clever tool that allows travelers, their travel arrangers, business associates and/or family members to view – in real time – the most current air, hotel and car rental reservations booked on the Galileo or Apollo computer reservation systems. ViewTrip, only a few months old, is designed as the companion for Galileo Wireless™



You don't want to pay full fare, but you don't want totally distressed inventory either (like the 11:00 pm Friday night flight to Sheboygan).

Important Ways to Get Airline Information & Assistance

Now that most major carriers are part of airline alliances, making reservations, getting information and finding assistance is getting easier than ever. Travelers on **AeroMexico** (www.aeromexico.com.mx), for instance, can make searches and book directly off the airline's newly-enhanced Web site, or access flight information via the SkyTeam site at www.skyteam.com.

SkyTeam, whose anchors (besides AeroMexico) include Delta, Air France and Korean Air, currently offers over 400 daily flights to 451 destinations in 98 countries.

The alliance's integrated information technology network enables passengers to contact SkyTeam's 659 airport and city ticket offices or call centers to ascertain flight schedules, service

locations with real-time flight information. With it, employees can prepare Gold rental stalls in response to potential flight delays and cancellations, ultimately leading to more efficient and productive service. Hertz also has upgraded the wireless technology used by airport courtesy shuttle bus drivers and their colleagues at Hertz #1 Club Gold rental facilities, speeding up car delivery even faster than it already is.

Noteworthy New E-Tools for Flyers

One of the biggest reasons corporate travelers are reluctant to book on the Web is the fear that they won't have any recourse if they goof up by typing in a wrong date, or for not allowing enough time for a connection, or more likely, because of a change in their plans mid-trip. Web-based reservation systems and airlines are now allowing passengers who've

which lets travelers not only view their itineraries but make changes to their flight schedules via any book-markable wireless device or PDA.

Interesting Ways to Keep Up With Frequent Itinerary Changes

Sabre, one of the industry's most innovative technology pioneers, has launched another first: The **Virtually There** Web site which shows travelers their up-to-the-second itineraries – even ones that have been modified several times – and other information on the site and through wireless devices.

"Now, the 60 million travelers who book reservations in Sabre each year have the flexibility to retrieve their travel information anytime, anywhere, via any device," said Scott Smith, senior vice president and general manager of Sabre BTS. "Travelers from more than 500 companies subscribing to Sabre BTS are now also able to wirelessly book their trips."

Virtually There users also will receive proactive alerts about flight cancellations, delays and gate changes. The potential savings in transaction costs and increase in productivity and efficiency through the use of the site are substantial, travel managers say, because employees can quickly and easily obtain the answers they need without having to contact travel consultants – which lowers agency fees while boosting traveler productivity.

Information services include Virtually There To Go which lets



travelers deliver their personalized itineraries to their PDAs and other mobile devices; Sabre Virtually There Flight Tracker which allows travelers' business associates, friends and family members to view exactly where their planes are at any time during the flights; and Sabre Virtually There Restaurant Guide, an online resource for locating and making reservations.

"All of these tools make travel planning more convenient, time efficient and pleasant for Sabre ConnectedSM travelers," said Nancy Raynor, general manager for Sabre Virtually There. "Unlike other online sites, travelers can access these features directly from their itineraries," she added.

New Ways to Encourage Compliance on Airfare Purchasing

Ever wonder whether the Internet fare you've just seen beats your company's negotiated fare on the same route? Want to get corporate credit (not to mention frequent flyer points) for booking an airline ticket off the Web? The new interactive booking system at www.delta.com lets travelers view all their options, comparing all types of fares (discounted, Internet-only, corporate, full) and allows the company to easily capture purchasing information (to be applied toward a volume agreement). For the travel manager, the system tracks who actually purchased what and when, as well as the amount of savings achieved, in a format that's downloadable directly into a spreadsheet.

Noteworthy Hotel E-Services

Road warriors are notorious for turning hotel rooms into offices, which is one of the reasons why **Embassy Suites** hotels is so popular with guests. For the second year in a row, the chain won the top honor in the prestigious J.D. Power & Associates 2000 Domestic Hotel Guest Satisfaction StudySM for "Highest Guest Satisfaction Among All-Suite Hotel Chains." What guests liked, besides great service: the practical advantage of two rooms. It's wonderful not to wake up facing your laptop computer, even nicer to have a room that doubles as a conference room if you need a confab with a client or colleague without the awkwardness of a queen-sized bed in the room.

To further impress customers,

Embassy Suites now offers high-speed Internet access, chain-wide. Not only are the guest rooms wired with dataports offering up to 50 times the speed of a conventional modem, but the meeting rooms are also hooked up, and many the public areas are as well. Another e-advantage: the opportunity to plan a meeting, quickly and easily, online at the Embassy Suites Web site (www.embassy-suites.com). By clicking the 'Plan a Meeting' icon, you can request sleeping room blocks and schedule an entire week's worth of events, all backed by the company's strict Meeting Guarantee.

A revamped hotel Web site worth checking out is at **Marriott.com** which has added an Express Reservations feature and customized content for travelers and meeting planners. By voluntarily registering basic profile information, travelers eliminate the need to re-enter personal information whenever making reservations.

Provide information about your travel preferences, such as the cities you most often visit, your favorite activities and preferred Marriott brands (Marriott, Renaissance, Residence Inn, Courtyard, TownePlace Suites, Fairfield Inn, Spring Hill Suites, Ramada International), and the site delivers content that meets these interests. You can also choose to receive e-mails about relevant new offers, products and services.

We also like the deal **Hilton Hotel** has just struck with LodgeNet to provid





YOU CAN ALWAYS SPOT

WHO DIDN'T FLY AEROMEXICO.

THE DRIVER CAN WAIT. BUT IT'S UNLIKELY THE MEETING HE'S TAKING YOU TO CAN.

NEXT TIME, FLY THE AIRLINE THAT, FOR 10-YEARS, HAS PROVEN TO BE MORE PUNCTUAL THAN ANY MAJOR U.S. CARRIER.*

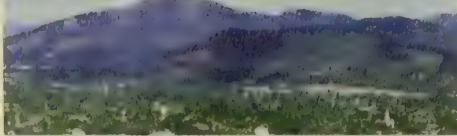
YOU'LL STILL BE EASY TO SPOT. BUT NO ONE SAID BEING FIRST TO ARRIVE WAS A BAD THING.



AEROMEXICO

1-800-237-6639 www.aeromexico.com

*In on-time arrival data comparison of Aeromexico's systemwide operations, derived from internal company records, and the operations of the major U.S. carriers as published in DOT's Air Travel Consumer Reports, for calendar years (1990) through (1999).



interactive television services to 220 Hilton hotels in the United States, and in the formation of a 50-50 joint venture company, InnMedia LLC, to offer high-speed Internet access via TV to hotel guests – not just in Hiltons but in other upscale brands. LodgeNet's interactive television service which provides on-demand movies and music, Nintendo 64 games, Internet access via the television and other features will begin being phased in during the fourth quarter.

Streamlined E-Expense Reports

Who doesn't want an easier way to do an expense report? New interactive tools from **American Express** gives Corporate Cardmembers quicker and easier access to their T&E spending information. "Corporate Card Check Your Bill" allows Corporate Cardmembers to review all of their account information (unbilled charges, current charges and six months' worth of previously billed charges) online. Several other interactive features, from international currency converters to profile update capability, allow Cardmembers to more efficiently manage their T&E-related paperwork. 24/7 access to billing information greatly simplifies the often-aggravating preparation and reconciliation of expense reports. Missing a statement or individual receipt? Billing information is posted for six months. Billing disputes can also be initiated online at the site. Enroll at www.americanexpress.com, click on the "Corporations" tab and select "Check Your Corporate Card Bill Online." Personal Cards may be registered at the same time as Corporate Cards.

New E-Ways to Evaluate the Real Cost of Changing a Flight

Want to know quickly how much it'll hurt (or help) to change an airline ticket? **Expedia.com**'s Exchange Calculator provides estimated costs for changing previously purchased tickets. Enter the new dates and times you prefer to travel and you'll be stepped through a search of the available alternate flights and their costs. After you select a new flight, the Exchange Calculator displays an estimated cost or airline credit, as well as any penalty fees that may apply. Customers have no obligation to buy the new flight(s) and are welcome to use the Exchange Calculator to determine whether or not to make a change at all.

Clever New E-Valet

Part of the trouble with business travel isn't the trip itself, it's what road warriors need to get done before they leave or while they're away. A new Internet site, **FreeToGo** (www.freetogo.com), is aimed squarely at travelers who'd love someone to take care of all sorts of quotidian details for them: putting their newspapers and mail delivery on hold, finding a pet sitter, downloading passport renewal forms and shopping for travel necessities, such as sundries, luggage and electrical adapters. ●



Advertisers' Web Addresses

AeroMexico
www.aeromexico.com

Delta Air Lines
www.delta.com

Embassy Suites
www.embassy-suites.com

Hilton Hotels Corporation
www.hilton.com

Marriott International, Inc.
www.marriott.com

Sabre Virtually There
www.virtuallythere.com

Additional Resources

American Express
www.americanexpress.com

FreeToGo
www.freetogo.com

Galileo ViewTrip
www.viewtrip.com

GetThere.com
www.getthere.com

The Hertz Corporation
www.hertz.com

Homewood Suites
www.homewoodsuites.com

Hyatt Hotels & Resorts
www.hyatt.com

Lufthansa Airlines
www.lufthansa.com

PlaceWare
www.placeware.com

Savvio.com
www.savvio.com

Worldspan
www.worldspan.com

Yatra
www.yatra.com

Writer: Jill Molyneux is a business travel specialist and former editor-in-chief of *Corporate Travel* magazine.

Design: Sundberg & Associates, Inc

Produced by: Meigs Media, Ltd.,
Millbrook, NY
e-mail: jonmeigs@earthlink.net



PRACTICE YOUR

Short game.

AH, GO AHEAD, PRACTICE YOUR

Long game.

A spacious two-room suite, free cooked-to-order breakfast, nightly Manager's Reception* and Hilton HHonors® hotel points and airline miles.† All for the price of an ordinary hotel room. Call 1-800-EMBASSY or visit embassysuites.com



EMBASSY SUITES
HOTELS™

THE TOUGH
SPORT-UTILITY
VEHICLE
SOFTENS UP

BusinessWeek Lifestyle

Say Good-bye to the Shake, Rattle, and Roll

The new herd of SUVs drive more like big cars than big trucks

BY DAVID WELCH

Let's face it. The closest most sport-utility vehicle owners get to using the off-road capabilities of their trucks is rumbling through the gravel in the country club parking lot. But for a decade, millions of people have flocked to sport-utilities designed off the foundations of pickup trucks. That means most buyers are paying big sticker prices and enduring a bone-shaking ride just to have the hip image that comes with an SUV.

Sensing an opportunity, foreign carmakers have created a class of sport ute with a gentler ride. This approach, building on car and minivan platforms, has worked well with luxury models. SUVs such as Toyota's Lexus RX 300, launched as the first of this breed in 1998, rides on a Camry sedan platform and is a smash hit. The RX 300 has a much smoother drive than popular pickup-based SUVs like the Ford Explorer and Chevrolet Blazer. It was quickly fol-

lowed by the Mercedes-Benz M-Class. True to its Odyssey roots, the M-Class has a comfortable ride suitable for family travel. Its smoothness is matched by a quiet cab which allows conversation.

The Acura handles nearly as well as the BMW X5—which many consider to be the best-driven SUV on the market. I took an off-ramp with suggested speed of 40 mph at about 70 mph and the MDX took the bend with aplomb. The combination of stiff body and high-tech suspensions keep the MDX stable on tight turns.

Make no mistake, the \$40,000-plus BMW X5, launched last year, is the ultimate SUV driving machine. But with a six-cylinder

engine, it's at least \$10,000 more than the Mercedes-Benz M-Class. With an eight-cylinder, it'll set you back \$50,000 or more. And the Bimmer is equipped with less luxury on the inside. Says recent MDX buyer Christopher Choudhry of Dallas: "I really liked the BMW, but I just couldn't justify the difference in price."

The MDX is also far more versatile, with seating for seven people, vs. five in each of its three chief competitors. Engineers at Honda R&D Americas, Marysville, Ohio, fought hard for that. The vehicle was designed with American tastes in mind, where is the mission of Honda's R&D center these days. "We said this vehicle has to seat seven," says Frank Paluch, chief engineer on the MDX program. "At first, Japanese management said no. They wanted something more like the RX 300. We convinced them that Americans want passenger space and functionality."

Having won the day, the MDX team designed a two-person bench seat that folds easily into the floor so the rear compartment can double as cargo space. However, the bench is best suited for kids. I stand over six feet, and I can sit back there only if I scrunch up my legs accordion-style against the back of the second row. All the same, the MDX has the best seating for any SUV save the big, unwieldy American full-size models such as the Ford Expedition. And my MDX averaged over 17 miles per gallon with its V-6 engine. That's a sipper next to the big eight-passenger SUVs that get about 14 miles per gallon.

Automobiles



**MERCEDES
ML320**

lowed by the Mercedes-Benz M-Class, built on a truck base but with lots of automobile hardware; the nimble BMW X5; and this month, the minivan-based Acura MDX.

The MDX clearly leapfrogs the competition. Honda's U.S. engineering team took basic hardware from the hot-selling Odyssey minivan and stepped it up to make the MDX a nimble drive. The MDX, which starts at \$35,300, handles almost as well as the agile BMW X5 and better than the RX 300 and M-Class. And Acura has packed this vehicle with more standard luxury amenities than its rivals.

Driving it on Detroit's highways—which can seem at times like going off-road—the MDX rolls smoothly right over potholes, railroad tracks,

Starts at:
\$35,300

The most truck-like of the new breed, the M-Class suffers from cabin noise, but is still a Benz

BMW had no such American input. If engineers had gone to a music store and compared the number of compact disks to cassettes, they might have put a CD player in my \$45,000 car. The car also lacked heated seats. All of its competitors offer these amenities for less cash. True, the X5, with an inline six-cylinder engine, drives like a dream. But its heavy doors, tight passenger space, spartan interior, and hard leather seats seem to be saying, "It drives like a BMW, so don't complain about all the little things."

Conversely, Lexus understands luxury. In true Lexus fashion, the RX 300 carries the poshest interior. Even though the current RX 300 is the oldest in its class, it's still tops for comfort. The seats are the softest and best able to cushion the driver and passengers on the road. The four-wheel-drive system starts at \$35,655, though load-it with premium stereo equipment and a navigation system can easily push the sticker upward of \$42,000. Another trade-off: The RX 300 doesn't drive like the X5 and MDX. Still, it's better to drive than its fourth chief competitor—the Mercedes M-Class.

My test car was the \$36,000 ML-Class, powered by Mercedes' 3.2-liter V-6. It accelerates smoothly, but that doesn't make up for a rough ride. On any tight bend, the M-Class leans hard into the turn the way a truck would. And it's noisy. The engine sounds nice, but it invades the entire cabin. Why buy an M-Class? For a \$35,000 sticker that roughly matches the price of the entry-level Mercedes C-Class sedan, it's a cheap way to get into a Benz. The luxury SUV market is set to expand. In spring, General Motors will launch the Buick Rendezvous, based on the

BMW X5

Starts at:
\$40,000

The best driver in the group, the BMW comes as either a 225-hp V-6 or a \$50,000 282-hp V-8. The V-6 can easily reach \$45,000 with audio and comfort add-ons



LEXUS RX 300

Starts at:
\$35,655

The optional navigation package (far right), brings the luxurious Lexus to \$40,000-plus



same platform as the Pontiac Aztek. Cadillac's yet unnamed entry will follow in late 2002. In 2003, Lexus will have an all-new RX 300, featuring a third row of seats. And Mercedes will redesign the M-Class around the same time—with a stretched version offering more seating coming shortly after that.

Luxury-vehicle buyers should continue to benefit from the competition in the sport-utility market. For now, though, Acura's MDX is the best buy among this more refined breed of SUV.



ACURA MDX

Starts at:
\$35,300

Perhaps the best value, the MDX drives as well as the BMW, and including options comes to less than \$40,000

Staying Out Of The Tax Twilight Zone

The alternative minimum tax holds traps for the unwary

BY MIKE MCNAMEE

This has been a wild and crazy year for investors—and the pain isn't over yet. Whether you were lucky or unlucky in 2000, the Internal Revenue Service could have a surprise for you next April: the alternative minimum tax (AMT). Either big capital gains—the kind you might have if you cashed in your chips early in the year—or incentive stock options can shove you into this parallel tax universe, where deductions disappear and standard tax planning gets stood on its head. The result: a complicated tax return and a bigger check made out to “U.S. Treasury.”

A quick review of your 2000 income and deductions can tell you whether you're likely to land in the AMT trap (table, page 216). And if you act before yearend, you have a chance to escape the AMT—or to make the best of a bad situation.

The AMT was designed in the 1970s to catch high-income investors who use hefty tax breaks to wipe out their IRS tab. Now, it's catching many less-than-wealthy families, because, unlike the regular income tax, its rate brackets and exemptions aren't adjusted for inflation. The new Congress might reform it, but the rollback would be small.

The AMT's Form 6251 requires you to add back to your taxable income a long list of “preference items”—from state and local income and property taxes to net operating losses. You then recompute your taxes based on 26% and 28% rates, vs. the 15% to 39.6% used for the regular tax tables, and pay the higher of the two tallies.

These calculations hold traps for the unwary. If capital gains make up a large share of your income, as they might if you cashed out appreciated stocks this year, they can shove you into the



AMT. The reason: In place of personal exemptions and some itemized deductions, the AMT allows only a \$45,000 exemption (\$33,750 for single taxpayers) that starts phasing out when your income hits \$150,000 (\$112,500 for singles). Large gains can push your income to the point where those exemptions disappear, increasing your odds of paying AMT.

Taxes

Exercising incentive stock options can also land you in AMT territory. Options let you buy your company's stock at a low-market price. ISOs are most rewarding if you hold the shares you buy for a year, so a profit is taxed at the capital-gains rate. If you're subject to the AMT, however, you've got to compute AMT income the difference between the price you pay and the stock's market value at the time you exercise the option, and pay up to 28% in taxes.

That could be especially painful for high-tech employees. “A lot of people exercised opti-

Could the Mid-Cap Stock Fund be our best kept secret?

Much attention is paid to the hot new start-up companies and the established blue chips. But, sometimes the best opportunities may be right in the middle. The Fidelity Mid-Cap Stock Fund generally invests in companies with market capitalization between 1 and 15 billion. Mid-caps



hold a unique position in the market — around long enough to be fairly stable, but still having the potential for significant growth — you may want to consider them as part of a diversified portfolio. Put the expertise and service of Fidelity to work for your portfolio to help you see yourself succeeding.

Fidelity Mid-Cap Stock Fund

MORNINGSTAR



Morningstar Overall Rating™
as of 9/30/00.¹

Yesterday's start-ups. Tomorrow's blue chips?

1 year	5 year	Life of Fund ²
69.95%	26.57%	26.60%

Returns as of 9/30/00.³ Past performance is no guarantee of future results. Mutual fund returns have sustained significant gains and losses recently due to stock market volatility in certain sectors. Current performance may be lower than performances stated. Please visit Fidelity.com for current performance figures. The securities of smaller, less-known companies may be more volatile than those of larger companies.

The Overall Rating is based on a weighted average of a fund's ratings for the 3-, 5-, and 10-year periods. As of 9/30/00, the number of funds in the Morningstar Domestic Equity Fund Category was 3876, 2419, and 796 for the 3-, 5-, and 10-year periods, respectively.



1-800-FIDELITY Fidelity.com

For more information on any Fidelity fund, call for a free prospectus and read it carefully before investing. TDD SERVICE: 1-800-544-0118 for the deaf and hearing-impaired 9a.m.–9p.m. ET.

Morningstar proprietary ratings reflect historical risk-adjusted performance as of 9/30/00 and are subject to change every month. Morningstar ratings are calculated from a fund's 3-, 5-, and 10-year average annual returns in excess of the 90-day Treasury bill, including loads, if appropriate, and a risk factor that reflects performance below the 90-day Treasury bill. Ten percent of funds in an asset class receive five stars, 22.5% receive four stars, 35% receive three stars, 22.5% receive two stars, and 10% receive one star. Data provided by Morningstar, Inc. Although gathered from reliable sources, data completeness and accuracy cannot be guaranteed. Morningstar is a registered trademark of Morningstar, Inc. and is not affiliated with Fidelity Investments.

This fund was also rated five stars for the 3- and 5-year periods, 10-year period not available. ²Life of fund is as of inception date: 3/29/94. Average annual total returns for the period ending 9/30/00 include changes in share price, reinvestment of dividends and capital gains. Share price and return may vary and you will have a gain or loss when you sell your shares. Fidelity Distributors Corporation.

116619

when stock prices were high, but since then the stocks have tanked," says Martin Nissenbaum, head of personal finance and taxes for Ernst & Young. If, say, you paid \$1 to exercise an option when your stock was at \$11, you have a potential AMT of \$2.80 per share. If the stock has since fallen 75%—as many tech stocks have—you could owe more in taxes than the shares are worth.

What to do? One way out is a "disqualifying disposition"—a stock sale that removes the option's special tax treatment. If you sell the shares within a year, you'll owe ordinary tax, but that could be less than the AMT. Taking the same example—shares bought at \$1 that are now worth less than \$3—you'd owe only 79¢ in tax, even at the top rate. What if you still want to own the stock? Unless you took a loss, you can buy back the same stock immediately. "Try to exercise options early in the year so you'll have the most flexibility if the stock falls," says Bernard Kent, a tax partner with PricewaterhouseCoopers.

Even this late, you can take steps to avoid the AMT. Collect income now that you normally wouldn't get until next year, and put off payments that might increase your deductions. Don't pay investment expenses, legal fees, or state or local taxes now: If you wind up owing AMT, you'll be denied the deductions for those costs.

If you're first encountering the AMT, determine if it's a onetime hit or a new, permanent feature of your taxes. Smart accountants can time your finances so you'll be in and out of the AMT in alternate years. That helps get you the most mileage from income, deductions, and stock options. It's tricky, but worth the effort if building your wealth—not Washington's—is your goal.

FOR THIS TAX BREAK, SHOULD YOU HOLD 'HOLDERS'?

If it looks like an exchange-traded fund and acts like an ETF, is it also an ETF for tax purposes? Maybe not. Our story "Making the Best of Your Clunkers" (BW—Nov. 13) presented strategies for wringing tax benefits out of your portfolio. One was to sell a losing stock, replace it with a similar ETF, wait 31 days, and reverse the trade—and avoid the Internal Revenue Service's wash-sale rules, which disallow tax-loss deductions if you buy back too soon. The ETF works like a placeholder, keeping you invested in the sector in case there's an interim rally.

But the strategy may not pass muster with the IRS if you use one breed of ETF, the HOLDERS. According to Diane Garnick, an equity derivatives strategist at Merrill Lynch, which created HOLDERS, these vehicles are grantor trusts, and legally speaking, the HOLDERS owner owns the underlying stocks in the portfolio.

As such, replacing Yahoo! with Internet HOLDERS could be seen as violating the wash-sale rule, at least with the part of the HOLDERS that represents Yahoo!. SPDRs, or "Spiders," and iShares two other forms of ETFs, don't have this problem since they are organized as investment companies, the same as mutual funds.

Three ETF experts BUSINESS WEEK spoke with took issue with Garnick. Al Blomquist, editor of *The Weekly Reader*, an ETF newsletter, says the HOLDERS trust is a separate security from its underlying holdings. Blomquist, also a financial planner, has clients using them in tax-related sales.

Regulation lags innovation, and the tax code does not yet address the HOLDERS. Until the U.S. Tax Court steps in, investors concerned about the HOLDERS' viability as a replacement might use other ETFs.

ABCs of the AMT

Will you trigger the alternative minimum tax when you calculate your 2000 tax return? Here's a method to estimate your risk of owing AMT.

1 ADD UP YOUR "PREFERENCE ITEMS" Certain deductions and credits that you claim on your regular tax return are disallowed on the AMT. The major ones include:

INCENTIVE STOCK OPTIONS The difference between the price you paid for the stock and the market value at the time you bought it \$ _____

STATE & LOCAL TAXES PAID Remember to include the tax you paid on capital gains \$ _____

MISCELLANEOUS DEDUCTIONS i.e., investment and legal fees, unreimbursed employee expenses \$ _____

INTEREST ON PRIVATE-PURPOSE MUNI BONDS \$ _____

ACCELERATED DEPRECIATION, BUSINESS CREDITS For proprietors, partners, and Subchapter S shareholders \$ _____

PERSONAL EXEMPTIONS (\$2,800 per family member) \$ _____

TOTAL* \$ _____

2 COMPARE YOUR PREFERENCE

ITEMS If they exceed the "trigger points" on this table, you're likely to be subject to AMT.

AMT TRIGGER POINTS

INCOME	COUPLE	SINGLE
\$100,000	\$30,770	\$28,518
200,000	33,284	31,075
300,000	39,170	57,035
400,000	80,600	98,465
500,000	122,030	139,893

3 DODGE THE AMT OR TAKE ADVANTAGE OF IT?

• If you're just over the AMT line, you might escape the levy by putting off deductions (postpone paying state taxes and legal and investment expenses) or accelerating income into 2000

• If you're deep in AMT territory, pile as much income into 2000 as you can. It'll be taxed at a lower rate (28% top rate vs. 39.6% top rate) than if you claim it in a year when you don't owe AMT.

*Other preference items may apply in your situation
DATA: ERNST & YOUNG, BW

Listen with more intelligence.



LITTLE RICHARD

From computer modems to the newest MP3 players, ST microchips are the brains behind the latest ways to enjoy music.



Whether it's *Tutti Frutti* or Beethoven's *Ninth*, the digital revolution has forever changed how we listen to music. And ST is a star performer in the process.

ST supplies microchips for computer modems, sound cards, solid state and hard disk storage devices, active loudspeakers, and portable MP3 players.

People want better access to music, and ST is listening.



We put more intelligence into everything.

STMicroelectronics (formerly SGS-THOMSON) • www.st.com • A world leader in semiconductors for consumer products, automotive, telecommunications, computer peripherals, industrial automation and control systems • For opportunities: <http://jobs.st.com>

STMicroelectronics

Merrill's Tech Guru Draws the Big Picture

Steven Milunovich is bullish on the Internet buildout



**INTERNET STOCKS
WILL LANGUISH FOR A
WHILE, HE THINKS**

**"What happens
after a bubble
bursts is that
the real business
shows up 5 to 10
years later"**

Wall Street brokerage firms employ armies of analysts to cover technology stocks, but nearly all focus on a narrow group, such as e-commerce companies, networkers, or PC makers. That's why Merrill Lynch named veteran computer analyst Steven Milunovich as its global technology strategist, a new position for the firm.

Milunovich's job is to synthesize the ideas of Merrill's 110 technology analysts who cover nearly 500 companies into coherent advice. He is to focus on big-picture trends, which are often neglected by analysts caught up in quarterly earnings forecasts. Given Merrill's vast reach, with 15,900 brokers serving over six million house-

holds, Milunovich's views could become influential. Personal finance Editor Susan Scher recently spoke to Milunovich, 40, about technology investing.

Q: Are you bullish?

A: Over the long term, yes. Technology will continue to be one of the fastest growing sectors of the economy.

Q: What about the short term?

A: We might see a bounce between now and January, but I doubt it will cause tech stocks to have a year-end rally in eight of the past 10 years. But I doubt it will make new highs. Price-earnings ratios are still generally high by historic standards. Tech stocks have to fall another 10% to 15% before being fairly valued.

Q: How do you pick stocks?

A: Tech investing is thematic. If you can get the big-picture trends right, it quickly leads you to the baskets of stocks that should do well over time.

Q: What's an example?

A: Say you decided in the early 1990s that data networking could be a big thing. Back then, there were a handful of major players, like Cisco Systems and Cabletron Systems. It wasn't clear how big networking would be or which companies would succeed. Over time, some went out of business or merged with others, and Cisco became the gorilla. If you had initially bought a basket of stocks of the major players, you could have narrowed your portfolio to the winners over time.

Q: What's today's key theme?

A: The buildout of the Internet will drive technology over the next five to ten years. It's not a new theme, but we are still early in the game. We argue that no more than 20% of the Internet's plumbing is in place in the U.S. Globally, the buildout is probably closer to 10%.

Q: Which stocks will best capitalize on this?

A: The infrastructure players are well positioned. Sun Microsystems could dominate the server category. In storage devices, we like EMC, Network Appliance, and Veritas Software. In communications equipment, Cisco, Nortel Networks, and JDS Uniphase are good choices. Software

1-800-OK-CANON,
sit www.imagerunner.com

Staple
Saddle Stitch
Hole Punch

The imageRUNNER 5000 has landed along with legions of new fans. People attracted by its seamless network fit. By its ability to output 50 ppm and deliver full-finishing capabilities right from the desktop. Plus, it's built on the highly acclaimed imageRUNNER product platform. Which may explain why the latest in the imageRUNNER line is attracting lines of its own.

At Canon, we're giving people the know-how to realize the full power of the digital office.

The new
imageRUNNER
is here.



imageRUNNER™
5000

Canon KNOW HOW™

Canon is a registered trademark and IMAGEWARE is a service mark of Canon U.S.A., Inc. © 2000 Canon U.S.A., Inc.

will be important, so Ariba, Oracle, and niche players like Pivotal and Mercury Interactive.

Q: How about the wireless Internet?

A: The wireless buildout has barely begun. We think the device companies, such as Research in Motion, Palm, and Handspring will thrive, as well as new software names, such as Phone.com and services companies like Aether Systems.

Q: Which sectors do you favor?

A: We think data storage will be one of the highest growth areas in technology and exceed our expectations over time. As Internet use becomes more pervasive, increasingly data will be stored digitally, fanning demand for data-storage devices.

Q: What sectors do you avoid?

A: We're underweighting Internet stocks. We've seen a bubble type of industry; first there was hypergrowth, and then the bubble burst. It's like in the early 1980s, when a hundred disk drive companies emerged and then collapsed. People were saying the PC thing is over—and that was before Microsoft went public. What happens after a bubble bursts is that the real business shows up 5 to 10 years later. So, Internet stocks will probably languish for a while.

Q: When Internet stocks revive, which will be the names to own?

A: Our inclination is to go with today's leaders, thinking that they will decline less and bounce back first. So America Online, Yahoo!, and eBay. But still be cautious.

Q: Are there cheap tech stocks that investors should buy now?

A: There are cheap stocks, but whether they are screaming buys isn't clear. For instance, Compaq Computer, Dell Computer, Microsoft, and Intel have fallen to attractive levels, and they will probably bounce back a bit. But they were the leaders of the PC era of computing, and the fundamentals don't support investing in them over the next few years. You're better off buying high-quality companies, like EMC and Network Appliance, because they are in sync with the new trends.

Q: Are you sounding the death knell for PCs?

A: PCs will continue to be big sellers, but they will no longer drive technology. The tech industry changes dramatically every 12 to 15 years, and the market leaders of one period rarely lead the next. In the 1970s and early 1980s, mainframes were dominant, and companies like IBM and DEC

emerged as the leaders. Next came the PC giving rise to Microsoft, Dell, and Intel. Now we're in the network-computing period, which is about building the plumbing of the Internet.

Q: What's the best way to value tech stocks?

A: Revenues are a better predictor than earnings of tech-stock prices in the short term. A good example is Nortel. Its third-quarter earnings beat estimates, but revenues were disappointing, and its share price has since fallen 29%. That said, I still think Nortel is a good stock to own because it's a leader in the high-growth fiber-optics area. If you look at the Merrill Lynch 100 Tech index, which represents the largest tech stocks, the top 10 stocks in terms of earnings growth rose an average 113% over the past three years. The top 10 revenue growers rose 134%.

Q: Why are investors paying more attention to revenues than earnings?

A: One reason is because some tech companies don't have earnings. Another is because it's harder for management to manipulate revenues. By most important, revenues are a company's oxygen. You can't sustain high earnings without strong revenue growth. Look at some of the biggest tech blowups of the past year, such as IBM, Xerox, Lucent, and Unisys. In every case, earnings growth handily exceeded revenue gains.

Q: Anything else important about revenues?

A: Be wary of big tech companies whose revenues

Merrill's Top Tech Picks

STOCK	SYMBOL	RECENT PRICE*	52-WEEK RANGE	EST. 5-YR GROWTH*
ADOBE SYSTEMS	ADBE	\$72.06	\$170-\$53	24%
CADENCE DESIGN SYS.	CDN	23.00	28-21	25
CISCO SYSTEMS	CSCO	50.38	82-33	32
DST SYSTEMS	DST	54.75	61-26	24
EMC	EMC	78.88	105-30	30
NORTEL NETWORKS	NT	38.56	86-25	25
PIVOTAL	PVTL	50.00	76-19	45
SANMINA	SANM	92.44	120-39	30
SOLETRON	SLR	35.69	50-28	30
SUN MICROSYSTEMS	SUNW	85.31	129-44	25

*As of Nov. 13 **Average annual growth in earnings per share

DATA: MERRILL LYNCH & CO., BLOOMBERG FINANCIAL MARKETS

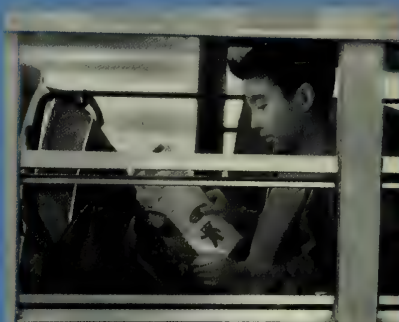
venues are approaching \$30 billion. A study by the Corporate Executive Board and partly funded by Hewlett-Packard found that the sales growth of Fortune 500 companies tended to stall at \$30 billion. Compaq hit the wall around that mark, and sales are slowing at Lucent, Intel, and Dell. Companies I'd watch in here are Ericsson, Nortel, and Nokia. Hewlett-Packard's revenues slowed at \$40 billion but then reaccelerated for few quarters. However, its recent earnings disappointment shows the bigger you get, the harder it gets.

THE "SCREAMING BUY": Look for companies in sync with the new trends



**WHO DEPENDS
ON US FOR
INFORMATION?**

**PERHAPS YOU
SHOULD ASK
WHO DOESN'T?**



BE TRAINED

You could be a CEO or an elementary school student. Or anyone in between. Chances are you rely on The McGraw-Hill Companies for information to help you make the most out of your life.

www.mcgraw-hill.com

YOUR MONEY AND YOUR LIFE INSURANCE



BY TODDI GUTNER

Even if you earn less than your husband, your income counts. Make sure you have enough coverage to prevent putting your family in financial jeopardy should you die

I was reviewing my corporate life insurance benefits recently when I suddenly realized that I was grossly underinsured. While the coverage is designed to help support my family if I die, I couldn't achieve that goal without buying additional insurance.

It turns out I'm not unusual. Women, whether they work in or outside the home, tend to underestimate their economic contribution to the family. So they don't make adequate provisions to offset the loss of their income, which could leave their families vulnerable to financial disaster should they die. In my case, since my husband earns about twice what I do, I figured all would be fine if he were properly insured. But the reality is, we depend on both our salaries to pay our mortgage and care for our two small children. Without my share, my husband would be in an economic bind. "Women often see their salary as the secondary income," says Diane Savage, a senior manager at benefits consultant Watson Wyatt Worldwide. "But it's not just fun money because a big part of it is used to support the lifestyle of the family."

CALCULATIONS. So you have to determine how much insurance you need and the most cost-effective way to purchase it. Many big companies provide some life insurance benefit, but the amount is usually insufficient. For example, my employer, The McGraw-Hill Companies, automatically insures me for one year's salary, up to \$100,000. But many financial planners recommend that each wage earner in a dual-income couple be covered for five to seven times gross annual income. Other advisers suggest you determine the family's yearly financial needs, multiply the number by 20, and make sure the two spouses' combined coverage is adequate. Both methods assume you'll want life insurance for 20 years, or until your children reach adulthood. Web sites such as Quicken.com or QuickQuote.com can give you rough estimates of how much insurance you'll need.



Don't think that if you're a stay-at-home mom none of this applies to you. You need to determine what it would cost to replace the services you provide, such as child care, housekeeping, cooking, and transportation. Even if your spouse has substantial assets or earnings enough to cover these expenses easily, you should be insured for at least \$100,000 for immediate cash needs, says John Hixson, president of Financial Management Professionals, a financial planning firm in Lake Charles, La. But for the couples that do not have substantial assets or high income, a policy of at least \$250,000 is more appropriate.

Generally, you have three sources from which to purchase life insurance: your employer, your spouse's company, or private plans. Securing

supplemental coverage from your own company is convenient, but you have more policy choices if you go outside. Also, because employers must insure their workers regardless of health, their rates are often higher than those of private insurers. At McGraw-Hill, for example, I could increase my coverage fivefold for an extra \$59.80 a month in 2001. But the premium is locked in and could rise every year after that. Alternatively, I could buy a 20-year policy with the same amount of coverage from Prudential Insurance Co. for a fixed monthly premium of \$52.92.

About 10% of companies offer some coverage to a spouse for free, while 66% let you buy it, according to William M. Mercer, a human resources consulting firm.

But it's advisable to buy a policy that's not from your spouse's employer, whether you work outside the home or not. You need the portability of the insurance in case your spouse becomes unemployed or you get divorced. "The more you own independent of the marriage, the better," says Anna Rappaport, a principal with William M. Mercer. I'm glad it's corporate benefits season. Reviewing my benefits statement has motivated me to make sure I am properly insured from now on.

BusinessWeek online

For more on insurance, or to join a discussion in our forum, see hers.online.at/businessweek.com/investor/

QUESTIONS? COMMENTS? E-mail hers@businessweek.com or fax (212) 512-2538

managed security

anti-virus

security audits

firewall

VPN

insomnia

budgets

sanity

Imagine having all the world's best e-business protection at your beck and call. 24/7. Now you can have managed network security and availability services via the Internet with myCIO.com, the world's first infrastructure as a service provider (ASP). It features services built on the world's leading products like McAfee, PGP and CyberCop. So myCIO.com is continuously on the job, defending your company against the many threats you face from both inside and out.

Visit myCIO.com today for a FREE 30-day trial of managed security.

Then sign up for a little peace of mind.



myCIO.com

Your Chief Internet Officer

THE UNSUNG HERO OF FUND INVESTORS



BY ROBERT BARKER

Who is Mercer Bullard? And just what does Mercer Bullard want? Those aren't questions I ever dreamed would occur to me—or interest you. But they drove me the other day to hear him out over coffee and orange juice. A couple hours of intense, nonstop talk later, I had a crushing headache and two convictions: First, few investors will ever know the name Mercer Bullard. Second, if you own a mutual fund, you will likely end up in his debt.

Bullard is the founder of something called Fund Democracy. Right now, that amounts to a home office, a Web site, and some startling ambitions. "I'd like Fund Democracy to be the leading advocate for mutual fund shareholders—an effective advocate for change," Bullard said. "And I want to make a living doing it."

Since leaving his legal post in the Securities & Exchange Commission's fund-regulation division last January to start Fund Democra-

SEC's fund division, added: "He's a tenacious pig-headed person—and that's a compliment."

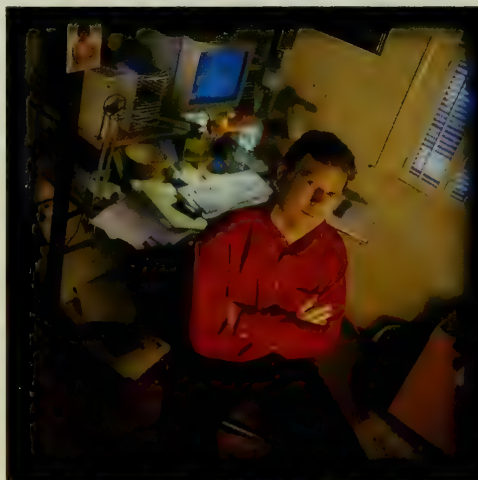
Not everyone who has encountered Bullard admires him as much, although they're careful to stay anonymous. His criticism of the SEC has angered some former colleagues, and the Investment Company Institute, an industry group, Bullard opposes on many issues, declined to discuss him. A fund industry attorney explains why: "I don't think the ICI is prepared for somebody like him. They tend to view the SEC as their private jurisdiction. They're of the view right now that he's just a speck."

STRATEGY. Bullard made his way to the SEC after touching the right academic bases, clerking for a U.S. Appeals Court judge, and spending five years at a big-name Washington law firm. He also worked four years at a Pentagon constant, studying options in limited nuclear warfare and picking up strategic smarts.

Hearing all of this, though, I couldn't help wondering who, after a long bull market, could be such a champion? But Bullard rightly sees funds as they are and knows how much better they might be. The law demands funds be run

for the benefit of investors, not the fund companies. His prime target is changing the law to make fund directors bargain harder with fund managers over fees. Directors' roles, particularly such issues as how often funds should disclose their holdings, came up in October, when Fund Democracy sponsored a symposium that put Paul Royce, the SEC's current top fund regulator, right on the hot seat. Royce said later that he was happy to have the chance to hear from the investor advocates.

For all the hell Bullard has been raising, he has made only slow progress toward his second ambition—making a profit from



Mercer Bullard

CURRENT JOB CEO, Fund Democracy

LAST JOB Attorney, U.S. Securities & Exchange Commission

FORMER BOSS'S DESCRIPTION

"A tenacious, pig-headed person—and that's a compliment"

WEB SITE www.funddemocracy.com

SCHOOLING B.A., Yale University; M.A., Georgetown University; J.D., University of Virginia

PERSONAL 39 years old. Lives in Chevy Chase, Md., with wife and three children

HEROES Arthur Ashe, Jack Bogle

QUOTE "This is hardball in the worst way"

DATA: BUSINESS WEEK

cy, Bullard has made notable headway toward that first goal. Most remarkably, he intervened last May in a case involving Barclays Global Investors, which manages \$833 billion in assets, to enhance disclosure of risks in "iShares," a group of exchange-traded funds BGI rolled out with much fanfare. Now, he's helping speed along a pending SEC rule to make

funds invest at least 80% of assets in the way their names imply, so a municipal bond fund would be at least 80% in munis. "He knows how to push the right buttons," said Barry Barbash, a Shearman & Sterling partner. Barbash, who hired Bullard in 1996, when he ran the

Fund Democracy. He aims to create a publishing operation and data base on fund governance that financial advisers will find valuable. He's trying to raise capital from the likes of investment researcher Morningstar. "He wants to capitalize on [having made] a name for his organization," Morningstar CEO Don Phillips told me. Yet, Phillips said Morningstar has learned, "advocacy doesn't necessarily translate into revenues. It's something you do because it's right."

That's why the fund world's Old Guard may be happy to hope they can wait Bullard out. My bet is Mercer Bullard will keep causing them headaches far more wicked than the crusher he put on

BusinessWeek online

For a Q&A with Mercer Bullard, please go to barkeronline.businessweek.com/investor/ or AOL keyword: BW Data

QUESTIONS? COMMENTS? E-mail barkerportfolio@businessweek.com or fax (321) 728-1711

JICING UP CAMINUS



GENE G. MARCIAL

Hilary Kramer, investment strategist and senior managing director at multibillion-dollar Cisneros Group, is ever on the prowl for undervalued growth stocks that she deems are potential buyout bait. Her latest pick: Caminus (CAMZ), an energy play with takeover spice added.

In recent days, the stock has jumped from 25 to more than 31—on record third-quarter results and rumors that a couple of large enterprise-software companies are eyeing Caminus—a provider of software and consulting services to electric and gas utilities and energy traders in North America and Europe. Among its customers: American Electric Power, Conoco, ConEdison, and PG&E Energy Trading.

Who is after Caminus? "It appears that PeopleSoft and Germany's SAP are looking to expand into energy," says Kramer. She notes that both are enterprise resource planning companies that develop broad applications software. PeopleSoft, whose market cap is \$12.3 billion, develops enterprise software for finance, human resources, and supply-chain planning. SAP, with a market value of \$51 billion, is the world's largest maker of collaborative e-business software solutions.

"Caminus would give SAP or PeopleSoft entry into a slice of the energy market that's growing annually at 30% to 40%," says Kramer. SAP and PeopleSoft already make financial software systems that they could apply to yet another rich market, she says. "PeopleSoft is always on the lookout for possible acquisitions," says spokesman Steve Swasey. SAP didn't return a phone call. Caminus CEO David Stoner declined comment.

James LoGerfo of Banc of America Securities rates Caminus a "strong buy," with a 12-to-18 month price target of 45 based on its "robust earnings growth and solid future prospects."



KRAMER: Hunting takeover targets

ware biggies
et Caminus'
he in utilities.
uyout may loom
farm-implement
ker Gehl. And
election snafu
ld boost Diebold
ing machines



IS GEHL HEADING FOR A HARVEST?

The pressure is mounting on Gehl (GEHL), a maker of farm and light construction equipment, to take swift action in the face of sagging earnings and soggy stock. Two major investor groups are urging the company to come up with options to boost share-

holder value—including putting the company up for sale. Behind the move are Heartland Advisors, which owns 8.5%, and a group headed by takeover artist Harold Simmons, which has 6.3%.

In a recent letter, Heartland President William Nasgovitz reminded Gehl's board that it had a "fiduciary responsibility to respond decisively" to severe problems plaguing Gehl. And a group composed of CIC Equity Partners, Newcastle Partners, and Simmons' Contran warned that it may make a bid for Gehl.

Paul DeRobbio, managing director at CIC Equity, says the group will either seek control of the board or make a tender offer. In June, CIC proposed to buy Gehl at a substantial premium to its trading price. The offer was rebuffed, says DeRobbio. He hopes Chairman and CEO William Gehl will "respond more positively" when the Simmons group makes its next move.

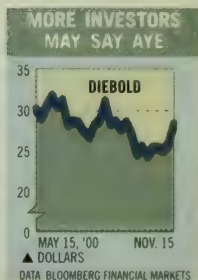
DeRobbio notes that the stock, which hit 19 in June, collapsed to 8 in mid-October before bouncing to 12 recently—mainly because of renewed buyout rumblings. Gehl didn't return calls.

VOTING MACHINES FLORIDA WOULD LOVE

Some pros think they have found what could be a timely "electoral balloting" play: Diebold (DBD), the largest maker of automated teller machines and electronic and physical security equipment. The bizarre turn of events in Florida has cast a bright light on Diebold's recent purchase of Brazil's Procom Industria Electronica, which makes simple, foolproof, and secure electronic voting machines—used by 100 million Brazilians during the local elections in October.

The Diebold voting machine, UE2000, has a numeric keypad and small liquid-crystal-display monitor. Tapping in a candidate's number, his or her digitized photo shows up on the monitor. The voter presses a green button to cast the vote. Each voter has an electronically registered number. About 20 private companies make electronic touch-screen voting devices. What's Diebold's plan for its machine? "We are looking into all options on how to market it in the U.S.," says spokesman Mike Jacobson. Diebold has yet to determine its selling price.

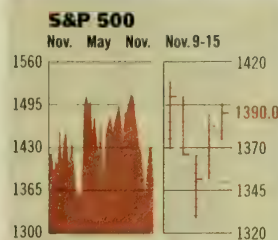
Shares of Diebold jumped from 26 to 30 on Nov. 13 when investors got a whiff of Diebold's voting machine. Matthew Wolfersberger of McDonald Investments raised his rating that day from a hold to a buy.



BusinessWeek online

Watch for Gene Marcial's Inside Wall Street Online column every Tuesday afternoon at www.businessweek.com/today.htm

STOCKS



COMMENTARY

A haywire week in the markets, which reeled with election confusion and bleak earnings forecasts. On Nov. 13, the Nasdaq closed below 3000—a first in over a year—prompted by Hewlett-Packard's earnings shortfall, yet it rebounded the next day with its 10th-largest gain ever. It ended the week down 2.0%. The Dow shed 1.8%, and the S&P 500 lost 1.4%. A stable Federal Reserve policy on interest rates helped curb further damage.

Data: Bloomberg Financial Markets
Bridge Information Systems, Inc.

U.S. MARKETS

	Nov. 15	Week	Year to date	Last 12 months
S&P 500	1390.0	-1.4	-5.4	-0.3
Dow Jones Industrials	10,707.6	-1.8	-6.9	-0.5
Nasdaq Composite	3165.5	-2.0	-22.2	-1.7
S&P MidCap 400	513.4	-1.7	15.5	21.5
S&P SmallCap 600	215.3	-0.6	8.9	17.5
Wilshire 5000	12,926.0	-1.7	-6.4	0.6

SECTORS

	Nov. 15	Week	Year to date	Last 12 months
Business Week 50*	1104.4	-1.9	-15.1	-4.1
Business Week Info Tech 100**	763.9	-1.3	NA	NA
S&P/BARRA Growth	780.8	-0.9	-12.0	-4.1
S&P/BARRA Value	623.5	-1.8	2.1	3.0
S&P Energy	932.7	0.8	11.8	9.3
S&P Financials	153.4	-3.3	15.3	6.3
S&P REIT	81.7	0.2	11.0	11.5
S&P Transportation	697.3	3.3	16.8	8.7
S&P Utilities	323.2	-0.7	42.2	35.0
GSTI Internet	299.1	-12.7	-58.0	-43.9
PSE Technology	948.9	-0.2	-2.4	27.8

*Mar. 19, 1999 = 1000 **Feb. 7, 2000 = 1000

BEST-PERFORMING GROUPS

Pollution Control	46.4	Defense Electronics	176.2
Forest Products	26.8	HMOs	71.0
Railroads	24.9	Hospital Management	64.6
Toys	23.7	Food Wholesalers	61.6
Specialty Appar. Retailers	23.6	Pollution Control	58.7

GLOBAL MARKETS

	Nov. 15	Week	Year to date
S&P Euro Plus (U.S. Dollar)	1367.4	-0.5	-
London (FT-SE 100)	6432.3	-0.7	-
Paris (CAC 40)	6301.8	-0.5	-
Frankfurt (DAX)	6961.1	-0.7	-
Tokyo (NIKKEI 225)	14,799.1	-3.9	-2
Hong Kong (Hang Seng)	15,127.4	-3.4	-1
Toronto (TSE 300)	9187.1	-4.1	-
Mexico City (IPC)	6153.3	-3.5	-1

FUNDAMENTALS

	Nov. 14	Wk. ago
S&P 500 Dividend Yield	1.15%	1.12%
S&P 500 P/E Ratio (Trailing 12 mos.)	26.7	27.3
S&P 500 P/E Ratio (Next 12 mos.)*	22.3	23.1
First Call Earnings Revision*	-3.27%	-3.51%

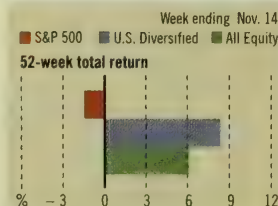
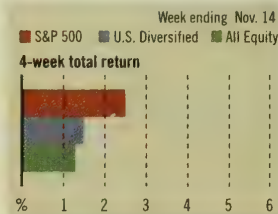
TECHNICAL INDICATORS

	Nov. 14	Wk. ago
S&P 500 200-day average	1441.5	1441.8
Stocks above 200-day average	51.0%	56.0%
Options: Put/call ratio	0.74	0.59
Insiders: Vickers Sell/buy ratio	1.93	2.17

WORST-PERFORMING GROUPS

	Last month %	Last 12 months %
Long-Dist. Telecomms.	-21.4	Long-Dist. Telecomms.
Communications Equip.	-13.7	Metal & Glass Contain.
Oil & Gas Drilling	-13.2	Office Equip. & Suppl.
Computer Systems	-9.8	Furnishings & Applia.
Office Equip. & Supplies	-7.6	Gold Mining

MUTUAL FUNDS



Data: Standard & Poor's

EQUITY FUND CATEGORIES

4-week total return	%	52-week total return	%
Leaders		Leaders	
Miscellaneous	7.4	Health	67.7
Financial	6.8	Mid-cap Growth	19.2
Mid-cap Value	5.9	Natural Resources	18.9
Large-cap Value	5.1	Real Estate	18.7
Laggards		Laggards	
Japan	-5.6	Precious Metals	-25.4
Technology	-5.3	Japan	-20.5
Communications	-2.8	Diversified Pacific/Asia	-17.2
Natural Resources	-2.7	Pacific/Asia ex-Japan	-10.1

EQUITY FUNDS

4-week total return	%	52-week total return	%
Leaders		Leaders	
Fidelity Select Paper	19.5	Dresdner RCM Biotech. N	178.3
Gintel	16.5	Munder Fram. Hlthcare. B	166.2
Rydex Basic Materials Inv.	14.9	Schroder Cap. Mic. Cap Inv.	157.9
Rydex Transportation Inv.	14.2	Franklin Biotech. Disc. A	130.8
Laggards		Laggards	
Credit Suisse Inst. Jap. Gr.	-23.9	Apex Mid Cap Growth	-60.7
Grand Prix A	-18.4	Credit Suisse Inst. Jap. Gr.	-54.1
Thurlow Growth	-18.2	U.S. Glob. Inv. World Gold	-46.2
PBHG Tech. & Comms.	-17.8	Warburg Pincus Jap. Sm. Co.	-46.2

INTEREST RATES

	Nov. 15	Week ago
KEY RATES		
MONEY MARKET FUNDS	6.14%	6.13%
90-DAY TREASURY BILLS	6.36	6.41
1-YEAR TREASURY BILLS	6.15	6.16
10-YEAR TREASURY NOTES	5.71	5.87
30-YEAR TREASURY BONDS	5.77	5.89
30-YEAR FIXED MORTGAGE†	7.76	7.79

†BancQuote, Inc.

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond	30-yr. bond
GENERAL OBLIGATIONS	4.76%	
TAXABLE EQUIVALENT	6.90	
INSURED REVENUE BONDS	4.91	
TAXABLE EQUIVALENT	7.12	

THE WEEK AHEAD

INTERNATIONAL TRADE Tuesday, Nov. 21, 8:30 a.m. EST ► The U.S. trade deficit, covering both goods and services, likely rose to \$30 billion in September, from \$29.4 billion in August. That's the median forecast of economists polled by Standard & Poor's MMS, a unit of The McGraw-Hill Companies. Exports are expected to be unchanged in September, after jumping 3.6% in August, to \$93 billion. Imports probably grew to about \$123 billion, after edging up 0.8% in August, to \$122.5 billion. Foreign trade

had little effect on economic growth in the third quarter, but it subtracted significantly from first-half growth.

FEDERAL BUDGET Tuesday, Nov. 21, 2 p.m. EST ► The U.S. Treasury is likely to report a monthly deficit of \$17 billion for October, the first month of fiscal 2001, says the S&P MMS survey. That compares with a deficit of \$26.7 billion in October, 1999. For all of fiscal 2000, Washington posted a surplus of \$236.7 billion, the largest surplus on record. The new Congress and

White House will debate how to turn future surpluses.

UNEMPLOYMENT CLAIMS Wednesday, Nov. 22, 8:30 a.m. EST ► New filings for unemployment insurance probably totaled about 300,000 for the week ending Nov. 18. Claims had posted an unexpectedly large jump in the first week of November, when they rose to 344,000. The Labor Dept. said the jump was caused by temporary layoffs in the auto industry.

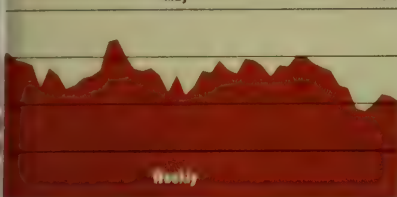
BUSINESS WEEK FIFTY

THE
BUSINESS
WEEK

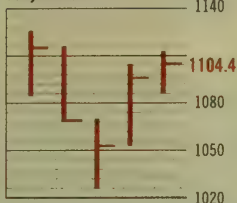


May

Nov.



Daily: Nov. 9-15



performance, down 1.9%, tracked the broader markets. Best Buy was by far the biggest loser with line after the company warned earnings for fiscal third and fourth quarters will fall below estia-
tial stocks—Schwab, Citigroup and Capital One Financial—were down. Oracle, up 16.4%, and Xil-
6 were among the few bright spots.

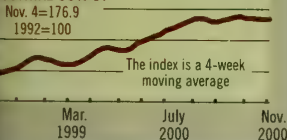
COMPANY PERFORMANCE

pany	% change		Rank	Company	% change	
	Week	Since 3/1/00			Week	Since 3/1/00
FI	0.9	-22.8	25	Intel	-2.8	-28.4
irner	-10.5	-11.7	27	Tribune	-0.5	1.8
stems	2.8	-18.7	28	Xilinx	19.8	-6.4
	16.4	-19.2	29	Enron	-2.1	16.5
	0.2	50.5	30	Lexmark International	0.0	-62.6
stems	7.4	-73.9	31	Omnicom Group	-3.8	-14.1
Stanley Dean Witter	-4.2	-7.0	32	America Online	-12.2	-13.3
	-5.2	-48.0	33	Guidant	-6.0	-23.1
Technologies	-7.8	-65.5	34	MBNA	-0.2	65.9
se Technology	7.0	12.5	35	Pfizer	-5.1	35.1
rosystems	-6.4	-4.1	36	Solelectron	-13.6	0.2
	0.1	-48.1	37	Gateway	-13.2	-40.3
Schwab	-8.2	2.0	38	Wells Fargo	-4.7	29.0
epot	-3.9	-28.8	39	General Dynamics	5.8	72.7
mputer	-16.9	-41.4	40	Texas Instruments	13.4	-41.6
	6.5	8.1	41	Capital One Financial	-10.7	51.6
k Appliance	-28.9	-19.9	42	General Electric	-3.8	19.9
nic	-1.9	12.3	43	Kansas City Southern Industries	1.3	104.1
	9.3	3.6	44	Wal-Mart Stores	0.5	0.0
ware	1.1	-58.1	45	Paccar	2.9	2.2
Materials	-1.6	-53.7	46	PE Biosystems Group	-11.1	-0.3
ternational	-4.0	46.6	47	Merck	0.9	52.7
er Associates	-4.7	-53.6	48	Adobe Systems	1.2	61.8
ry	-37.5	-40.5	49	Reliant Energy	2.4	94.8
mm	21.9	-39.4	50	Citigroup	-5.4	29.6

PRODUCTION INDEX

Change from last week: 0.0%
Change from last year: 13.2%

INDUSTRIAL OUTPUT



tion index declined to 176.3 in the week 4, from 177.5 in the previous week. Before of the four-week moving average, the index 176.9 from 176.8. After seasonal adjust-
y output decreases in autos, trucks, electric and lumber, along with fewer refinery runs
, offset an increase in steel production and in rail-freight traffic. The index has moved
trend in recent weeks.

each of the index components is at www.business-week.com.
production index Copyright 2000 by The McGraw-Hill

ONLINE RESOURCES

BW50 Track the index and the companies in it all day long. Plus: our exclusive Info Tech 100 index.

S&P PERSONAL WEALTH Real-time market coverage, industry analysis, and personalized retirement advice.

MUTUAL FUNDS Search for funds, view BW ratings, and read Q&A's with fund managers.

COLUMNS Hot stocks, takeover plays, and the latest strategies for managing your money.

BusinessWeek online

For more investment data and the components of the production index, visit www.businessweek.com.

[Your technology wants a bigger allowance] But how do you know if it needs one? And how do you justify giving it one? We can help. Contact Comdisco IT Control and Predictability Solutions. www.comdisco.com.

COMDISCO

internet

address directory

Reach these Business Week advertisers on the Web:

AeroMexico

www.aeromexico.com

Alcatel

www.alcatel.com

Allianz AG

www.allianz.com

American Electric Power

www.aep.com

American Financial Advisors

www.americanexpress.com/advisors

American Honda Motor Co.

www.honda.com

americanexpress.com

www.americanexpress.com

Ashland

www.ashland.com

Asiana Airlines

www.flyasiana.com

AT&T

www.att.com

Avaya

www.avaya.com

Blue Martini

www.bluemartini.com

BMW of North America, Inc.

www.bmwusa.com

Boston Consulting Group

www.bcg.com/breakingcompromises

BREITLING WATCHES

www.breitling.com

Broadwing

www.broadwing.com

BusinessObjects

www.businessobjects.com

Cadence

www.cadence.com

Canon USA

www.usa.canon.com

Cap Gemini Ernst & Young

www.capgemini.com

Celanese AG

www.celanese.com

Cemex

www.cemex.com

Charles Schwab

www.schwabwelcome.com

Charles Schwab

www.charlesschwab.com

CNF Transportation

www.freight.com

Cognos

www.cognos.com

Comdisco

www.comdisco.com

Commerce One

www.commerceone.com/

Compaq

www.compaq.com

Credit Suisse First Boston

www.csf.com

Data Return

www.datareturn.com

Dell Computer Corporation

www.dell.com

Delphi Automotive Systems

www.delphiauto.com

Delta Air Lines, Inc.

www.delta-air.com

Deutsche Bank AG

www.deutsche-bank.com

Embassy Suites

www.embassysuites.com

Ericsson

www.ericsson.com

Ernst & Young

www.ey.com

Fidelity

www.fidelity.com

Focal Communications Corporation

www.focal.com

Fujitsu

www.fujitsu.com

Genuity

www.genuity.com

Global One

www.global-one.net

Goldman Sachs

www.gs.com

GP Worldwide

www.gpworldwide.com

Headstrong

www.headstrong.com

Hilton Hotels

www.hilton.com

HP/PSG

www.hp.com

HYSTER

www.hysterusa.com

Hyundai Electronics

www.hei.co.kr

i2 Technologies

www.i2.com

IBM

www.ibm.i2-ariba.com

IBM

www.ibm-siebel.com

IBM Global Services

www.ibm.com/services/us4

Interland, Inc.

www.interland.net

Jamcracker

www.jamcracker.com

James Martin & Co.

www.jamesmartin.com

Kyocera

www.kyocera.com

LAWSON SOFTWARE

www.lawson.com

LeadersOnline

www.leadersonline.com

Lexus

www.lexus.com

Lotus

www.lotus.com/superhumansoftware

Marimba

www.marimba.com

Marriott

www.marriott.com

Morgan Stanley Dean Witter

www.morganstanley.com

MOTOROLA DIGITAL DNA

www.digitaldna.com

myC10.com

www.mycio.com

NetLedger

www.netledger.com

Nortel Corporate

www.nortelnetworks.com

NTT Communications Corporation

www.ntt.com/world

NYTimes.com

www.nytimes.com

OMRON

www.omron.com

One World Alliance

www.oneworldalliance.com

Oracle

www.oracle.com

PEPCO

www.pepco.com

PHILLIP MORRIS

www.philipmorris.com

Rational

www.rational.com

Redleaf

www.redleaf.com

Ricoh Company, Ltd.

www.ricoh-usa.com

Robertson Stephens

www.robertsonstephens.com

Sabre

www.sabre.com

Saudi Aramco

www.saudiaramco.com

Savin

www.savin.com

SeeBeyond

www.seebeyond.com

Siemens

www.siemensmobilebiz.com

Singapore Airlines

www.singaporeair.com

SportBrain

www.sportbrain.com

ST Microelectronics

www.st.com

Starband

www.starband.com

Stonebridge Technologies

www.stonebridgetechnologies.co

Texas Instruments

www.ti.com

The Hertz Corporation

www.hertz.com

The Peninsula Group

www.peninsula.com

THE PRINCIPAL FINANCIAL GROUP

www.principal.com

The Timken Company

www.timken.com

TOSHIBA

www.toshiba.com/tacp

Trend Micro

www.trendmicro.com

Tropicana Products, Inc.

www.tropicana.com

UBS WARBURG

www.ubswarburg.com

United States Postal Service

www.usps.com

VERITAS Software Corporation

www.veritas.com

Versata

www.versata.com

Williams

www.williams.com

WINTERTHUR INTERNATIONAL

www.winterthur-int.com

WorldCom

www.wcom.com

BusinessWeek

Make your best customers :)

See and hear from the experts at
www.sas.com/webcast

The Power to Know™

sas
e-Intelligence

PLAN YOUR FUTURE. ONE DAY AT A TIME.

Prepare for another
successful year with
the 2001 Business Week
Planner in desktop and
pocket formats.

BusinessWeek

USA Credit
card holders may call

TOLL-FREE
800-553-3575.

Ask for Dept BC41.

We honor
AmEx/Diners/Visa/
MasterCard

Order
Now at
20%
Off

Materials and workmanship fully
guaranteed or your money back.

Available in black or burgundy, the *Business Week* planner will keep you on schedule with a 13-month calendar, international dialing codes, time conversion charts, and important toll-free numbers. The desktop version also features 32-page, four-color world atlas; detailed information

about 39 U.S. and international cities; and even a wine vintage guide.

Whether purchased separately or in a matching skived leather set, the 2001 *Business Week* Planner will ensure that you make the most of each and every day.

Name (Mr./Mrs./Ms) _____

Company _____

Address _____

City _____ State/Country _____

Zip/Postcode _____ Tel _____

Job Title _____

Send me your color brochure and information on quantity
discounts and customization options.

Full name for blocking _____

Clip coupon and mail check to BUSINESS WEEK PLANNER, Dept. BC41
P.O. Box 1597, Fort Lee, NJ 07024, USA or Fax 201-461-9808

Item	Code	Regular	Your Price	Quantity	Total US\$
Black Desk & Pocket Planner Set	BW210	US\$48.95	US\$39.00		
Black Desk Planner	BW207	US\$34.95	US\$27.95		
Black Pocket Planner	BW204	US\$17.95	US\$14.50		
Burgundy Desk & Pocket Planner Set	BW226	US\$48.95	US\$39.00		
Burgundy Desk Planner	BW216	US\$34.95	US\$27.95		
Burgundy Pocket Planner	BW218	US\$17.95	US\$14.50		
Personalization US\$4.75 per item					
Handling/Packing (USA) US\$2.50 per item					
Handling/Packing (ex. USA) US\$5.75 per item					
N.J. Residents add 6% Sales Tax					
					TOTAL US\$

Prices include delivery by surface mail
but do not include local duties or taxes.
Delivery commences in September 2000.

- ☐ Check enclosed payable to "Business Week Planner"
☐ Bill my Company (Purchase Order & Company letterhead enclosed)
☐ Charge to ☐ AmEx ☐ Diners Club ☐ Visa ☐ MasterCard

Card No. _____

Expiration Date _____ / _____ Signature _____

For customization options and special discounts on larger quantities call Amanda Kane at 201-461-0040 or fax to 201-461-9808.

Index to Companies

This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

A

ABC 28
Acer (ACRRF) 142
Adams Harkness & Hill 66
Advanced Semiconductor Business 138
Aerospaciale 166
Aether Systems (AETH) 218
Air France 166
Altera (ALTR) 44
Amazon.com (AMZN) 44, 64
American Electric Power (AEP) 225
American Express (AXP) 102
American Freightways (AFWY) 66
America Online (AOL) 178, 180, 218
Andersen Consulting 190
Apple Computer (AAPL) 180
Ariba (ARBA) 218
Arthur Andersen 14, 60
AstraZeneca (AZN) 168
AT&T (T) 38, 44, 54, 64, 176
Aventis (AVE) 168

B

Bank of America (BAC) 38, 66, 225
Bank of New York (BK) 180
BEA (BEAS) 180
Best Buy (BBY) 44
BET Holdings 176
Birinyi Associates 44
BMW 212
Boston Consulting Group 132
British Telecom (BTY) 180
Broadcom (BRCM) 180

C

Cabletron Systems (CS) 218
Caminus (CAMZ) 225
Campbell Soup (CPB) 66
Carbon Nanotechnologies 76
CBS (VIA) 35
Celestica (CLS) 180

Cendant (CD) 176
CIC Equity Partners 225
Ciena (CIEN) 180
Cisco Systems (CSCO) 64, 180, 218
Cisneros Group 225
Citigroup (C) 44
CMGI (CMGI) 66
Coca-Cola (KO) 91
Commerzbank 168
Compaq Computer (CPQ) 142, 218
Conoco (COC.B) 225
Consolidated Edison (ED) 225
Contran 225
Credit Suisse 44
Crimson Ventures 139
CSM Forecasting 190

D

Daewoo Motor 35, 38
DaimlerChrysler (DCX) 62, 190
Danone Group 91
Dell Computer (DELL) 38, 44, 59, 142, 180, 190, 218
Deloitte & Touche 60
Deutsche Bank (DBK) 38
Deutsche Banc Alex. Brown (DBK) 62
Diamond Technology Partners (DTPI) 38
Diebold (DBD) 225
Digital Equipment (CPQ) 218
DoubleClick (DCLK) 180
Dow (DOW) 76
Dow Jones (DJ) 44

E

Earthlink (ELNK) 178
eBay (EBAY) 218
EMC (EMC) 180, 218
EMI 132
Ericsson (ERICY) 218
Ernst & Young 60

F

Fairway Construction 70
FCB Worldwide 91
FedEx (FDX) 66
First Call 44

First International Computer 142
Flextronics (FLEX) 180
Foote Cone & Belding 91
Ford (F) 190, 212
Formosa Plastics 140
Forrester Research (FORR) 190
France Télécom (FTE) 166
Freightliner (DCX) 62

G

Gatorade (OAT) 91
Gehl (GEHL) 225
General Electric (GE) 110
General Motors (GM) 14, 34F, 190, 212
Global Crossing (GX) 180
Global Financial Advisors 44
Goldman Sachs (GS) 44
Grace (THW) 140
Grace Semiconductor Manufacturing 140

H

Handspring (HAND) 218
Heartland Advisors 225
Hewlett-Packard (HWP) 38, 44, 59, 218
Hicks Muse Tate & Furst 66
Home Depot (HD) 70
Honda (HMC) 212
honestbroker.com 14

I

IBM (IBM) 64, 76, 142, 218
ICG Communications (ICG) 38, 66, 176
InfoSpace (INSP) 180
Integral Capital Partners 44
Intel (INTC) 44, 218
International Data 182
IVAX (IVX) 38

J

Jabil (JBL) 180
JDS Uniphase (JDSU) 218
J.P. Morgan (JPM) 44, 232
Juno Online Services (JWEB) 178

K

Komatsu 225
KPMG 60

L

Lazard Frères 166
Lehman Brothers (LEH) 26, 225
LG Chemical 132
Liberty Media (LMGA) 66, 176
Lowe's (LOW) 70
Lucent Technologies (LU) 44, 59, 76, 218
Lyondell Petrochemical (LYO) 76

M

Marriott (MAR) 14
McDonald Investments 225
McGraw-Hill (MHP) 226
Mehta Partners 168
Mercedes (DCX) 212
Mercury Interactive (MERQ) 218
Merrill Lynch (MER) 44, 180, 218
Micromuse (MUSE) 180
Micron (MU) 180
Microsoft (MSFT) 44, 178, 218
MicroSurfaces 76
Mitsubishi Motors 38, 168
MonitorClipper 38
Morgan Stanley Dean Witter (MWD) 38, 44
Motorola (MOT) 180, 218
MP3.com (MPPP) 66
MSNBC 28

N

NEC (NEC) 76
Ned Davis Research 44
Nestlé (NSRGY) 91
NetCreations (NCR) 180
Netscape (AOL) 64
Network Appliance (NTAP) 180, 218
Newcastle Partners 225
News Corp. (NWS) 176
Nokia (NOK) 218

Nortel Networks (NT) 44, 180, 218
NorthNet Internet Service 178

O

Oracle (ORCL) 182, 218

P

Pacific Investment Management 44
Palm (PALM) 218
PeopleSoft (PSFT) 225
PepsiCo (PEP) 91
PG&E Energy Trading 225
Pharmacia (PHA) 168
Philips (PHG) 139
Phone.com (PHCM) 218
Pivotal (PVTI) 218
Polaroid (PRD) 38
Price Communications (PR) 66
Priceline.com (PCLN) 44, 176, 190
PricewaterhouseCoopers 59, 60
Procom Industria Electronica 225
Prodigy (PRGY) 178
Prudential Securities 44, 59, 182
Prudential Volpe Brown 180

Q

Quaker Oats (OAT) 91
QuickQuote.com 222

R

Rational Software (RATL) 182
Regional Financial Associates 38
Research in Motion (RIMM) 218
Rinor 96

S

Salomon Smith Barney (C) 42
Sanmina (SANM) 180
SAP (SAP) 225
Schering-Plough 144
Seagram (VO) 66
Sears (S) 70
Shanghai Fudan 140

Siebel (SEBL) 180
Sprint PCS (PCS) 18
Standard & Poor's (N) 44, 226
Staples (SPLS) 44
Starwood Hotels (HO)
Sterling Software (SS) 182
Stokely-Van Camp 9
Strategic Thinking G 132
Sun Microsystems (SUNW) 180, 218
Synoptics 218

T

Taiwan Semiconductor (TSM) 180
Tele-Communication 176
Telelogic 182
Teligent (TGNT) 176
Time Warner (TWX) 178
Timogen 142
Toyota (TM) 190
Toyota (TOYOY) 212
Trilogy 190

U

UBS Warburg 44, 176
Unisys (UIS) 218
Universal Music (VO)
UPS (UPS) 66
USA Networks 176
U-Vision Biotech 142

V

Verizon Wireless 66
VerticalNet (VERT) 18
Vespa 14
Viant (Vian) 180

W

Wal-Mart (WMT) 44, 180
Wells Capital Management 38
WorldCom (WCOM) 38, 44, 180
Wyeth-Ayerst 144

X

Xerox (XRX) 218

Y

Yahoo! (YHOO) 180, 218

Business Week (ISSN 0007-7135) published weekly, except for one week in January and one week in August, by The McGraw-Hill Companies, Inc. Executive, Editorial, Circulation, and Advertising Offices: 1221 Avenue of the Americas, New York, N.Y. 10020. U.S. subscriber rate \$54.95/year. Canada, \$69/year. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Postage at Montreal, P.Q. Canada Post International Publications Mail Product Sales Agreement No. 246. Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J. 08520.

MARKETPLACE

For Ad Rates and Information
Phone: (312) 464-0500
Fax: (312) 464-0512

Business Services

Need a Logo?

Get a Professional
Custom Designed
LOGO TODAY!
Free: 1-888-869-5646
www.1800mylogo.com

Incorporate.com

Registered agent services
Bank accounts opened
Minute director services
Share Incorporation Handbook
Share Business Incorporators, Inc.
800.423.2993

Education/Instruction

AM INTERNATIONAL UNIVERSITY

Accredited Distance Learning
College Degrees. Over 100 majors
Credit for Work/Life Experience
www.aui.edu / usa@afordnet.edu
TOLL FREE 1-877-7 BIJ USA

Doctor of Letters

London Campus of a private British
Indies registered University is
offering a limited number of D.Litt.
degrees. Applicants should be leading
figures in their field with published
works. For further information contact
St. Clements University
Fax 44 207 404 2423 or
mail admin@stclements.edu

ABSOLUTELY FREE
EVALUATION

Chancellor's -- Master's --
Ph.D. Degrees
Based on life and work experience.
Confidential -- Fast -- Student
Loans. www.arcc.org
800-951-1203

Get Your MBA
Through Distance Learning

University of
Leicester
Prestigious British University
World Leader in Distance Learning
No GMAT required
Local support center
Flexible Education Financing available
Work experience & qualifications considered
Member of the Association of
Business Schools
Accredited by the Association of MBAs
Offered under Royal Charter
800-874-5844
Email: rdiusa@erols.com
www.rdi.co.uk

Business Opportunities

BUSINESS
PARTNER

Retired lawyer needs associates to
offer unique financial services to
make clients lawsuit-proof. All the
local appointments you can handle.
State-of-the-art marketing tools.
Huge demand. Extremely high income
with lifetime residuals in multi-
billion dollar market. Candidates
must be bondable, have outstanding
references & good communication
skills. 24-hr. recording.

(800) 653-4497

OFFSHORE BANK
FOR SALE

Free Report

800-733-2191

\$ OVER THREE BILLION \$

WORTH OF BUSINESSES FOR SALE BY OWNERS
MAJOR MANUFACTURING TO SMALL RETAIL SHOPS
CONVENIENCE STORES - RESTAURANTS - HOTELS
No Cost To Review Businesses
1-800-999-SALE • www.gwbs.com
NATIONWIDE - To Buy or Sell
GREAT WESTERN BUSINESS SERVICES, INC.

MAKE MONEY AS A
BUSINESS FINANCE
CONSULTANT

Arrange Business Loans and Equipment
Leases from \$1,000 to \$10 million. No co-
brokering. Work directly with National
Lenders. Unlimited earnings potential and
residual income.

FREE 45 minute
video seminar and
information packet

CALL 1-800-336-3933

The Loan Consultants, Inc.

Legal Services

ASSET PROTECTION

Corporations, Ltd. Partnerships, LLCs
Offshore Trusts, Corps., Private Banking
• Best Jurisdictions • Maximum Privacy
• Tax Savings • Estate Planning
Professional - Confidential

Steven Sears, CPA • Attorney at Law
714-544-0622 • www.searsatty.com

Mouse Pads

"Where the Heck
Is Area Code 978?"

Area Code Mouse Pad puts up-to-the-
minute U.S. area code info at your
fingertips! Super-accurate, code-order
directory, high quality, hard-top, fast-
tracking pad. Time Zone info too!
Only \$7.99 + \$2. S&H
FREE Bonus Gift while supplies last!

The Product Works
PO Box 9004 Gaithersburg, MD 20898
www.theproductworks.com

Cruises/Travel Discounts

REDEEM AND EARN MILEAGE PLUS MILES



1-888-666-8120

cruise4miles.com

WIN A CRUISE - SEE OUR WEBSITE
12 CRUISE LINES - GREAT PRICES

Discount CNN
Hotels & Condos

Up to 65% Off! Rooms for Soldout Dates!

hoteldiscount.com

1-800-964-6835

Most Major Cities

Computer Equip./Supplies

INK CARTRIDGES

SAVE UP TO 70% ON CARTRIDGES FOR
EPSON® AND CANON® - GREAT PRICES
ON OTHERS, TOO. DELIVERED BY FEDEX®
OVERNIGHT FOR ONLY \$5.00 TENS OF
THOUSANDS OF SATISFIED CUSTOMERS

FREE BLACK CARTRIDGE VIA THIS LINK
WWW.CARPOTINK.COM/BW

CARROT'S
INK CARTRIDGES

Ted Dasher Inc.

Hewlett-Packard

Buy/Sell/Trade

LaserJet • ColorPro • DraftMaster • DeskJet
DraftPro • DesignJet • Ruggedwriter
Electrostatic Plotters

HP 9000/3000 Workstations & Personal Computers
Demo & Refurbished Equipment

800-638-4833

Email: sales@dasher.com

Aviation/Fractional Ownership

VIRTUAL REALITY?
HOW ABOUT ACTUAL REALITY?

www.flexjet.com

Some things just can't be communicated over
fiber optic cable. And our Learjet® and
Challenger® business jets enable the modern
CEO to capitalize on the kind of face-to-face
interaction that moves businesses forward.
We offer the most complete range of latest
technology aircraft available today. So while
there may be other options to Flexjet, there
can only be one choice. Flexjet. For more
information on the many affordable benefits of
fractional ownership and our unprecedented
level of personal service and attention to
detail, call 1-800-FLEXJET.

BOMBARDIER
AEROSPACE

Flexjet is a Bombardier Aerospace program.



THE ECONOMIC CHALLENGE AHEAD

Pity the new President, whoever he may be. Upon taking the oath of office in January, he is likely to immediately face a sharply declining economy that Wall Street fears just might slide into recession. Unless he is careful, a legacy of bitter partisanship from the election could pressure the President to take policy measures that are either too extreme or simply wrong for what could turn out to be the first big downturn of the New Economy (page 38). As Bob Woodward shows in his new book, *Maestro: Alan Greenspan's Fed and the American Boom*, it took an unusual deal on fiscal policy between President Clinton and Federal Reserve Chairman Alan Greenspan that actually went against core elements of the Democratic Party to lay the conditions for a decade of growth. The new President should be prepared to be just as flexible.

The unalloyed truth is that the forces of higher interest rates, higher energy prices, and a growing tech wreck are pulling down the growth rate from 6% toward 3%. The only question is how low it will go. The political uncertainty and limited mandate that will surround the next President threaten to contribute to the slowdown. One of Greenspan's favorite arcane leading indicators, the price of scrap steel, is already at a 14-year low. Economists at J.P. Morgan & Co. and elsewhere are already on a "hard landing" watch, giving recession a 30% to 40% chance of occurring next year.

It is the shape of the slowdown that represents the clear and present danger to economic policy of the new President. This downturn in the business cycle may turn out to be like no other. Capital investment for information technologies, not consumer spending, has been the driving force in the long expansion. Growing at 30% to 40% annually, IT outlays are now being scaled back, as the dot-com bubble bursts, telecom giants stagger, and high-tech companies forecast slowing earnings ahead. How far corporations will go in cutting back their high-tech investment is a key question.

The stock market will be a major influence on whether there is a soft or hard landing. With the Nasdaq already

down about 40% from its highs of last spring, a big pullback could weaken the economy. The stock market plays a big role in the New Economy than in the Old—attracting capital from overseas and keeping the dollar strong, boosting consumer spending via the wealth effect, generating a federal budget surplus through capital-gains and income taxes, spawning startups and sparking innovation with initial public offerings, as well as financing corporate investments in information technologies. With more people owning stocks, margin debt at record highs, the economy is clearly more vulnerable today to a drop in the stock market than before.

Adding to this vulnerability is an increasingly fragile global economy. Without much fanfare, the world economy hitched itself to the New Economy business cycle. Asia, in particular, rises and falls with tech.

The good news is that the budget surplus provides the new President with plenty of fiscal fodder to combat any severe economic downturn. But will politics blind the President—Congress—to its proper use? In the runup to the election, both parties betrayed their promises to cap spending, blowing billions on pork. This stimulative fiscal policy worked at cross-purposes with Greenspan's efforts to slow the economy down. It made his job that much harder.

The new President will be tempted to fall back on campaign promises, be it massive tax cuts or enormous spending programs. Either one will avoid paying down the debt and will extend far into the future. The correct policy is much more modest, short-term, and cyclically oriented. Indeed, in a New Economy downturn, new fiscal policy may be required that specifically focus on reinvigorating capital investment in information technologies. Greenspan, a serious student of productivity-driven economic growth, may already have ideas on dealing with a high-tech slowdown.

The bottom line is politicians cannot make fiscal policy a vacuum. Consulting the Federal Reserve is as important as keeping the recovery moving as it was in getting it started.

THE BIG FIVE'S CHANCE AT SELF-REGULATION

The Securities & Exchange Commission and the accounting profession have come to a reasonable compromise over a serious conflict of interest issue involving the sale of consulting services to companies that the Big Five audit (page 60). Those accounting firms that sign on to the agreement are to be congratulated for recognizing the magnitude of the problem and for seeking a solution.

SEC Chairman Arthur Levitt originally proposed banning accountants from selling lucrative information-technology consulting services to their audit clients. Levitt argued that if the accountants were business partners with the companies they audit, it would be extremely difficult to be objec-

tive. Under the compromise, the accounting firms will be able to design and sell computer systems, but it will be up to the client audit committee to disclose to shareholders the company's annual proxy how much it paid to the accountants for the services. The audit committee must verify whether or not the consulting services have impaired the auditors' independence in any way. Finally, the company, and not the auditor, must own the information systems installed.

This is the accounting profession's big chance for self-regulation in the high-tech arena. If they, or their clients, buy into this agreement, then a ban will almost certainly follow.



Every day, 160,000 people
are accessing infotainment
services on their mobile
phones. Ericsson says, let's
make sure that as the Mobile

want

Ericsson mobile infotainment. What you want. Where you want it.

Internet grows we're giving
people what they want, where
they want it. That's why, as
part of its end-to-end Mobile
Internet solutions, Ericsson
brings together network
operators and application devel-
opers to build exciting new
services for every local market
around the world. News.
Music. Games. Online shopping.
The kind of services customers
will actually use. Every day.

www.ericsson.com

The Mobile Internet Revolution.

It's an everyday thing.

ERICSSON 

➤ Just learned
discounted cash flow
techniques with
40 other analysts.



IBM

Lotus.

IBM Mindspan Solutions™ helps you plan, create and deploy innovative e-learning solutions to change the way your organization learns and works. We offer flexible training software and services.

Business Week

CEMBER 4, 2000 / THE MCGRAW-HILL COMPANIES

ch
orries
◀Intel
EMC▶

nazon
oor
ons
e

nance
y bank
dit is getting
ight

gital
meras
How to
choose
the right
one



BURLINGAME
NOV 28 2000
LIBRARY

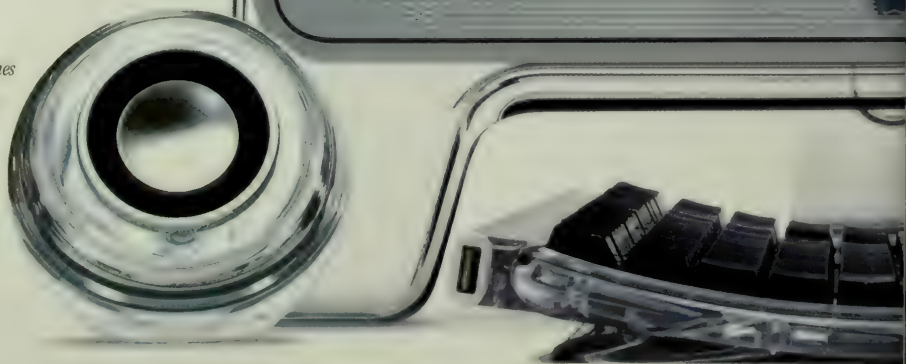
PAGE 128

BKBBGDD 5-DIGIT 94010
0602 1058111600# T03 0101 000000071
0120
004
BURLINGAME PUBLIC LIBRARY
180 PRIMROSE RD
BURLINGAME CA 94010-4010

Never been there

Introducing the new Power Mac™ G4 Cube: A supercomputer miraculously engineered into an eight-inch cube. Though it's less than one quarter the size of most PCs, the G4 Cube offers far greater performance. Its G4 processor reaches supercomputer speeds of over three billion calculations per second (three gigaflops). So you have more than enough power to make desktop movies, create websites, enjoy advanced 3D games or watch DVD movies.

The Power Mac G4 Cube comes with slot-loading DVD drive, Apple-designed Harman Kardon stereo speakers, a new pro keyboard and ergonomic optical mouse.



ever done that.

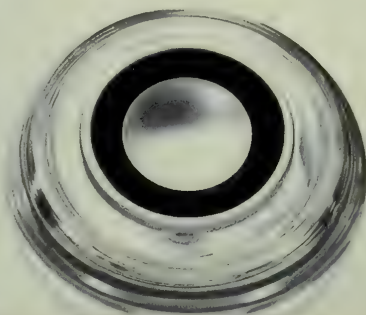
*Choose from three perfectly matching displays: 17-inch (16-inch viewable) flat Diamondtron™ CRT, 15-inch flat-panel display or the breathtaking 22-inch flat-panel, widescreen Apple Cinema Display.**



Designed to be cooled without a fan, the G4 Cube is one of the quietest computers ever built. And it comes standard with a new optical mouse, pro keyboard and Apple-designed Harman Kardon stereo speakers. True, it looks like it belongs in the Museum of Modern Art. But the G4 Cube is actually a supercomputer that belongs right on your desk. Call 1-800-MY-APPLE or visit www.apple.com.



Think different.™





What if the mosquito could

Viruses. The Internet caused the problem. It's only fit



arry the cure?

ould also provide the solution.



myCIO.com

Your Chief Internet Officer

New viruses are spreading so fast, anti-virus solutions can't keep up. Until now.  myCIO.com's VirusScan ASaP uses the Internet to deliver anti-virus services that automatically update your entire network with the latest cures. Instantly. So it shuts out bugs before they can infect even one person.  What's more, myCIO.com is an easy upgrade because it's built on McAfee technology, the anti-virus software used by most businesses. It's all part of the world's #1 Internet security software at Network Associates.  So don't let your security take a turn for the worse. Let myCIO.com exterminate your problems automatically.  Visit myCIO.com for a free trial of VirusScan ASaP. You'll see.

©2000 Networks Associates Technology, Inc. and its affiliated companies. All rights reserved. Network Associates, myCIO.com, McAfee and VirusScan are registered trademarks of Networks Associates Technology, Inc. and/or its affiliates worldwide.

SURFING 60-FOOTERS AT WAIMEA SPEED CLIMBING EL CAPITAN TEAMING ACROSS MULTIPLE DISCIPLINES TO IMPLEMENT A COST-EFFICIENT YET FLEXIBLE GAS SUPPLY MODEL SAVING MUNICIPALITIES A BUNDLE { whatever gets those endorphins going }

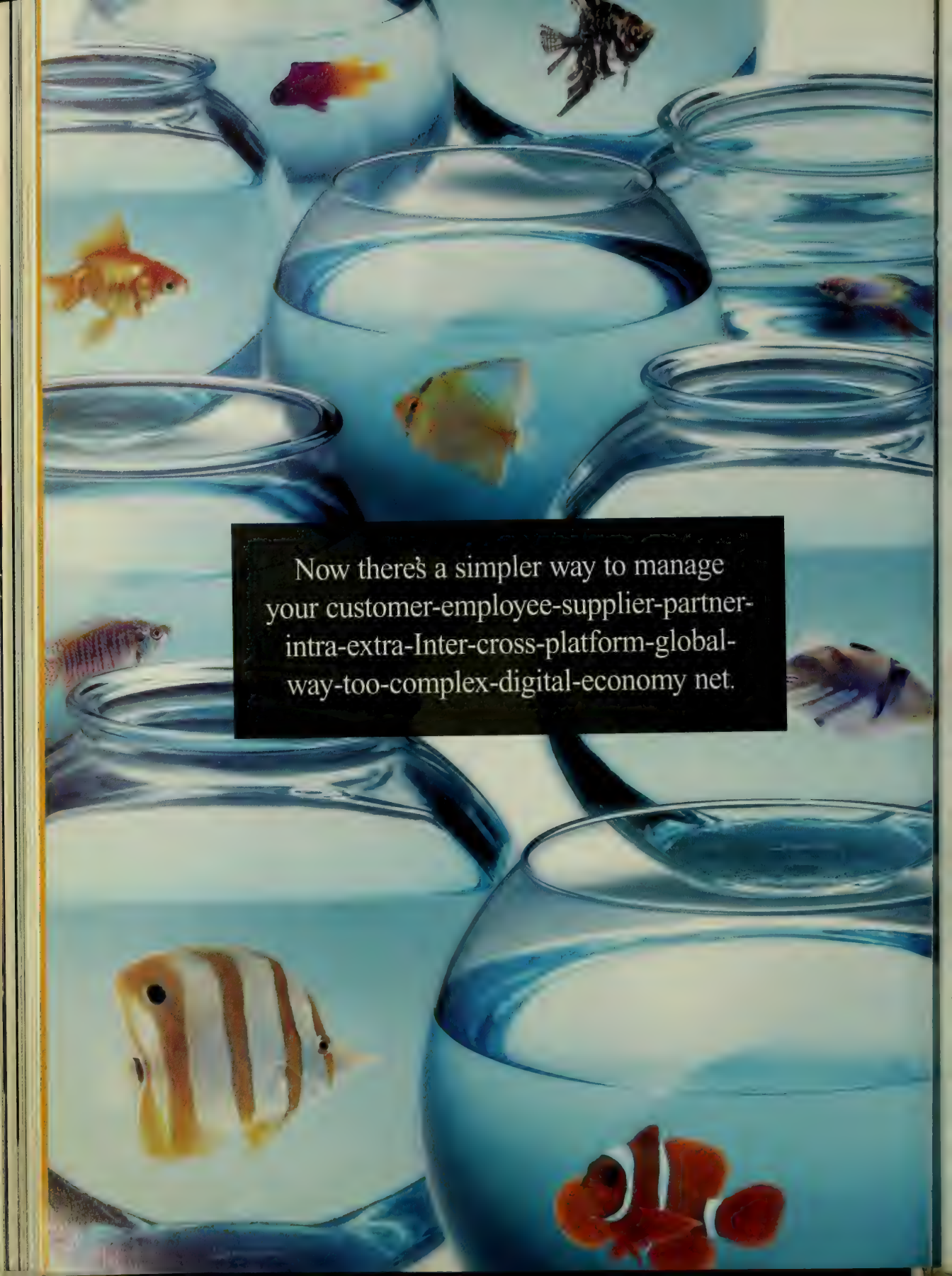
We admit it. At Dynegy, we're opportunity junkies. Living for the rush of turning the complexity of the marketplace into upside for our clients. For example, using our expertise to create a virtual storage capability so a western city can save on unbundled natural gas costs. Cool stuff like that. Our business is to market, generate, deliver and manage energy (and now broadband) for our clients. We do it with unmatched market savvy. A work ethic second to none. A penchant for tailored solutions. And we do it well. In just 15 years, we've become a company with revenues topping \$22 billion and we're now included on the S&P 500. All of which make Dynegy (NYSE: DYG) a company worth watching. Presumably for some opportunities of your own. Enjoy the rush.

www.dynegy.com 877-4-DYNEGY
©2004 Dynegy Inc. All rights reserved. Dynegy and Dynegy logo are trademarks of Dynegy Inc.



DYNEGY





Now there's a simpler way to manage
your customer-employee-supplier-partner-
intra-extra-Inter-cross-platform-global-
way-too-complex-digital-economy net.



It's one Net. Dive in.

You can't conquer the world of eBusiness being a lonely fish in an isolated pond. You need the freedom to connect. So your employees, partners, suppliers and customers can work together. And all their different operating systems, intranets, extranets and the Internet, can work as one Net. Securely and reliably. That's the strength of Novell's Net services software. It lets existing technology work together. And gives you the power to change your eBusiness as fast as the Net economy. So dive in at www.novell.com

Novell.

BusinessWeek

DECEMBER 4, 2000

COVER STORY

TOYS 'R' US

Can CEO Eyler, a star from rival FAO Schwarz, make the retailer shimmer again? *page 128*

Cover Story

128 TOY STORY

It's beginning to look a lot like Christmas, and the CEO of Toys 'R' Us, John H. Eyler, is hell-bent on making this the season the retailer turns around. He's revamping stores, pumping up service, and building a flagship in Times Square. Here's a look at his game plan

140 CLUBBY BOARDROOMS 'R' US

With two ex-CEOs as directors, will Eyler really have free rein?

News: Analysis & Commentary

34 'TIS A SEASON TO BE GLOOMY

Retail sales will slow, along with the economy, for the holidays

36 E-TAILERS' HOLIDAY SURPRISE?

Online sales might not be so jolly

38 COMMENTARY: SOFT MONEY

This election, many candidates found their messages overwhelmed

39 ORACLE'S MANAGEMENT VOID

After CEO Ellison's heir apparent quit, shares got whacked

40 COMMENTARY: CHRYSLER

Can Schrempf's new team stop the careening in Detroit?

42 COMMENTARY: DSL

The Baby Bells are winning the race against upstart companies

44 PLAYBOY'S TIRED LITTLE BUNNY

The brand stalls on TV and online

46 BOTTLING UP NATURAL GAS

What's giving the industry fits

48 B2B: MORE ISN'T MERRIER

The big exchange sites flounder

50 IN BUSINESS THIS WEEK

International Business

54 FRANCE: VIVENDI

The media giant's future is clouded by tech glitches and a fuzzy agenda

56 RUSSIA: CRONY CAPITALISM

It's thriving under Putin

60 COMMENTARY: MEXICO

Fox must lower expectations

62 INTERNATIONAL OUTLOOK

Canada: A hard wind from the right

Economic Analysis

28 TYSON: ECONOMIC VIEWPOINT

Asian regional trade deals are a first step toward multilateralism

30 ECONOMIC TRENDS

Asian recovery, trust and winning games, Big Apple boom

31 BUSINESS OUTLOOK

Investors must be patient with Fed when it comes to a rate

127 COMMENTARY: ASIA

Post-crisis Asia seems to be losing interest in free trade

Government

53 WASHINGTON OUTLOOK

The slowdown could hit GOP governors where they live

85 COMMENTARY: WARFARE

Now, the media are key—any weaponry may be next to us

Industries

63 A WORLD-CLASS DISASTER

Big promises not kept may be the break-up of software firms

Marketing

64 ALL ABOARD AT LIONEL

The toy train maker is back on track with enthusiasts at the

Photo Essay

72 AMTRAK BETS ON A BULL

Its Acela high-speed train is on the laptop-and-cell-phone on

CONNECT
A string of
steps, Intel is
going mad

ROLLING ALONG
Toy train maker
Lionel is once
again being run
by enthusiasts—
plus a rock star

page 64



**PHOTO
ESSAY**

A peek at Amtrak's
new bullet train page 72



CAMERA ACTION

Digital prices have
fallen, and there are
lots of choices page 160



TARGETED
EMC is no longer
the only storage
game in town page 122

6-1/2-INCH!
lenly, Vivendi's
d design doesn't
so grand page 54

Workplace

UNION FOR AMAZON?
d-fashioned organizers target
orkers at the online icon
COMMENTARY: OSHA
s cure for workplace injuries
initely beats the disease

Corporation

OLAROID'S BLURRED PICTURE
he company has yet to make the
ansition to digital cameras

ce & Technology

COMMENTARY: THE EBOLA VIRUS
on, the contagious and incurable
sease will be the West's problem
BLOOD BOOSTER FOR AMGEN?
he biotech giant has potential
ockbusters near the pipeline's end
DEVELOPMENTS TO WATCH
atwing" sails, foot-and-mouth
sease, sunburn patches, nanotech

mation Technology

WILDSTROM: TECHNOLOGY & YOU
ost Americans could wait a good
ing while for broadband access

116 INTEL INSIDE OUT

After a year of bloopers, can the
chipmaker get its house in order?

122 CHALLENGING DATA KING EMC

EMC rules data storage, but rivals
are vying for the business

Management

144 DEUTSCHE TELEKOM'S NEXT CALL

Ron Sommer runs the AT&T of
Europe. But he isn't breaking it up

Finance

148 CREDIT CRUNCH AT THE BANK

Ailing corporations are coming up
against cautious lenders

150 LESSONS FROM A DAY TRADER

Carlin Equities' Mayer Offinan has
15 years' experience to share

152 INVESTMENT BANKS: BARINGS

It may soon be history

157 COMMENTARY: EXCHANGE RATES

Why the euro must take its toll

158 SCHWAB'S DISTAFF STRATEGY

The brokerage goes all-out with a
Web site and women-only seminars

BusinessWeek Lifestyle

160 DIGITAL CAMERAS

They're more affordable, and there
are more models for different needs

164 'SLOW FOOD' FOR THE FAST LANE

Handmade eats for connoisseurs

BusinessWeek Investor

167 PICKING CLOSED-END FUNDS

They're plums now as investors sell
stocks to offset taxes

172 THE BARKER PORTFOLIO

Amazon's cheap stock is no bargain

175 MARCIAL: INSIDE WALL STREET

Features

14 UP FRONT

18 READERS REPORT

19 CORRECTIONS & CLARIFICATIONS

23 BOOKS

Woodward: *Maestro*

Martin: *Greenspan*

26 BUSINESS WEEK BEST-SELLER LIST

176 FIGURES OF THE WEEK

180 INDEX TO COMPANIES

182 EDITORIALS

BusinessWeek online

www.businessweek.com
America Online Keyword: BW

Updated every business day at www.businessweek.com



Winner of the 2000 National Magazine Award for General Excellence in New Media

VIDEO VIEWS

Original streaming video featuring industry experts and BW editors

■ HAIL GRIDLOCK:

Discount broker Muriel Siebert likes the prospect of government stuck in neutral



■ ARCHIVE DEAL:

TV veteran Sir David Frost on selling subscription access to historic news clips



TOOLS

■ CAPITAL GAINS CALCULATOR:

Here's how to figure if you should hold, or sell and reinvest



■ **MBA SEARCH:** Which is the right business school for you and your needs?



■ **SALARY SURVEYS:** How much money should you be paying your staff?



■ YOUR PORTFOLIO:

Check in on the health of your investments



INTERACTIVE FORUMS

■ Join in ongoing discussions on B-schools, assistive technology, investing, info tech, and more—or start your own

HANDHELD EDITION

Put us on your Palm! Get news from Daily Briefing, S&P data, and more. Powered by PricewaterhouseCoopers



Find quick links to everything on this page at the Dec. 4, 2000, issue's table of contents online, or go directly to www.businessweek.com/2000/00_49/online.htm

Election Insights

And the winner is... Our in-depth daily coverage gets behind the vote counts in this year's unprecedented Presidential race



www.businessweek.com/bwda

DAILY BRIEFING

Business and investing news, commentary, and analysis

YOUTH DRIVE: At GM, a slew of new models and concept cars are focused on one thing: Grabbing younger buyers



SATELLITE BOOST? Despite disasters like Iridium, the industry is getting another chance, thanks to booming broadband demand

INVESTING

Investing insights powered by S&P Personal Wealth

www.businessweek.com/invest

STREET WISE: Although its stock is in tatters, VA Linux has plenty of cash and big hopes of luring customers from IBM and Sun

SMALL BUSINESS

A resource for entrepreneurs

frontier.businessweek.com

THE WRITE STUFF: Bplans.com has some handy tools for entrepreneurs struggling to put their business plan on paper



TECHNOLOGY

State-of-the-art coverage of info tech

www.businessweek.com/technology

DOT-COM UNDERDOG: PayPal may well hold its own against Citigroup as the giant invades the online-payments market



B-SCHOOLS

Business Week's exclusive rankings and profiles

www.businessweek.com/bschools

PART-TIME MBA: We've expanded our coverage and now have profiles of 250 programs in the U.S. and around the world

GLOBAL BUSINESS

In-depth coverage of Asia, Europe, and Latin America

www.businessweek.com/global

ONLINE ASIA: Acer Chairman Stan Shih talks about Taiwan's need plan now for a postindustrial future

CAREERS

Advice and tools for upper-management job seekers

www.businessweek.com/careers

LONG-TERM VIEW: Experts weigh in on how to plot a future career path even though you're in a comfortable position





AA.COM. THE ULTIMATE SITE FOR EVERYTHING **American Airlines**
American Eagle

We develop new vaccines and combination vaccines.

So that protecting our children

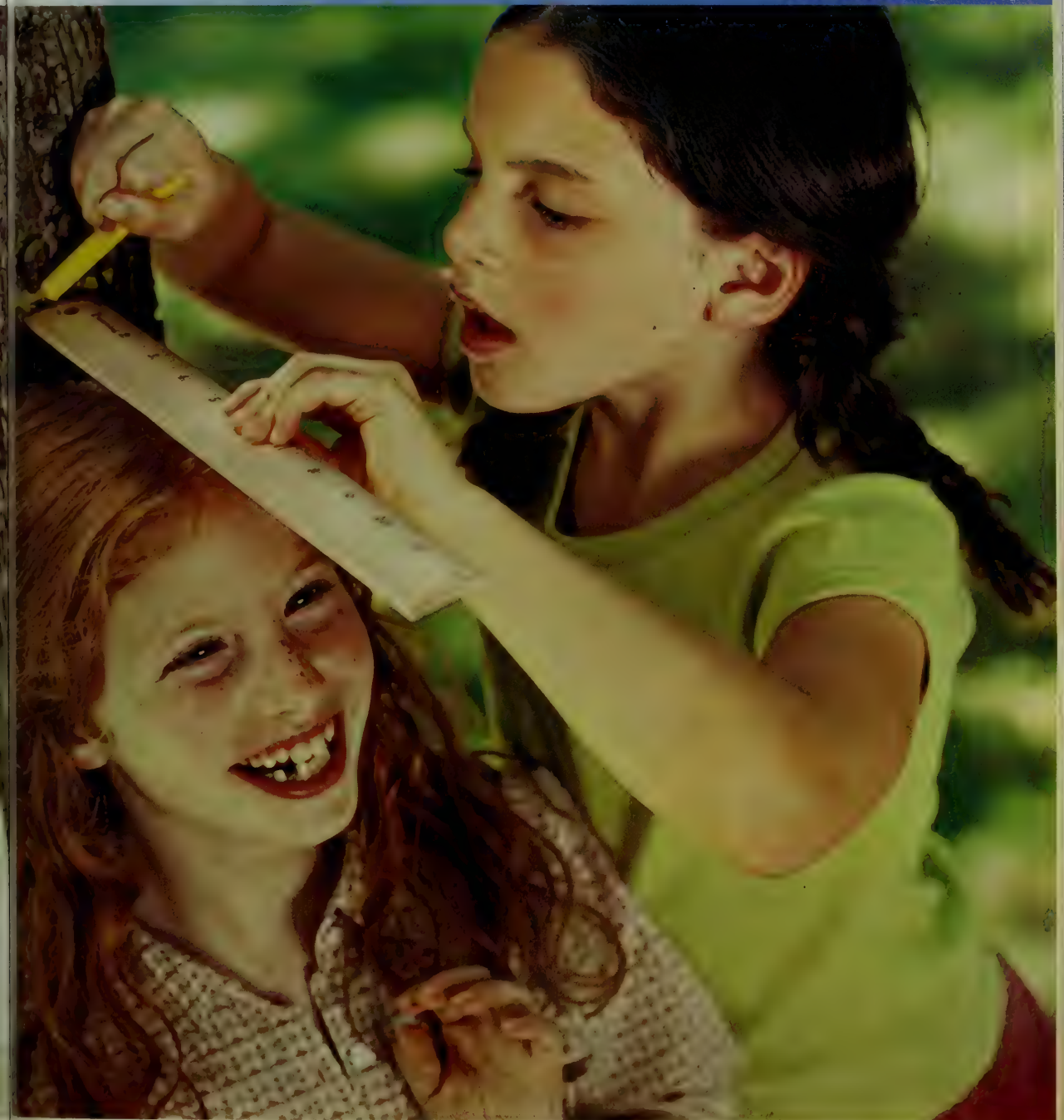
Wouldn't it be wonderful if many illnesses were just a memory? At Aventis, we are working toward this goal. As a world-leading pharmaceutical company in the field of human vaccines, we help protect children around the globe from infectious diseases such as polio, diphtheria, tetanus, pertussis, meningitis and hepatitis B. We can prevent up to six illnesses with a single combination vaccine. However, for a number of diseases, there is still no comprehensive protection. Therefore, our scientists will continue to strive to develop innovative vaccines. So that our children can grow up more carefree.

Aventis, Strasbourg (France), is listed on the stock exchanges in Paris, Frankfurt and New York. www.aventis.com

Health is easier.



Our Challenge is Life



Up Front

EDITED BY ROBERT McNATT

SPORTS BIZ

SIGN OF THE DOT-COM TIMES?

THE TWINKLING LETTERS ATOP Baltimore's PSINet Stadium, which have become a fixture on the city skyline, could soon go out. Because of an underperforming acquisition, PSINet's share price has plummeted



from about \$61 in March to less than \$2. PSINet may even be sold, now that it has retained Goldman Sachs as an adviser. So what happens to that big stadium sign then?

Nothing, says PSINet, which in 1999 agreed to pay \$105.5 million over 20 years to put its name on the home of the National Football League's Baltimore Ravens. It has already paid about \$17 million. Despite its ills, the Internet services compa-

ny insists that the deal is still on; the publicity is just too good. Says spokesman Robert Leahy: "Three and a half million people see that stadium each month driving down the I-95 corridor."

The Ravens say they have not considered PSINet's problems. But the team might be better off if PSINet fumbles.

Missing a payment would breach its contract. The team could then resell the stadium name. And naming deals have gotten very rich. Reliant Energy recently inked a 30-year, \$300 million deal to name a stadium complex in Houston.

With money like that floating around, any sentimental attachment the Ravens may feel for that sign might fade as quickly as PSINet's fortunes. *Mark Hyman*

TALK SHOW "It was clearly the most effective and humane way of dispatching the bird."

—Buckingham Palace response to criticism of Queen Elizabeth II for wringing the neck of a live pheasant during a hunt



MOTOR CITY

THE AZTEC FAILS TO CONQUER

PONTIAC DEALERS SAY THAT shoppers who can get past the looks of the new Aztek sport-utility vehicle usually end up liking the way it drives. But the angular lines and garish styling must be stopping more people than General Motors anticipated. The Aztek has sold slowly since its introduction, forcing the company to scale back sales projections and offer rebates.

Introduced in August, the Aztek sold only 6,700 units

through October. The company had first forecast sales of 60,000 to 70,000 units annually. So in late November, GM slapped a \$500 rebate on the car. (Azteks cost from \$22,000 to \$27,000.) Pontiac-GMC Division General Manager Lynn Myers says that GM has also scaled back the SUV's sale forecast by roughly 10,000 units. "Are we as far along the curve as we need to be?" asks Myers. "Probably not."

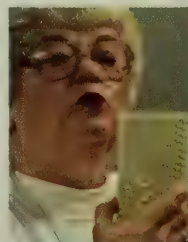
In fairness, many carmakers now offer rebates. GM offered new rebates on 16 other cars along with Aztek. But ominously, Aztek inventories are still piling up in dealer showrooms. That could put pressure on the forthcoming Buick Rendezvous SUV, which will be built alongside the Aztek early next year. GM hopes to sell between 40,000 and 50,000 of those vehicles each year. *David Welton*

CAMPAIGN 2000

VOTE OF CONFIDENCE

EVEN AFTER ONE OF the most fractious elections ever, America's under-30 crowd—often thought materialistic and apolitical—retains a surprising glimmer of faith in politics.

According to a BUSINESS



WEEK/Harris Interactive poll of 1,680 adults

PREZ WHO? Nov. 1
Nov. 2

young people, asked if the political process is a "true test of the public will"

answered affirmatively more often than their elders. Some 34% of 18- to 24-year-olds answered yes, compared with 30% of those 25 to 29. But they were extremely confident, very confident, or confident. The percentages fell in older groups. Of those over 65, 72% were somewhat not confident of the process. "The surprise of this poll," says David Krane, Harris senior veep, "is that older people are bummed out."

Yes, only 54% of the 18- to 24-year-old respondents voted. But 46% of them said this wild election would make them more likely to vote in the future. Maybe the apolitical young need what the elders seemingly don't want. More close elections.

THE LIST THE NEW DEMOGRAPHICS OF BLACK AMERICANS

African Americans are still concentrated in the South and suffer a higher poverty rate than non-Hispanic whites, according to 1999 data just released by the Census Bureau. A bit of good news: Black married couples are catching up to whites in household income.

FINDING

SUPPORTING DATA

THE AFRICAN AMERICAN POPULATION IS YOUNGER THAN THE WHITE POPULATION

Age 18 or younger:
blacks: 33%; whites: 24%

AFRICAN AMERICANS ARE MORE THAN TWICE AS LIKELY TO LIVE IN CITIES

Metro area, inside central city:
blacks: 55.1%; whites: 21.7%

AFRICAN AMERICANS STILL LAG BEHIND IN HIGHER EDUCATION

Those with at least a bachelor's degree:
blacks: 15%; whites: 28%

AFRICAN AMERICANS HAVE A GROWING MIDDLE-INCOME PRESENCE

Married couples earning \$75,000 or more:
blacks: 22.6%; whites: 32.9%



focus

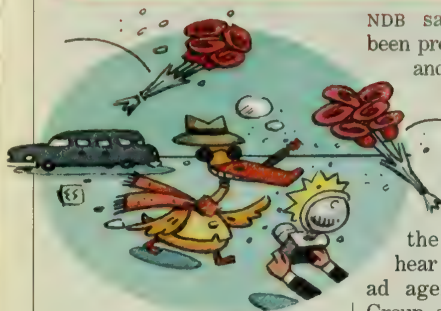


With all efforts focused on one goal, success becomes a far surer thing. This is what we believe at Syngenta, a new global company dedicated solely to agribusiness. Syngenta brings together the industry-leading skills of Novartis and Zeneca to form a company that will create new potential in the world of agriculture. With over 23,000 employees worldwide, a dedicated R&D team of 5,000 and pro forma sales in 1999 of US\$ 7 billion, we are focused on the development of innovative crop protection, seed solutions and sustainable agriculture around the world. Focus isn't just a philosophy at Syngenta, it's how we'll grow.

syngenta

www.syngenta.com

Up Front



MAD AVE.

EVERYTHING'S JUST DUCKY

TO THE LONG-STANDING FINANCIAL icons of the bull and the bear, need we now also add the lowly duck?

National Discount Brokers Group already had a mallard as its logo (NDB sees duck decoys as emblematic of the wealthy customers it wants) when it added this entry to its voice-mail system this summer: "If you would like to hear a duck quack, press 7."

AMUSEMENTS

NOW THE BLIND CAN ENJOY MOVIES, TOO

VISUALLY IMPAIRED AMERICANS who love movies have long been "out of sight, out of mind" to Hollywood. But relief is on the way, thanks to government prodding and two different technologies.



EARFUL: All on the soundtrack

The Telecommunications Act of 1996 mandates that TV shows be both captioned and described. PBS does that now. But, the Federal Communications Commission wants the biggest broadcast and cable networks to com-

NDB says that number has been pressed 8 million times—and account growth is up by 75%. In insurer AFLAC's TV ads, a frustrated duck tries to brag about the insurer by saying "AFLAC!" But the humans, of course, hear only "quack." AFLAC's ad agency, Kaplan Thayer Group, says the goofy ads test twice as recognizable as those of other insurers. So look for new duck ads in 2001.

Also, insurer Geico has a spokesduck. He shows the savings customers can reap with Geico by briefly covering his face with his wing, only to reveal...a smaller bill.

So why a duck? Trish Watson, a partner at marketing consultants Peppers and Rogers, says the comic ads stand out in the staid financial category. "It's great brand recognition." And good, too, for a few extra wisequacks. *Roy Furchgott*

ply in 2002. Says former FCC Chairman Reed Hundt: "Government should guarantee that multimedia helps the blind hear and the deaf see—meaning all the things broadcast."

Here are two tools that could help meet that goal: Talking Films, a startup in Perth, Scotland, sells movie soundtrack CDs whose audio tracks include a *sotto voce* narration of the action. Its first such CD, of the British comedy *East Is East*, is now on sale in London and may soon be available in the U.S. Talking Films hopes to have deals for three more films by Christmas. Technology No. 2, from an arm of the WGBH Educational Foundation in Boston, is Descriptive Video Service. Already in 76 U.S. theaters, DVS provides both dialogue and description over headsets. About 200 DVS-enhanced films are already available by catalog. *Joan Oleck*

DRAWN & QUARTERED



RECOUNT 2000

MAKING HAY WHILE THEY TALLY BALLOTS

THE FIGHT OVER FLORIDA'S Presidential vote is giving designers and hawkers of political memorabilia a once-in-a-lifetime chance to cash in.

Since Nov. 8, online auctioneer eBay has been flooded with everything from "I Tried to Vote" bumper stickers to "Electoral College" sweatshirts. Opening bids for replicas of the now infamous "butterfly ballot" in Palm Beach County range from \$5 to \$300. And issues of papers with the "Bush Wins" headline? Sellers are asking up to \$21,000 for the *New York Post*'s version—but less than \$20 for *The San Francisco Chronicle* version.

Billy Tsangares, a Los Angeles graphic artist, quickly put phrases such as Recount 2000 and Revote 2000 on everything from lunch boxes to mouse pads. "I jumped this," says Tsangares, w-



REVOTE: Pop memorabilia

sells his war at liveaction elections.com

One eBay seller was \$1,000 for the Net address Gorecount2000.com. No bidders yet. But with this election, anything could happen. *Nicole St. Pie*

THE BIG PICTURE

CHRISTMAS ON THE WEB Hispanic consumers are expected to shop online more often than whites or African Americans. Because Hispanic families tend to be larger, the convenience of shopping from home increases. And money is no barrier. Households earning less than \$50,000 are as willing to shop online as those making more.



FOOTNOTES Share, by sex, of tech industry MBAs who are one to three reporting levels from the CEO: men, 54%; women, 5

— CERTIFIED PRE-OWNED LEXUS —

Certified Pre-Owned Lexus. The Lexus Of Pre-Owned Vehicles.



Given the standards for which Lexus is known, we simply couldn't relax when it came to our pre-owned automobiles. So, following tradition, each Certified Pre-Owned Lexus is backed by the Lexus of warranties* for three years from your purchase date or 100,000 total vehicle miles. You'll even get a complimentary loaner car† — not a shuttle — on service visits. Visit your Lexus dealer today. And test-drive the only cars that are Lexus Certified Pre-Owned. Not to mention, the only ones that are worthy of the title.



ONLY AT YOUR LEXUS DEALER

lexuscpo.com

EDITOR-IN-CHIEF: Stephen B. Shepard
MANAGING EDITOR: Mark Morrison
CHIEF ECONOMIST: William Wolman
ASSISTANT MANAGING EDITORS:
 Joyce Barnathan, Frank J. Comes, Robert J. Dowling, G. David Wallace
ART DIRECTOR: Malcolm Friedman
CHIEF OF CORRESPONDENTS: James E. Ellis
SENIOR EDITORS: Bob Arnold (New Media), Rick Green (Frontier), Neil Gross, Mary Kuntz, Jeffrey M. Laderman, Christopher Power, Kathy Rebello, Jane A. Sasseen, Ciro Scotti, John Templeman, Lee Walczak (Washington), Elizabeth Weiner, Seymour Zucker
EDITORIAL PAGE EDITOR: Bruce Nussbaum
SENIOR WRITERS: Catherine Arnt, Robert Barker, Aaron Bernstein, Anthony Bianco, John A. Byrne, Peter Elstrom, Gene G. Marcial, Otis Port, Paul Raeburn, Gary Weiss
ECONOMICS: James C. Cooper (Sr. Economist/Bus. Outlook ed.), Kathleen Madigan, Michael J. Mandel (Economics ed.), Peter Coy, Charles J. Whalen, Gene Koretz (Trends ed.), Christopher Farrell (Contributing ed.)
INTERNATIONAL: Patricia Kranz (European, Latin American Editions ed.); Michael S. Serrill (Sr. ed.); Pete Engardio, (Sr. news eds.); Rose Brady (Sr. writer), Sheridan Prasso (Asia), Christina Lindblad (Latin America), Julia Lichtblau (Int'l. finance)
ASSOCIATE EDITORS: Dan Beucke, Diane Brady, Amy Dunkin, Mike France, Todd Guttner, Steve Hamm, Ira Sager, Eric Schine, Fred Strasser, Marcia Vickers
PICTURE EDITOR: Lawrence Lippman
MANAGING ART DIRECTOR: Jay Petrow
SENIOR ART DIRECTOR: Steven Taylor
INTERNATIONAL ART DIRECTOR: Christine Silver
DEPARTMENT EDITORS: Books: Hardy Green. Computers: David Rocks. The Corporation: Nanette Byrnes. E-Business: Timothy J. Mulvaney. Finance & Banking: Emily Thornton, Debra Sparks, Heather Timmons. Frontier: Lary Kanter, Robin D. Schatz. Industrial Management: Adam Aston. Internet: Spencer E. Ante. Management: Louise Lavelle. Markets & Investments: Maria Der Hovanesian. Media: Tom Lowry. News: John Protos. People: Susan Berfield. Personal Finance: Susan Scherick, Anne Treppe. Science: Ellen Licking. Scoreboards: Frederick F. Jespersen. Technology Strategies: Marcia Stepanek. Telecommunications: Steve Rosenbush. Up Front: Robert McNatt. Working Life: Michelle Conlin
CONTRIBUTING EDITOR: Mark Hyman (Sports business)
STAFF EDITORS: Dennis K. Berman, Lewis Braham, Jeanette Brown, Heather Green, Jennifer Merritt, Joan Oleck, Kimberly Weisul
COPI EDITORS: Prudence Crowther, Harry Maurer, Marc Miller (Deputy chiefs); Jim Taibi (Asst. chief); Tim Belknap, Aleta Davies, Jack Robbins, Doug Royalty (Sr.), Giles Blunt, Jay Katz, Barry Maggs, Anne Newman, David Pengilly, Malka Percal, Monica Roman, Lourdes Valeriano
RESEARCHERS: Maria Chapin, Gail Fowler, Alia Rosario
PRODUCTION COPY EDITORS: Lawrence Dark (Chief), Céline Keating, Robert J. Rosenberg (Deputy chiefs), Alethea Black, Sarah B. Rubin, Halberg Hallundsson, Robert S. Norman, David Purcell, Victoria Davis
ART: Don Besom, Alice Cheung (Assoc. dir.); Jamie Ellis, Edith Gutierrez, Peter Marshutz, Ron Plyman (Asst.). **Graphics & New Media:** Arthur Eves (Creative dir.), Jon Danaher (Graphics dir.); Rob Doyle (Deputy graphics dir.); Jaime Beauchamp, Laurel Dainis Allen, Alan Baseden, Joe Calviello, Matthew Kopit, Alberto Mena, Ray Vella (Illustrators); Eric Hoffmann.
Imaging: James Leone (Mgr.), Alan Bomzer (Asst.), Rich Michiel, Leo Nietzer, Joseph Rhames
PHOTO EDITORS: Scott Mlyn (Deputy); Ronnie Weil (Sr.); Cynthia Carris Alonso, Bettina Baudoin, Paula Gillen, Kathleen Moore, Anne Murray, Andrew Popper, (Assoc.); Sarah Greenberg-Morse (Asst.); M. Margarta Eiroa (Traffic mgr.); Lucy Conticello, Mindy Katzman (Researchers); Burt Hughes (Researcher/Librarian)
EDITORIAL OPERATIONS: Susan Fingerhut (Director); Ken Lockwood (Mgr.). Karen Butcher, Francisco Cardoza, Thomas R. Dowd, Stephen R. Lebrun, Jody A. McGrasso, Jose L. Martin, Peter K. Niceberg, Jane M. Perkinson, Laura Reissman, Karen Turk, Ilse V. Walton (Edit map mgr.), Barbara Wilhelm, Mark Lang
EDITORIAL TECHNOLOGY: Thomas L. Morgan (Director), Christopher Amado, David Bandler, Y. Steve Ben-Ari, Amanda Chan, Lawrence Crowe, Beth Higgins, James Kutz, Neil MacLeod, Mike Marubio, John Navarro, Juan Rodriguez, Marta Skrelija, Mauro Vaisman, Julian Wong
BUSINESS WEEK ONLINE: Michael Mercurio (Managing ed.), A. Peter Clem, John A. Dierdorf, John Johnson, Heather Barry, Stefani Eads, Sam Jaffe, B. Kite, Jessica Loudon, Joseph Mandel, Tyn Nig, Patricia O'Connell, Margaret Popper, Alex Salkever, Mica Schneider, Amey Stone, Kith Vuksana
CORRESPONDENTS: Atlanta: Dean Foust (Mgr.), Charles Haddad, Aixa Pascual. Boston: William C. Symonds (Mgr.), Norm Alster, Rochelle Sharpe, Geoffrey Smith. Chicago: Joseph Weber (Mgr.), Michael Arndt, Robert Berner, Roger O. Crockett, Julie Foster, Pallavi Gogari, Darrell Little. Connecticut: Pamela L. Moore. Dallas: Wendy Zellner (Mgr.), Stephanie Anderson Forest, Lori Hawkins (Austin). Detroit: Kathleen Kerwin (Mgr.), Jeff Green, Joann Muller, David Welch. Los Angeles: Ronald Grover (Mgr.), Larry Armstrong, Christopher Palmeri (Sr. correspondents); Steven V. Bruff, Arlene Weintraub. Philadelphia: Amy Barrett (Mgr.). Silicon Valley: Linda Hirstein (Mgr.), Peter Burrows, Cliff Edwards, Ben Elgin, Jay Greene (Seattle), Joan O.C. Hamilton, Robert D. Hof (Sr. correspondent), Jim Kerstetter, Louise Lee, Andy Reinhardt, John Shinal. Washington: John Carey, Paula Dwyer (News eds.); Howard Gleckman, Mike McNamee (Sr. correspondents); Rich Miller (Sr. writer); Amy Borrus, Dan Carney, Laura Cohn, Stan Crook, Richard S. Dunham, Paul Magnusson, Nicole St. Pierre, Christopher H. Schmitt, Stephen H. Wildstrom (Tech. & You), Lorraine Woellert, Catherine Yang, Douglas Harbrecht (Online: Sr. News ed.), Beth Belton (Online: News ed.). Beijing: Dexter Roberts (Mgr.). Bombay: Manjeet Kripalani (Mgr.). Brussels: William Echikson. Frankfurt: Jack Ewing (Mgr.), David Fairlamb, Christine Tierney. Hong Kong: Mark L. Clifford (Mgr.), Frederik Balfour, Bruce Einhorn. London: Jonathan Reed (Mgr.), Kerry Capell. Mexico City: Gen Smith (Mgr.). Moscow: Paul Starobin (Mgr.). Paris: John Rossant (Mgr.), Stephen Baker, Carol Matlack. Rome: Gail Edmondson (Mgr.). Seoul: Moon Ilwan. Singapore: Michael Shan (Mgr.). Tokyo: Brian Bremner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson, Irene M. Kunii
EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondscio (Director), Christine Fontaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), Susan Rutledge (Research mgr.), John Gady (Technology mgr.), Lara Christiansen, E. Kathleen Carberg, Jennifer Reyes-Orellana, David Poles, Susan Zegler. Office Manager: Roselyn Kopt. Readers Report: Yvette Hernandez. Reprint Permission: Wendy Hernandez. Special Asst. to Editor-in-Chief: Christine Summerson

GREENSPAN AND THE PRODUCTIVITY WOLMDOWN

"Still pumped up" (News: Analysis & Commentary, Nov. 13) gives Alan Greenspan a big pat on the back for forecasting the post-1994 productivity boom. Yet Greenspan is portrayed as a passive observer of the current situation, when his six consecutive increases in the Fed funds rate have exacerbated the risk of a productivity bust.

The investment boom of the past five



years that you cite as the engine of productivity is in danger of being choked off by higher interest rates. The article cites companies cutting back on capital spending because higher interest rates and lower stock prices are boosting the cost of capital. But these higher rates were engineered by Greenspan, in part in an effort to cool off stock prices. That Greenspan should be able to take a pass on the negative economic consequences of his massive interest rate increases is beyond the pale.

Bernie Schaeffer
Cincinnati

To Greenspan's delight, stock prices are reflecting a slowing economy. We should put into perspective the possible impact on corporate performance.

The U.S. economy has been expanding for almost two decades. Since the 1981-82 recession, we have performed with exceptional vigor most of the time. In fact, there were only four quarters in which gross domestic product did not increase in absolute terms—two in 1991, one in 1991, and another in 1994. Therefore, growth has occurred in 68 out of 72 quarters. The "recession" of 1990-91 was merely a speed bump on the road to prosperity. We submit that any slowdown in the next year or two is likely going to be another speed bump.

The \$9 trillion U.S. economy is a diversified and growing engine that has brought benefits to most U.S. citizens. Its global corporate structures are now embracing a transformation benefiting from a technological revolution of efficiency brought on by the integration of Inter-

net technology into almost every aspect of economic activity. Cost-containment strategies are being implemented across the board. If we do enter a period of recession, it will likely be short and mild. Instead of getting excited about the short term, decision makers and investors should continue to plan for long-term expansion.

Raymond Logan
James G. O'Connell
Pace University
White Plains, N.Y.

DON'T BLAME R&D FOR XEROX' SHORTCOMINGS

Singling out Xerox Corp.'s Palo Alto Research Center as an example, author Peter Coy says that its inventions

PRESIDENT & PUBLISHER: William P. Kupper Jr.

SR. VP. OPERATIONS: Gary B. Hopkins
SR. VP. ASSOCIATE PUBLISHER: Constance E. Bennett
SR. VP. MARKETING & BUSINESS DEVELOPMENT: Keith L. Fox
SR. VP. BUSINESS WEEK ONLINE: Gregory J. Zorthian
VP. CONSUMER MARKETING/CIRCULATION: Thomas Mastersen
VP. U.S. ADVERTISING SALES DIRECTOR: Joanne K. Bradford
VP. STRATEGIC PLANNING & PRODUCT DEVELOPMENT: Kimberly Greer

VPs, SALES: Karen Christiansen (Southeast reg.), Robert H. Kelly (Nor. reg.), Gary London (Midwest region), Michael Dance (Western region), **VP. MANAGING DIRECTOR:** Alan Lamm (Asia), Paul Maraviglia (Europe), **VP. TECHNOLOGY/NEW MEDIA:** Christopher C. Rousseau
VP. CONTROLLER: Kevin P. Pascale
VP. ADVERTISING BUSINESS & PRODUCTION: Linda F. Carval
VP. ACCOUNT DEVELOPMENT & RESEARCH: Charlene Trentham
VP. STRATEGIC PROGRAMS: Jim Richardson

Business Week

A Division of The McGraw-Hill Companies

DECEMBER 4, 2000 (ISSN 0007-7135) *** 3710
 Published weekly, except for one week in January and one in August, by The McGraw-Hill Companies, Inc. Founder: James H. McGraw (1860-1948). Executive, Editorial, Circulation, and Advertising Offices: The McGraw-Hill Companies, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone: 212-512-2000. Telex: Domestic: 127039; Int'l: 2500127039. U.S. subscription rate: \$54.95 per year; 2 years: \$109.95; 3 years: \$164.95. Single copies: \$4.95; back issues: \$5. Write for rates in other countries: Subscriber Services: 1-800-434-1200. (Toll-free 1-800-524-1679)
 Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 510, Hightstown, N.J. 08520. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Canada Post International Publications Mail Product Sales Agreement No. 246848.

Registered for GST as The McGraw-Hill Companies, Inc. GST #R12304. Copyright 2000 by The McGraw-Hill Companies, Inc. All rights reserved. Registered in U.S. Patent Office. European Copyright Clearance Center, McGraw-Hill, Maidenhead, Berkshire, England. Telephone: 01288-25431; Telex: 5553.

Offices of The McGraw-Hill Companies, Inc.: Harold W. McGraw III, Chairman, President, and Chief Executive Officer; Kenneth M. Vittor, Executive President and General Counsel; Robert J. Hish, Executive Vice President, Chief Financial Officer; Frank D. Pangloss, Senior Vice President, Sales Operations.

PHOTOCOPY PERMISSION: Where necessary, permission is granted the copyright owner for those registered with the Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923, to photocopy any herein for the flat fee of \$1.00 per copy of each article. Send payment to the Copyright Clearance Center. For other than personal or internal reference use without express permission of The McGraw-Hill Companies, Inc. is prohibited. Address requests for customized bulk reprints to Business Week Reprints, 1221 Avenue of the Americas, New York, N.Y. 10020 or call 212-633-3148. ISSN 0007-7135. PRINTED IN THE U.S.A.

CORRECTIONS & CLARIFICATIONS

"What if it breaks?" (Technology Buying Guide, Nov. 13) said the price of Apple Computer Inc.'s AppleCare extended warranty was \$249 for three years. That figure applies to the company's PowerMac line of computers. The price of its iMac series warranty is \$149.

le or nothing for Xerox' shareholders and that any co-owners will demand at PARC researchers work on "more tactical, short-term business problems" Research labs get real. It's about ne," News: Analysis & Commentary, (v. 6). He later says corporate research and development labs once resembled "ivory towers," but that "PhDs are now getting their hands dirty on real-world customer problems." The only veiled implication: We've got to in those pointy-headed intellectuals what he calls a "dream factory." Coy misrepresents reality. PARC researchers did their job, but Xerox' business leaders failed to grasp the value of R&D. What would companies give away to own rights to Ethernet networking, the graphical-user interface, even just the lowly mouse itself? Apple Computer Inc. was largely based on PARC research, and Apple's profits would have accrued to Xerox if Xerox' leaders been on the ball. Xerox' accountants, lawyers, and managers failed to deliver on the El Dorado turned up by Xerox' engineers. The problem Coy has unwittingly put his finger on is the tendency to use R&D as whipping boy for failures by technically benighted management.

Stephen R. Cooper
St. Louis

nies have found it easy to give soft money in the amounts of \$3 million, \$848,000, and \$250,000 for this election cycle. And Steven F. Goldstone, chairman of Nabisco Group Holdings Corp., said that "he does not vote in protest of the system." Yet, according to lobby filings in 1999, he authorized \$650,000 to be used to lobby officials.

The arrogance of these CEOs, who choose to speak through their wallets or through their lobbyists rather than the ballot box, helps drive the fight for cam-

paign finance reform. Democracy, after all, is supposed to be based on the concept of "one man, one vote." Given the current system, who can blame these CEOs for not voting?

Amy Kauffman
Hudson Institute
Washington

Voting is a responsibility of every citizen. Possibly many of these executives see themselves more as global citizens and feel no particular allegiance to

©2000 The Williams Companies, Inc.



"In the spirit of 'winning at all cost,' I find your notion of leaving it to Williams Communications' diabolically smart."

Being smarter wins. Williams' sophisticated next-generation network means brilliant local-to-global connectivity, plus greater capacity and scalability for your business. And our innovative equipment integration solutions are just as smart. Leave it all to Williams.

Williams
COMMUNICATIONS

1-800-WILLIAMS • WWW.WILLIAMSCOMMUNICATIONS.COM • NYSE: WMB & WCG

DOES LET THEIR WALLETS DO THE VOTING

"Do CEOs vote? Not always—and not even" (Government, Nov. 6) told only part of the story. While it gave a rundown of whether CEOs head to the polls on Election Day, it missed the opportunity to note that many CEOs who do not vote choose to influence the election through their contributions.

Although Lawrence J. Ellison of Oracle Corp. hasn't voted since 1992, he has made political donations since 1996 totaling \$124,000, while Oracle's contributions amount to almost \$800,000. And Oracle's lobbying expenses for 1999 alone topped \$2 million. While C. Michael Armstrong of AT&T, John F. Welch of General Electric Co., and Steve Case of America Online Inc. find it difficult to get to the voting booth, their compa-

this country. In that case, I say take them off of corporate welfare just as I think most able-bodied welfare recipients should have a full-time job.

Some might say they are too busy, but that is only an excuse. I have been an active person most of my life. In 1953, I voted absentee as a soldier in Korea. I have voted in every election since I became eligible 49 years ago.

Bob Headland
San Diego

HOW CAN ECONOMISTS PUT A PRICE TAG ON THE ENVIRONMENT?

Gore's "reckless and offensive passion for the environment" (Economic Viewpoint, Nov. 6) exemplifies the flaws characterizing narrow economic analysis. Current economic modeling has a woeful poverty of tools for factoring in true costs associated with environmental degradation. It does not take an Exxon Valdez for degradation to occur, but it is often more insidiously produced through lost habitat and other factors. It is an established fact that nearly 10,000 species of plants and animals are on the verge of extinction. Countless others have become extinct in recent decades at a rate unseen in history.

Similarly, the scientific community is in overwhelming consensus about the reality of global warming. Where in your models do you factor in the lost riches and the dislocations we are likely to experience because of weather change? The models do not account for long-term costs, complex wide-ranging relationships, or damage to large numbers of people. To ignore such realities and criticize Al Gore for being courageous enough to take a stand is truly reckless and offensive.

Rafael K. Reyes
Foster City, Calif.

Robert J. Barro's article shocks and dismays me. I expect such articles from people running for office, not from Harvard professors. Barro, like many other Americans, falls into the trap of thinking revenue and cost are adequate reasons to do just about anything. Who is he to judge what portion of nature is attractive? What relevance does our ever seeing it have to the well-being of the planet? By the way, Professor Barro, what is the "cost" of losing a species forever? I'd love to see the math on that one.

Barro also fails to address a basic fact known to rest of the world except us: Americans waste huge amounts of energy. If Americans chose to cut back

consumption even in the slightest, we could solve our energy problem overnight. But since sport-utility vehicles, 24-hour air conditioning, and inefficient home construction are popular among Americans, they choose to ignore the impact—until it hits their wallets. I laugh in the face of SUV owners who cry at the pump. I say "for shame" to those who know they are wasting energy unnecessarily and do it anyway, simply because they can afford it.

No wonder the rest of the world is disgusted with us. We won't slow down our consumption long enough to even evaluate the situation properly. We just continue to chase "revenue" and limit our personal "cost."

James F. Kennedy
Madison, N.J.



PILOTS' PAY HIKES PALE BESIDE EXECs' 'PARACHUTES'

"Will United's woes spread?" (Management, Nov. 13) was well done, but as a United Airlines pilot, I think a few points were missed. The pilots' pension plan increased from 9% to 11% with this contract, the same level that existed prior to 1981. The pilots' new wages come to annual compounded increases of 3% to 3.5% over seven years—not so generous. For comparison, consider the executive compensation raises and their "parachute" prices.

We have paid an inflated price for our own stock for six years and were not enamored of it. Why would we want United to purchase overpriced US Airways Group Inc. stock when no one else does, even at normal prices? Have you noticed any new employee stock ownership plans of late?

R. C. McCormick
Crystal Lake, Ill.

DON'T EXCLUDE THE BALTICS FROM A 'NEW EUROPE'

As a former vice-minister of defense of Lithuania, I feel obliged to express my concerns about "Is NATO about to make a bad move in the Baltics?" (International Outlook, Nov. 13). The authors' reference to the three Baltic nations as "former Soviet republics" shows their lack of understanding of history.

The Baltic nations were occupied and forcibly incorporated into the Soviet Union following the 1939 signing of the Molotov-Ribbentrop Pact, which established spheres of interest between Berlin and Moscow. After the Soviet occupation of the Baltic countries in 1940, their governments were overthrown and Stalinist puppet regimes installed. In the years that followed, one third of the population of these nations was murdered or exiled to Siberia.

Lithuania, Latvia, and Estonia are three small, peaceful nations seeking membership in NATO to ensure that their freedom and independence are protected. They cannot forget the two centuries during which Russia subjugated and terrorized them, especially during the Soviet occupation. They want guarantees that this will never happen again. All the Baltic people want is to secure their liberties and do their part to contribute to overall security in Europe. They are doing this by forming their own armed forces which are being trained to defend themselves and contribute to European security through NATO and U.N. peacekeeping operations.

When diplomats speak of a new Europe that is whole and free, they cannot ignore the people of Lithuania, Latvia and Estonia as was done at Yalta.

Rom Kilikauskas
Fairfax, Va.

BusinessWeek online

The full text of Business Week, the Business Week Daily Briefing, and five years of BW archives are available on the World Wide Web at:

www.businessweek.com

and on America Online at Keyword: BW.

HOW TO REACH BUSINESS WEEK

LETTERS FOR READERS REPORT

All letters must include an address and daytime and evening phone numbers. We reserve the right to edit letters for clarity and space and to use them in all electronic and print editions.

Mail: Business Week, 1221 Avenue of the Americas, 43rd floor, New York, NY 10020

Fax: (212) 512-6458

Internet: bwreader@businessweek.com

America Online: readersbw

SUBSCRIBER SERVICES

For individual subscriptions, corporate subscriptions, renewals, changes or problems, and single copies.

Phone: (800) 635-1200 or (609) 426-7500

Fax: (609) 426-7623

Internet: bwcustsv@businessweek.com

Library fee-based services: (212) 512-6704

REPRINTS AND COPYRIGHT PERMISSIONS

For custom reprints (minimum order of 1,000) contact (212) 512-3148

Fax: (212) 512-2337

Internet: www.businessweek.com/reprints/

For permission contact:

Phone: (212) 512-4801

Fax: (212) 512-4938

ceiva™
Internet-connected digital
PICTURE FRAME



WHAT TO THEIR WONDERING EYES SHOULD APPEAR...



If you're wondering what to get someone this holiday season, here's something to look into. Ceiva. It's the world's first digital picture frame that lets you share photos over the internet. It's easy to set up. Easy to use. You don't even need a computer to receive photos. Every day the Ceiva frame automatically updates and displays your new photos. And anyone you want can send you photos from just about anywhere. So give someone a Ceiva picture frame this holiday season. And open up a totally new way to look at pictures.

SHARE **photos**
EVERYDAY

ceiva.com or 1.877.MY.FRAME

Available at **CIRCUIT CITY**  **Gateway**  **amazon.com** ceiva.com

©2000 Ceiva Logic, Inc. All rights reserved.
Ceiva is a trademark of Ceiva Logic, Inc. Patents pending.

BY STEPHEN H. WILDSTROM

tech&you@businessweek.com

WHY MOST OF US CAN'T HAVE BROADBAND



At this point, no one knows who will pay to overhaul the nation's enormous infrastructure

The postcard was a cruel tease. For just \$40 a month and no startup charges, Northpoint Communications and partner Microsoft Networks told me, I could tap the Internet with high-speed digital subscriber line (DSL) service at home. I knew better because the offer came just a day after Verizon Communications told me I cannot get DSL now or in the foreseeable future. The card was particularly puzzling because Verizon, over whose wires the service would run, is in the process of acquiring Northpoint. Meanwhile our cable company, Comcast, says it will offer Internet access in my suburban Washington neighborhood—someday.

I'm disappointed, but not surprised, to be stuck among the 95% or so of Americans without high-speed Internet service. Despite all the hype and talk of broadcast-type video and CD-quality audio over the Net, we are a dial-up nation, and we are likely to remain that way for a long time to come.

The figures tell the story. Mike Lowe, market analyst for *Cahners In-Stat*, estimates that as of the end of September, there were 1.6 million DSL customers, about 1.3 million of them residential. The two major providers of cable Internet service, Excite@Home, controlled by AT&T,

and Time Warner's Road Runner, have about 3.3 million subscribers. Those numbers add up to less than 5% of the 105 million households in the U.S.

While broadband services are growing very rapidly—174% in the past year for Excite@Home—the absolute number of subscribers added is relatively small. Issues of money and technology are likely to keep a cap on the number of new subscribers. Both interactive cable and DSL require vast infrastructure overhauls that financial markets are unwilling to fund. Stung by a sinking stock price and plunging profits from long distance, AT&T has abandoned its grand dream of reinventing itself as a provider of voice and data services over the cable network it purchased. Instead, it will spin off AT&T Broadband, leaving open the question of who will finance the overhaul of the nation's largest cable network.

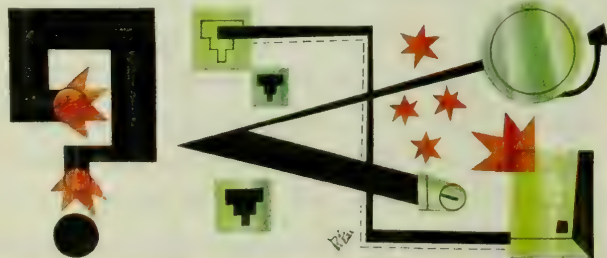
UPGRADE VICTIM. The DSL situation is grimmer. The technology runs high-speed service over existing copper phone lines but is subject to lots of technical restrictions. For one thing, the customer must be within 15,000 feet of a central office, and that's as the wire runs, not as the crow flies. Furthermore, there must be an old-fashioned analog line all the way from the customer to the switch.

I am a victim of Verizon's upgraded phone technology. My service comes from a "digital loop carrier," a metal cabinet down the street where my phone signals are digitized, then relayed to the central office on a high-speed line. While some carriers, notably BellSouth, provide DSL through that sort of setup, Verizon, which admits that it is struggling with demand from the homes it can serve, has no plans to follow suit.

Verizon estimates that because of distance and other restrictions, just over half of its subscribers will ever qualify for DSL service. Furthermore, cable companies often can let customers install their own Internet service just by hooking up a modem, but DSL usually requires sending a crew to every home—a task that trucks and crews are in very short supply.

The situation isn't completely hopeless. StarBand Communications will begin offering two-way satellite Internet access in December. It requires a clear view of the southern sky. At \$70 per month after about \$600 in startup costs, it's more expensive than either DSL or cable. But you can get it anywhere you can set up a satellite TV antenna. Sales and installation are being handled by Radio Shack and Echost, both experts in mass deployment. Hughes Electronics' DirecTV plans to offer a similar service next year.

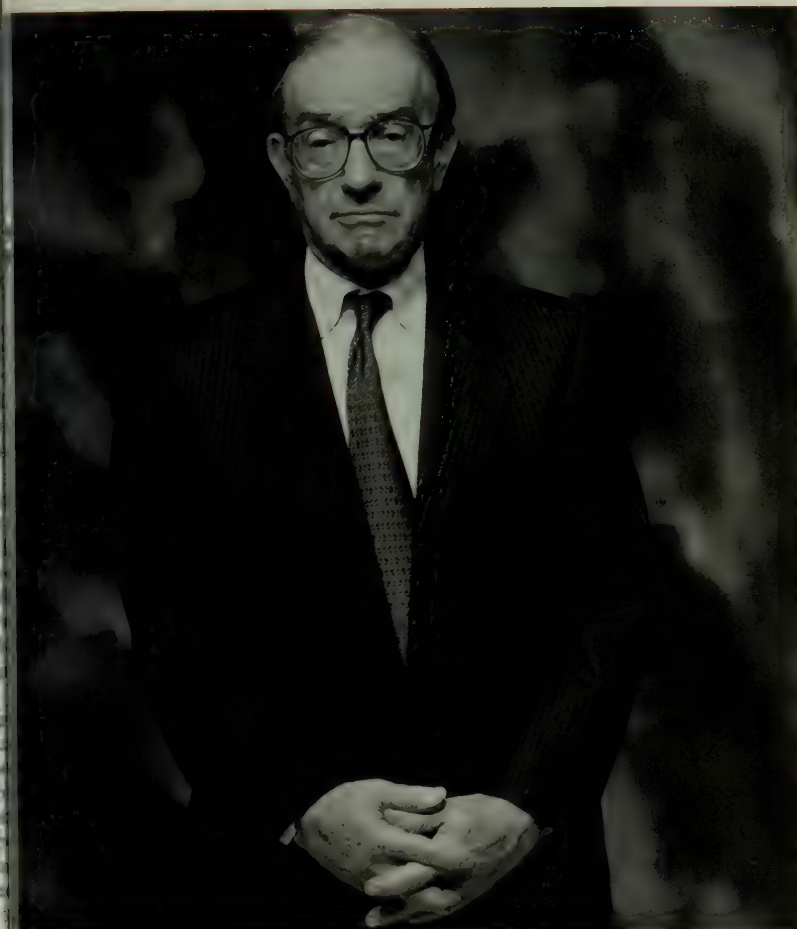
The advantages of broadband are impressive: an Internet connection that is always available and fast enough for content, such as high-quality audio, and applications you can rent and use as required. No wonder providers can't meet the demand. Unfortunately, most of us will be outside looking in for a long time to come.



The Barriers to Broadband

FORMAT	U.S. SUBSCRIBERS	INSTALLATION COST	MONTHLY FEE	BARRIER
CABLE	3.5 million	\$0-\$400	\$30-\$50	Requires massive, expensive infrastructure upgrade
DSL	1.3 million	\$0-\$400	\$40-\$70	Many homes can never be served because of distance from phone centers and other limits
TWO-WAY SATELLITE	0 (starts December)	\$600	\$70	New and untested; limited satellite capacity

DATA: NATIONAL CABLE TELEVISION ASSN., EXCITE@HOME, ROAD RUNNER, CAHNERS IN-STAT, STARBAND, BUSINESS WEEK



GREENSPAN:
*Paradoxical
personality*

Greenspan's luck finally run out? Was the economy headed for disaster? No. Just over a

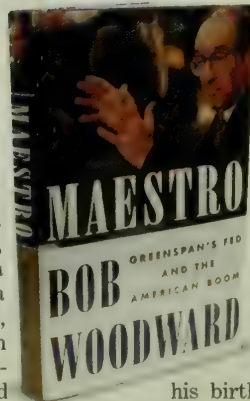
week later, he surprised the markets by cutting interest rates again, this time ordering a reduction on his own instead of waiting for the next meeting of the Fed's monetary policy committee. Investors cheered. Stock prices zoomed higher. And the crisis passed.

It's thanks to that sort of astute monetary management that the 74-year-old Greenspan has achieved the status of an economic oracle who holds the fate of the U.S. economy in his hands. He has even become a cultural icon, showing up in a cameo role in an episode of the hit television cartoon show *The Simpsons*. But despite all the attention, Greenspan remains something of a paradox. A onetime acolyte of the late libertarian author Ayn Rand, Greenspan is a staunch believer in free markets and the power of the individual. Yet he has spent much of his career in government, including the past 13 years at the Fed. A self-confessed introvert, Greenspan nevertheless is a regular on the cocktail-party circuit that brings together the capital's movers and shakers—the so-called “A” list. He's a self-effacing man who avoids confrontation, yet has prospered in a city known for its publicity-seekers and partisanship.

Two new books try to peel away the mystery shrouding the monetary mandarin and explain how his mind works. In *Maestro: Greenspan's Fed and the American Boom*, the country's best-known investigative reporter, Bob Woodward, offers an inside look at the central bank during the Fed chief's

reign, from the stock market crash of October, 1987, up to the prosperous current days. Former *Fortune* magazine writer Justin Martin reaches back even further in his effort to separate the man from the monetary myth. In *Greenspan: The Man Behind Money*, Martin provides a well-researched overview of Greenspan's life, from

his birth in 1926 through his



MAESTRO
Greenspan's Fed and the American Boom
Bob Woodward
Simon & Schuster • 270pp • \$25

GREENSPAN
The Man Behind Money
By Justin Martin
Perseus • 284pp • \$28

GREENSPAN REVEALED

At the peak of the global financial crisis in the fall of 1998, Federal Reserve Chairman Alan Greenspan seemed at a loss about what to do. The central bank had just cut interest rates for the first time in 2½ years, but investors had paid this no

nd. Stock prices were fluctuating wildly. Bond trading had come to a virtual halt. Nobody, it seemed, wanted to take on any risk. In a rambling, abstruse speech to a group of business economists, Greenspan described the situation as scary and confessed he had never seen anything like it before. Had

WOODWARD SHOWS THE FED CHAIRMAN'S UNUSUAL SKILL AT POLITICAL POWER GAMES

brief stint as a saxophonist and clarinetist in a jazz band in the 1940s to his present life as the world's premier economic policymaker. Both books reward the reader with a wealth of detail about Greenspan's comings and goings over the years. But in the end, they come up short in explaining the Fed chief's paradoxical personality.

Perhaps because it concentrates on Greenspan's time at the Fed, Woodward's book is more interesting. While it doesn't contain any startling revelations—in fact, many of the stories in the book have been told before—it's still replete with the sort of fly-on-the-wall reporting for which *The Washington Post* assistant managing editor is known. There's then-Treasury Secretary James Baker gloating "We got the son of a bitch" after maneuvering Paul Volcker out of the Fed and replacing him with Greenspan. There's Greenspan getting top-secret briefings from then-Defense Secretary Dick Cheney before the Persian Gulf war—briefings that helped him set interest-rate policy. And there's Greenspan phoning conservative radio talk-show host Rush Limbaugh to urge him to back Clinton's 1995 Mexico bailout.

As with Woodward's previous books, it's clear that he enjoyed unparalleled access to many of the principal players in this saga, including Greenspan. How else would he know that the Fed chief gets a pain in his stomach whenever he's about to say something that could backfire? But as he has done previously, Woodward likely won that access by agreeing not to identify many sources, leaving it to the reader to guess at the origins of much information.

What comes across most clearly in Woodward's book is Greenspan's skill in playing the political power games that determine who survives in the cutthroat world of Washington. It's a skill that Woodward greatly admires—after all, along with Carl Bernstein, the author made his reputation by helping to bring down a President, the late Richard Nixon. Survival skills have allowed Greenspan to outlast three Presidents—Republicans Ronald Reagan and George Bush and Democrat Bill Clinton.

Most surprising has been the ability of Greenspan, a lifelong Republican and onetime Nixon adviser, to forge such close ties with Clinton. Woodward replays some of the ground he covered in *The Agenda*, his best-selling book on



CLINTON'S PARTNER

And before the Fed, Greenspan was briefly a jazz musician in the 1940s

Clinton's first year in office, when he describes the key role Greenspan played in persuading Clinton to tackle the bulging budget deficit—

all but promising the Administration lower interest rates as a reward. But he also goes further, describing in detail how Greenspan later developed close ties with former Treasury Secretary Robert E. Rubin, forged in part on their shared fear in 1996 that the stock market was dangerously overvalued. That led to Greenspan's now-famous warning that December about the market's "irrational exuberance."

Perhaps Greenspan's survival skills have been best displayed in his ability to scuttle any threats to his preeminence at the Fed. Woodward describes how Fed Vice-Chair Alan Blinder felt so undermined by what he perceived as Greenspan's quiet machinations that he decided to leave the central bank. Woodward also hints that Greenspan, together with Rubin, secretly sabotaged Clinton's efforts to appoint financier Felix Rohatyn to succeed Blinder in 1996. But he doesn't dig deep enough to say for sure what happened in either case—a surprising lapse for such a resourceful reporter.

As is clear from the book's title, Woodward also gives Greenspan too much credit for the current boom. Sure, the Fed chief has played a critical role in ensuring that the expansion endured. But a host of other factors—including an explosion in the use of

information technology—have also been at work. Something Woodward seems to give short shrift.

Martin's book is more critical of Greenspan. It points out how the Fed chief was wrongheaded about the 1991 recession, even to the point of insisting, months after the downturn had started, that the economy was still on an upswing. And Martin is more evenhanded in doling out responsibility for the 1990s boom, perhaps because he lacked the same access to Greenspan.

Martin's book is thick with detail of Greenspan's pre-Fed life, making it more suited to close watchers of Greenspan than to casual readers. It describes his early skill with mathematics—he was able to add up three-digit numbers in his head when he was only five. It also details the key part Greenspan played in Rand's "collective," which met regularly to debate libertarian ideas—and the role she played in "opening his eyes to the moral dimension of capitalism." Al chronicles: the success of Greenspan's economic consulting business, his suspicions of Nixon, and his admiration for Nixon's successor, Gerald Ford.

At the end of both books, though, the

reader is left feeling that something is missing. This may be because the last chapter of the Greenspan saga is yet to be written. He still has to bring the booming economy of the 1990s in for a soft landing and avoid a crash. Only then, perhaps, will we know how Alan Greenspan will be judged by history.

BY RICH MILLER
Miller covers the Fed.
BUSINESS WEEK



STILL WAITING FOR HIGH-
SPEED INTERNET ACCESS?



JUST LOOK UP



red of waiting for broadband? StarBand™ is here now. StarBand is the
it company to deliver two-way, high-speed Internet access via satellite to consumers.
always on and it's available virtually everywhere. If you can see the southern sky,
I can get StarBand. Just look up: StarBand is available now at selected DISH Network™
ailers and through MSN® HighSpeed - Satellite at your local RadioShack® store.
more info go to www.StarBand.com or call toll-free 1-800-421-3464.



STARBAND.

www.StarBand.com

THE BUSINESS WEEK BEST-SELLER LIST

HARDCOVER BUSINESS BOOKS

- 1 **WHO MOVED MY CHEESE?** by Spencer Johnson, M.D. (Putnam • \$19.95) *Learning to accept change.*
- 2 **WHEN GENIUS FAILED** by Roger Lowenstein (Random House • \$26.95) *Inside hedge fund Long-Term Capital Management.*
- 3 **THE ART OF POSSIBILITY** by Rosamund Stone Zander and Benjamin Zander (Harvard Business School • \$22.50) *Realizing opportunity, by a family therapist and the conductor of the Boston Philharmonic Orchestra.*
- 4 **FIRST, BREAK ALL THE RULES** by Marcus Buckingham and Curt Coffman (Simon & Schuster • \$26) *A Gallup investigation into managerial success.*
- 5 **LEADING THE REVOLUTION** by Gary Hamel (Harvard Business School • \$29.95) *A manifesto for radical innovators.*
- 6 **FISH!** by Stephen C. Lundin, PhD, Harry Paul, and John Christensen (Hyperion • \$19.95) *Motivating employees the Pike Place Fish Market way.*
- 7 **THE TIPPING POINT** by Malcolm Gladwell (Little, Brown • \$24.95) *Discovering what turns an idea into a hot trend.*
- 8 **GUNG HO!** by Ken Blanchard and Sheldon Bowles (Morrow • \$20) *How Walton Works No. 2 fired up its employees.*
- 9 **THE MESSAGE OF THE MARKETS** by Ron Insana (HarperBusiness • \$25) *Understanding the markets' predictive signals.*
- 10 **THE COMING INTERNET DEPRESSION** by Michael J. Mandel (Basic Books • \$24) *The bust that may follow the New Economy boom, by BUSINESS WEEK's economics editor.*
- 11 **DONE DEALS** edited by Udayan Gupta (Harvard Business School • \$29.95) *Interviews with Geoffrey Yang, John Doerr, and other venture capitalists.*
- 12 **THE POWER OF GOLD** by Peter L. Bernstein (Wiley • \$27.95) *The shiny stuff and its place in civilization.*
- 13 **RAVING FANS** by Ken Blanchard and Sheldon Bowles (Morrow • \$20) *Turning customers into your biggest boosters.*
- 14 **THE FORTUNE TELLERS** by Howard Kurtz (Free Press • \$26) *The media's stock market stokers.*
- 15 **THE SECOND COMING OF STEVE JOBS** by Alan Deutschman (Broadway Books • \$26) *A portrait of Apple Computer's temperamental co-founder.*

PAPERBACK BUSINESS BOOKS

- 1 **RICH DAD, POOR DAD** by Robert T. Kiyosaki with Sharon L. Lechter, CPA (Warner • \$15.95) *Teach your kids the rules of money that the rich play by.*
- 2 **THE 7 HABITS OF HIGHLY EFFECTIVE PEOPLE** by Stephen R. Covey (Fireside • \$14) *Habitually popular.*
- 3 **THE ONE MINUTE MANAGER** by Kenneth Blanchard, PhD, and Spencer Johnson, M.D. (Berkley • \$12.95) *Three management techniques, conveyed in brief story form.*
- 4 **RICH DAD'S GUIDE TO INVESTING** by Robert T. Kiyosaki with Sharon L. Lechter, CPA (Warner • \$19.95) *Choosing to be rich, not merely comfortable.*
- 5 **THE CASHFLOW QUADRANT** by Robert T. Kiyosaki with Sharon L. Lechter, CPA (Warner • \$17.95) *Moving beyond job security to financial independence.*
- 6 **GETTING TO YES** by Roger Fisher, William Ury, and Bruce Patton (Penguin • \$12.95) *A Harvard team's step-by-step guide to conflict resolution.*
- 7 **WHAT COLOR IS YOUR PARACHUTE?** by Richard Nelson Bolles (Ten Speed Press • \$16.95) *The enduring job-search bible.*
- 8 **THE 48 LAWS OF POWER** by Robert Greene (Penguin • \$15) *Thoughts of Machiavelli and other power brokers distilled.*
- 9 **THE INNOVATOR'S DILEMMA** by Clayton M. Christensen (HarperBusiness • \$16) *New technologies' disruptive effects.*
- 10 **IT'S YOUR MONEY** by Christos M. Cotsakos (HarperBusiness • \$16) *E*TRADE's CEO on online investing.*
- 11 **THE MILLIONAIRE NEXT DOOR** by Thomas J. Stanley, PhD, and William D. Danko, PhD (Pocket Books • \$14) *The simple ways of the wealthy among us.*
- 12 **1001 WAYS TO REWARD EMPLOYEES** by Bob Nelson (Workman • \$10.95) *Give them a champagne brunch, a casual dress day—or plain old cash.*
- 13 **THE LEXUS AND THE OLIVE TREE** by Thomas L. Friedman (Anchor Books • \$15) *Globalization and its discontents.*
- 14 **THE WALL STREET JOURNAL GUIDE TO UNDERSTANDING MONEY AND INVESTING** by Kenneth M. Morris and Virginia B. Morris (Fireside • \$15.95) *Concise explanations enriched with graphics.*
- 15 **THE RICHEST MAN IN BABYLON** by George S. Clason (New American Library • \$6.99) *Parables for prosperity.*

BUSINESS WEEK's Best-Seller List is based on a survey of chain and independent booksellers that carry a broad selection of books on economics, management, sales and marketing, small business, investing, personal finance, and careers. Well over 1,000 retail outlets nationwide are represented. Current rankings are based on a weighted analysis of unit sales in October.

Reviews and more are available on AOL (Keyword: BW) or www.businessweek.com

HOT TYPE

IT WOULD BE EASY TO DISMISS THE NO. 3 book on this month's hardcover list, *The Art of Possibility*, as another facile self-help tract. The authors propose ways to open yourself to what they call a "life of possibility." They flesh out this prospect with diverse sub-themes covering leadership, responsibility, creativity, and more, that can jazz up both personal and professional lives. Benjamin Zander, a conductor with the Boston Philharmonic Orchestra, and Rosamund Stone Zander, a therapist, suggest that "circumstances that seem to block us in our daily lives may only appear to do so based on a framework of assumptions we carry with us." The authors say: "Find the right framework and extraordinary accomplishment becomes an everyday experience."

Sounds a little too easy, right? But, as a result of the real-life examples drawn from the authors' work, you might find the volume growing on you. For example, Benjamin Zander tells how, in order to create an atmosphere in which competitive music students can perform at their best, he awards each of them an A on the first day of class. In return, he asks them to write him a letter from one year in the future, in which they describe their lives. Then they must live out that possibility. It's a mind-over-matter approach, which, although with some New Age rhetoric, won't appeal to everyone. But those looking to rethink their lives may find that the Zanders have hit just the right note.

BY KARIN PEKARCH



Rate your enterprise software investment.

If the answer isn't 10, you need to find out about Hummingbird's platform independent software solutions. Visit www.hummingbird.com/scale6 or call 1-877-FLY-HUMM.

Hummingbird EIP



Where the future of e-Business takes flight

BY LAURA D'ANDREA TYSON

THE MESSAGE FROM ASIA: TRADE LOCALLY, THINK GLOBALLY



HOPE:
Regional
trade deals
under
discussion
in Asia could
be a catalyst
for a new
round of
global trade
talks

Laura D'Andrea Tyson is dean of the Haas School of Business at the University of California at Berkeley. She is chair of the Council on Foreign Relations Task Force on Japan.

President Clinton, the first President of the Vietnam War generation, has become the first President ever to set foot in a unified Vietnam. His visit to Vietnam was part of a trip to Asia to attend his valedictory meeting of the heads of state of APEC, the Asia-Pacific Economic Cooperation forum, a regional group promoting economic integration. Back in 1993, when the American press was replete with dire predictions about the protectionist tendencies of the new Democratic Administration, President Clinton convened the inaugural meeting of APEC. Each year since, the leaders have met to set plans to achieve their long-run vision of free trade within the region.

President Clinton's leadership in developing APEC and his successful effort to secure passage of NAFTA during his first year in office signaled his Administration's commitment to trade liberalization. But despite these remarkable first steps, the naysayers continued to fret. They said Clinton may not have been a traditional protectionist, but wasn't his pursuit of regional trade agreements jeopardizing multilateralism? Wouldn't NAFTA and APEC encourage the formation of competitive trade blocs rather than expand global welfare by fostering more open trade?

In fact, APEC and NAFTA revitalized global efforts to secure final agreement on the Uruguay Round of multilateral trade negotiations that had dragged on for more than 15 years. Contrary to conventional wisdom, regional trade agreements proved to be a prod, not an impediment, to multilateralism. The Uruguay Round agreement finally took force at the end of 1994, slashing tariff and nontariff trade barriers and ushering in the World Trade Organization.

Just two years later the WTO adopted the Information Technology Agreement, an initiative that had first been launched by the United States within APEC. Once again, American leadership showed how enlightened regionalism could foster multilateral progress. When fully implemented, the ITA, which has more than 70 signatory nations, will eliminate all tariffs on computers, semiconductors, and related equipment.

During their last two meetings, in 1998 and 1999, APEC leaders reaffirmed their commitment to economic reforms and greater integration into the world economy, despite the fact that many APEC nations were still reeling from the effects of the 1997-98 Asian financial crisis. Indeed, the APEC countries agreed to additional tariff cuts in priority sectors and called for the launch of a new round of multilateral trade talks. And China

used the APEC forum to announce a number of important reductions in protection that were ultimately reflected in the historic U.S.-China agreement on the terms of China's accession to the WTO. This was one of President Clinton's major foreign policy goals.

This year the APEC meetings focused on New Economy issues, including a moratorium on custom duties over the Internet, safeguards against software piracy, and measures to close the digital divide both within and between APEC member states. The New Economy focus confirms that the Asia-Pacific economies are the next major frontier for the information-technology revolution. In this APEC meeting, as in earlier ones, the U.S. approach was to build support for regional agreements on particular issues that could serve as models for broader agreements within the multilateral system. Progress in APEC is especially important right now because of the temporary setback to a new round of multilateral talks dealt by the collapse of the WTO meetings in Seattle.

Nor is APEC the only regional forum for economic cooperation in Asia. Regional leaders, including Japan and China, are trying to build currency-swap arrangements and trade deals that exclude the U.S. These efforts reflect understandable frustrations over the 1997-98 Asian financial crisis and the Seattle debacle.

MOMENTUM. American policymakers should avoid a knee-jerk reaction to such regional initiatives. Asia has a disproportionate share of the world's foreign exchange reserves and an effective currency-swap arrangement backed by them could deter another round of debilitating currency devaluation. And trade agreements such as those under discussion between Japan and South Korea or Japan and Singapore could act as a catalyst for a new round of global trade talks. In addition, regional agreements defining an "Asian approach" to globalization might defuse some of the anti-American sentiment behind antiglobalization forces in Asia and elsewhere.

Thirty-five years ago, when the U.S. looked at Asia, its primary interest was containing communism. Today, its primary interest in the region is sustaining globalization. During the last several years, APEC has served this interest well, demonstrating that with the right leadership, regional economic agreements can build consensus and capacity for global action.

Based on its APEC experience, the U.S. should respect rather than reject recent initiatives by the Asian nations to foster stronger economic cooperation among themselves.

In IT services, managing people
and projects can seem impossible.

Nothing's impossible.

Not just project management, but a true enterprise solution. From initial demand to final invoicing. Finally, IT departments and consulting firms can streamline service delivery. And better deliver on time and budget. Welcome to the only end-to-end business process automation software for IT services. Find it at www.changepoint.com.

When is your point of change?

Changepoint™

BY GENE KORETZ

EMERGING ASIA'S SHAKY RECOVERY

Scant profits point to growing risks

With stock markets down sharply in emerging Asia this year, some observers worry about a potential reprise of the financial crisis and severe recession that hit the region a few years ago. Economist Chen Zhao of the *Bank Credit Analyst*, a Montreal-based investment publication, thinks it's prema-

WHY HAVE ASIAN EQUITIES SWOONED AGAIN?



ture to push the panic button just yet. Still, the current stock market swoon underscores the serious problems plaguing the Asian recovery in the face of a developing global slowdown.

By most measures, emerging Asia's recovery from its 1997-98 debacle has been impressive. Many countries have posted double-digit or near double-digit growth rates for two years, output per capita has returned to pre-crisis levels, and unemployment has fallen. Most countries are also running trade and current-account surpluses.

But the reality, says Chen, is that the hope fueling last year's stock market rally—that capacity cutbacks, currency declines, and sharply lower interest rates would spark a resurgence in profits—has failed to pan out. Corporate earnings in the five crisis-stricken economies of South Korea, Thailand, the Philippines, Malaysia, and Indonesia still languish far below pre-crisis levels, despite a stunning rise in industrial output.

As Chen sees it, three factors are responsible for this profitless recovery. The first is the region's most formidable competitor, the mammoth Chinese economy. With labor costs still only 6.5% of those of Korea and Taiwan (despite those nations' currency devaluations), China has not only been winning market share in

the U.S. from its regional rivals but also has been increasingly doing so in high-end computer and electronics products.

Compounding the threat of heightened Chinese competition is the fact that many Asian economies still seem plagued by excess capacity that puts additional downward pressure on prices. Meanwhile, the continuing huge buildup in Asia's semiconductor capacity in Taiwan, Korea, and China, at a time when the global semiconductor cycle is peaking, is yet another harbinger of falling prices and profits.

Finally, Chen points out that most of the Asian economies haven't really tackled their financial systems' bad-debt problems and the restructuring necessary to close down insolvent companies. Many companies continue to rely on export volume expansion to stay in business—a strategy that inevitably heightens both domestic and global deflationary pressures and thus compounds their debt-servicing woes. Only China has taken serious steps to allow insolvent businesses to fail and to reform its banking system.

The bottom line is that structural forces have handcuffed most of emerging Asia to a profit-starved recovery. And with the U.S. and other advanced economies slowing along with global high-tech demand, Asian economies face increasingly trying times ahead. That, in a nutshell, says Chen, is the message in the markets' decline.

TEAM TRUST AND A WINNING GAME

Basketball is an exception to a rule

In the corporate world, many management gurus use sports analogies to stress the importance of team members' mutual trust in achieving group goals. But surprisingly, in college basketball, reports Kurt T. Dirks of Simon Fraser University, mutual trust hardly affects team success.

In a study presented at the recent annual meeting of the Academy of Management, Dirks surveyed players on 30 U.S. college teams in the 1996-97 and 1997-98 seasons at the point where they had just completed their early games against nonconference rivals but had not yet begun their conference schedules. Using a form developed for other management research, he asked players a series of questions designed to reflect the degrees of trust they placed in their teammates and head coach.

Following each season, Dirks analyzed how these trust ratings affected the teams' subsequent win-loss records after adjusting for the influence of other factors. These included success in early season games and prior years, experience under the coach, coaches' past success, and player talent.

In the end, Dirks found that only two factors had significant, nearly equal effects on conference success: trust in the coach, and team talent (as determined by players selected for all-conference teams or most valuable player awards). Trust in teammates, by contrast, had little impact on team performance.

The findings make sense in basketball, says Dirks, because the coach provides the key strategy that permits physical talent to produce. But in many kinds of corporate tasks, where teams are involved in collaborative problem-solving or creative activities, team trust may be just as important as trust in the leader.

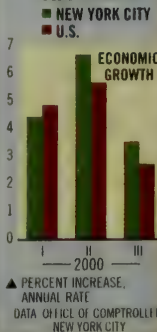
A LOUDER BOOM IN THE BIG APPLE

Job growth in New York is dazzling

The prices of luxury Manhattan tops have weakened, and Wall Street firms are taking some profit lumps, but New York City's economy is still on a roll, reports economist Marc M. Golove of Chase Manhattan Bank. With an October jobless rate of just 5.5% (vs. 9% in 1997), the city has added 89,200 private sector jobs in the past 12 months, bringing the total private job count to over 3.18 million—the highest October tally in more than 30 years.

One sign that prosperity has spread to the outer boroughs is that two Queens and Staten Island, now boasting jobless rates of 4.5% and 4.4%, vs. Manhattan's 5%. Meanwhile, paced by the heady growth of everything from the financial industry, to high tech, to retailers, construction, tourism, and small service-producing businesses, gross city product has accelerated sharply. In the past two quarters, it has outpaced the overall U.S. growth rate by almost a full percentage point.

OUTPACING THE NATION



BY JAMES C. COOPER & KATHLEEN MADIGAN

BE PATIENT, INVESTORS. THE FED CERTAINLY IS

Policy decisions are on hold until the labor market loosens up

U.S. ECONOMY Prior to the Federal Reserve's Nov. 15 policy meeting, many investors were looking for signs that Greenspan & Co. were thinking about cutting interest rates. Judging by the Fed's statement after the meeting, some of that anticipation was obviously wishful thinking. The Fed said that the possible inflation threat from tight labor markets and higher oil prices was still too great for it to relax its guard just yet.

However, despite the hard edge of the Fed's words, more and more evidence supports the view that the outlook is falling into line with what the central bank wants to see. The Fed even suggested that the softening in business and household demand, along with tighter financial conditions, could result in a slowing of the economy's growth rate to pace below its so-called noninflationary speed limit, generally taken to be about 3.5% to 4%.

But it will take a while longer for the soft landing to fall into place. Although consumers have dialed back their buying a couple notches right at the start of the important holiday season (page 34), credit is still flowing easily to households, and housing demand is actually strengthening a bit (chart). The Fed at least can count on foreign trade to subtract from future growth. The trade gap widened sharply in September, as imports jumped and exports fell. If economies elsewhere in the world slow by more than the U.S.'s next year, foreign trade will continue to be a drag on U.S. growth. Even if growth slows to 3%, though, that's not a pace that will quickly relieve what the Fed describes as an "unusually high level" of utilization of labor resources. In fact, the Fed's statement makes it clear that policy decisions are on hold—and that rising inflation is a threat—until there are concrete signs that overall demand has slowed enough to ease the drum-tight conditions in the labor markets.

INVESTORS CAN TAKE HEART that some loosening in the labor markets seems likely next year. That's because consumers and businesses are both feeling the effects of tighter financial conditions. For consumers, the pain is coming from the diminished stimulus from

the wealth effect, since stock prices generally have gone nowhere for a year and a half. Businesses meanwhile are getting hit with tighter borrowing conditions across a broad front, including banks and both the credit and equity markets.

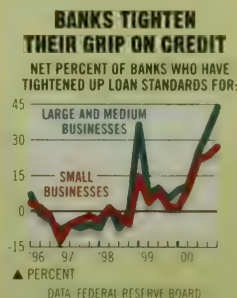
In particular, the Fed's latest survey of bank lending practices shows that loan officers continue to get increasingly picky about business borrowing in the fourth quarter. The net percentage of domestic banks that tightened their standards for commercial and industrial loans rose to the highest level in 10 years, and that's true for both large and small businesses alike (chart). Still, while conditions are tight, banks are not as stringent as they were prior to the last recession.

However, more than half of the domestic and foreign banks surveyed said they anticipated a further tightening of both loan standards and terms before the end of 2001. And the Fed said a net 60% of large domestic banks reported that the increase in commercial and industrial loan delinquency rates over the past year was "somewhat greater than expected."

INTERESTINGLY, BANKS' ATTITUDES toward consumer lending remain fairly lax. Credit standards for all types of household borrowing were little changed during the past three months. The net percentage of banks tightening conditions for installment loans is actually lower than it was in 1999, and mortgage lending standards have changed little since 1995.

That, plus mortgage rates that are below 8%—down some 70 basis points from their May highs—is a key reason why housing's weakness earlier this year now seems finished. Housing starts declined from an annual rate of 1.82 million in February to 1.52 million in August, but have edged up to 1.53 million in both September and October.

And starts will likely drift up some more, since builders are increasingly optimistic. The National Association of Home Builders' index of housing market conditions rose in November to 65, the highest reading in nine months. The index measures current and expected sales and buyer traffic through model homes, and all of the November increase reflected increasing



current sales. So after subtracting substantially from third-quarter economic growth, housing will very likely be at least a small plus for growth in the fourth quarter.

THE STRONG HOUSING MARKET is also exerting some upward pressure on inflation, especially the important service side of the equation. Overall, inflation looks quite quiescent. The consumer price index increased 0.2% from September to October. Excluding food and energy, core prices were also up a small 0.2%.

But compared with their levels of a year ago, both total inflation and the core rate are accelerating (chart). Top-line inflation has, of course, been boosted by the spike in energy costs this year, but the core rate is rising because of an upward tilt in service prices. Core service prices increased 3.5% from a year ago, a full percentage point higher than in October, 1999.

One area where service prices are accelerating quickly is shelter, which accounts for 30% of the total CPI and 56% of core service costs. The cost of shelter rose 3.6% over the past year, up from 2.5% in October, 1999. One reason is that the robust housing market and rising home prices are pushing up actual rents as well as the rents homeowners would theoretically pay if they were leasing out their own homes. This trend won't ease up until the housing market cools off.

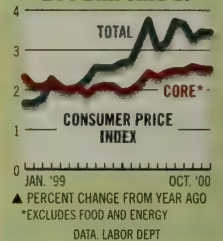
Energy, though, continues to be a major worry for

the Fed. And it isn't just fuel costs per se that have policymakers concerned. It is what workers will do if fuel costs do not back down. As the Fed's Nov. 1 statement noted, the increase in energy prices "still harbors the possibility of raising inflation expectations. That means that if consumers are still paying big bucks for gasoline and heating oil next year, they will demand bigger pay raises in 2001 in order to keep pace with higher overall inflation. Fatter pay raises will also kick in for workers covered by cost-of-living adjustments.

So far in this expansion, pay increases have been largely covered by productivity gains, so they have not been inflationary. But it will be harder to eke out productivity increases when output is slowing. So pay raises in 2001 may force businesses either to mark up prices or suffer on the bottom line.

All this means that investors who are waiting for relief from the Fed's tighter credit conditions are simply going to have to be patient. So far, the soft landing is on track, and nothing suggests that a crash is imminent. When the labor markets start to loosen up, that's when the Fed will think about easing its grip.

INFLATION: STILL TAME, BUT DRIFTING UP



MEXICO

NEW LEADER, OLD PROBLEM: SLOW GROWTH

On Dec. 1, Vicente Fox becomes Mexico's President, the first politician outside the Institutional Revolutionary Party to do so in 71 years. He inherits an economy enjoying robust growth and falling inflation.

Unfortunately for the new administration, the good times may not last.

Mexico's economy grew 7% in the third quarter from a year ago (chart), led by consumers. The economy is likely to grow more than 7% for all of 2000, after expanding just 3.7% last year.

For 2001, however, growth will probably slow to 4% to 4.5% for a few reasons. First, the Bank of Mexico has tightened the money

supply six times in 2000, and higher interest rates are beginning to cool domestic demand. Second, the expected soft landing in the U.S., Mexico's largest trading partner, will slow exports

from south of the border. Last, the revenue boost from higher oil prices enjoyed by the petroleum industry will be temporary.

In addition, Mexico has profited from a five-year decline in inflation. Although a yearly rate of 8.9% may seem high, for

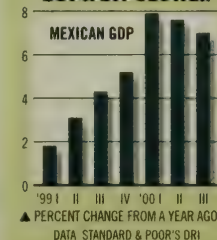
Mexicans it is the lowest inflation rate since the peso devaluation in 1994. Inflation could accelerate in 2001 if the economic slowdown causes a decline in the peso, considered by some analysts to be

overvalued. A weaker peso would push up import prices and overall inflation.

Rising wages could also cause inflation to accelerate. Real wages remain below their pre-devaluation levels, and workers are finally taking advantage of a tight labor market by demanding bigger pay raises. Workers in the booming auto industry this year have won wage hikes averaging 21%.

Such large pay gains mean the Bank of Mexico will continue to pursue a tight monetary policy into 2001. And incoming President Fox has pledged to present an austere budget for next year, complete with spending cuts. Although that will make it difficult for Fox to launch the ambitious social programs he wants, it shows he realizes the need to keep Mexico's economy on a steady keel.

GROWTH REMAINS STRONG BUT A BIT SLOWER





Avoid the fax

There's work. And there's life. OneRedCube enables you to put them together or keep them apart on your own terms. You get one number that can be used for home, business and cell phones, plus fax and email. And you get a personal, customizable, web-based communications portal where you can check your voicemails, emails and faxes all at once.

So now you can respond to messages, set up your calendar and manage projects in one fast, easy, time-saving way. Sync up with your PDA or PC-based organizer. Conference via the internet. Dial from your online directory with one click. Choose who you talk to, when and where. And then have fun with all that new free time >>

OneRedCube service works from anywhere in the world and can be used with any phone.

Give us one minute, we'll show you everything.

Visit oneredcube.com or call 866-want-one.



OneRedCube



'TIS THE SEASON TO BE GLOOMY

With shoppers spooked by the slowing economy, sales are slipping

It seems only fitting that the new movie *The Grinch* is a hit this holiday season. For retailers, at least, a lot of Grinch-like forces seem poised to steal the holiday cheer. In the face of soaring energy prices, a volatile stock market, and higher interest rates, many retailers and analysts are lowering their holiday expectations—and earnings forecasts—faster than the Grinch's sleigh can zoom down Mt. Crumpet.

The only question remaining whether the holiday shopping season will be merely mediocre or downright rotten banana peel ugly. Retail stores across the country are telling the same downbeat story: Folks are getting spooked by the slowing economy, sales won't be what they were last year, and there isn't even a hot-selling toy that parents are clamoring to buy for the kids. A.G. Edwards analyst Robert

the news. Meanwhile, discounter Ames Department Stores Inc. faces a similar problem. Same-store sales started dropping this fall following 7% gains for the past two years. Says CEO Joseph R. Ettore: "For whatever reason, people have gotten more cautious."

But bad news for retailers could mean great deals for bargain hunters. Analysts expect retailers to gain market share with deep discounts and costly promotions. Sears Roebuck & Co., for one, says it will have more promotions and will run them earlier in the season, particularly on items that are normally discounted after Christmas, such as large appliances. Ames is peddling a \$38.88 videocassette recorder in its holiday ads.

That helps explain why John M. Cavalier, a dockworker for Yellow Freight in Woodridge, Ill., expects to spend 50% more this holiday, mostly on electronics and high-tech gear for his parents, kids, and other relatives. "Price is what's governing what I buy and where," he says. Adds analyst Buchanan: "I've never seen so many pages of advertising and so many sales through the entire store as I'm seeing this holiday season."

To be sure, the Grinch won't do in Christmas. Despite lower same-store sales projections, "we continue to believe the customer has liquidity, inflation is still nominal, interest rates are stable, and unemployment levels remain low," says Wal-Mart Stores Inc. CEO H. Lee Scott. And though consumers are less confident about the economy than at the start of the year, "even now, they're more optimistic than they have been any time in the pri-

or 50 years," says Richard T. Curtin, director of the Surveys of Consumers at the University of Michigan.

Even so, that optimism seems to be getting a bit more subdued by the day. Deborah Schram, a marketing manager at her family's Schram Auto Parts business in Waterford, Mich., says uncertainty about the Presidential election and fear of rising interest rates and gas prices has her spending on hold. "I'm buying practical things instead of luxuries and silly things," she says. That means skirts and jeans for her daughters rather than novelty slippers that they'll wear once or twice. Donna McFadden, an advertising executive in Atlanta, says she, too, is feeling the pain of higher gas prices and is

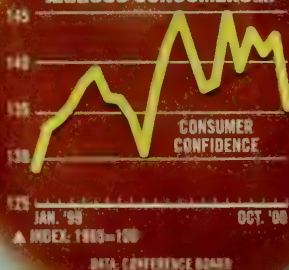
worried about a recession. "Everything is at a standstill for me right now. I would have started my holiday shopping already, but I'm going to wait a little bit," she says.

HUNKER DOWN. Little wonder that many retailers are hunkering down. Wal-Mart, for instance, is cutting \$1 billion from its inventories this year to help fuel its expansion plans in a slowing retail environment. The chain is now forecasting same-store gains of 3% to 5% for the fourth quarter, down from 4%-to-6% forecasts earlier in the year. Likewise, apparel chain American Eagle Outfitters Inc., though hoping to

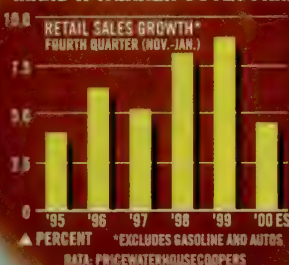
do better, is figuring on sales growth in the low single digits for the fourth quarter, despite a strong 6.8% same-store gain in the third quarter. Says analyst Jeffrey M. Feiner of Lehman Brothers Inc.: "Retailers are less

SALES GROWTH THIS QUARTER WILL BE THE SLOWEST SINCE 1995

ANXIOUS CONSUMERS....



...AND A WEAKER OUTLOOK...



...HAVE RETAILERS HURTING



pie-in-the-sky-oriented than they used to be and much more pragmatic."

With such measly gains, 'tis the season for a brutal market-share battle. Those retailers with the lowest costs, best prices, and smart merchandising will be the likely winners. Analysts expect value players such as Wal-Mart, Target, Costco, and discount department store Kohl's to lead the pack. "You do have a more price-conscious customer," notes Stephanie Hoff, senior retail analyst at Banc of America Capital Management. She looks for lower-priced items, such as books and music, and "small indulgences," such as candles,

gift foods, and fragrances, to be among the season's best-sellers.

Apparel, too, could benefit from a customer who's going back to basics. After missing a shift to more body-conscious clothing in the second quarter, American Ea-

remiah J. Sullivan says men's and women's sweaters and outerwear, especially leather, are all selling well, helped by the cold weather.

Toys and electronics, the usual holiday stalwarts, could be among the more disappointing retailing sectors this



The battle for market share will

gle says it's now benefiting from strong sales of clothing that includes stretch fabrics, denim in slimmer cuts, and ribbed sweaters in intense colors such as periwinkle and turquoise. At the Macy's West division of Federated Department Stores Inc., CEO Je-

Christmas season. There's no Pokémon craze, Gameboy, or other must-have toys to drive sales. And the wildly popular Sony PlayStation 2 game console will remain in short supply until early next year, thanks to Sony Corp.'s component shortages.

IT'LL BE A COLD CHRISTMAS FOR WEB RETAILERS

For already jittery Internet retailers, the holidays aren't looking very cheery. With the slowing economy expected to trim holiday spending generally, few expect online retailers to be spared. While Net consultant Forrester Research Inc. is predicting that online sales will double to \$10 billion this season, that optimism already looks as dated as a candy cane come January. Sales and traffic for the first week of November—the kickoff for online Christmas shopping—got off to a slower-than-expected start, says Web traffic maven Nielsen/NetRatings. The upshot for an industry already under the gun? "Companies that fail to deliver on every aspect this year will go under," predicts Kenneth E. Kurtzman, CEO of luxury e-tailer Ashford.com Inc.

Since the evaporation of financing that followed this spring's dot-com meltdown, cash-starved e-tailers have been on notice. Before investors will refill depleted coffers, they want reassurances that the online retailers actually can turn a profit. More than anything, this Christmas will be a make-or-break period. Things are especially grim for 11 of the remaining 22 publicly traded online retailers. Shares of most of these one-time highfliers—including eToys Inc. and Buy.com—are grounded. The holidays could be the last chance to rev up sales enough to attract the fresh capital needed to keep the e-doors open.

OBITUARIES. Already, obituaries of Web retailers are piling up fast. In the last year, 75 companies, from pet store Pets.com Inc. to garden-supply retailer Garden.com Inc., have shut down, ac-

cording to outplacement firm Challenger, Gray & Christmas Inc. That's likely to be just the beginning: Merrill Lynch & Co. estimates that 75% of today's 300 dot-coms will go under within five years.

Those still in the fight, however, face plenty of obstacles in grabbing business away from their bricks-and-mortar rivals. For starters, consumers are increasingly concerned e-tailers will shut down before gifts can be delivered or returned. Worse, many traditional retailers, such as Target and Best Buy, have poured resources into opening their own online franchises. Those sites boast well-established brand names and lower cost advantages. That's one reason analysts expect these click-and-mortar retailers to reap the lion's share of online sales this Christmas.

Already, they're gaining. By October, half of the 20 most shopped sites were

traditional retailers, including Sears and Barnes & Noble, according to market researcher PC Data Online. That's about double a year ago. "You'll see a continuation of this trend," predicts Jerry Storch, president of financial services and new businesses for Target Corp.

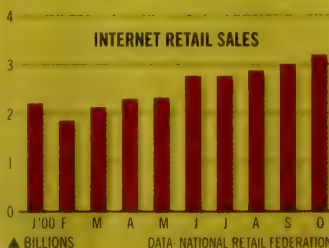
Of course, some pure online outfits will do well. This year's most likely to succeed among the dot-com crowd? The big established names such as Amazon and eToys, along with certain niche players such as teen site Alloy Online and gift center Ashford.com. Each already benefits from a well-developed infrastructure and all are nearing profitability.

Yet even for the best, the new environment has led to radically revised strategies and tightened purse strings. Last Christmas, flush dot-coms spent 110% of sales on marketing as they vied to build brands and customer traffic. They poured \$1.5 billion into advertising that inundated TV, radio, and magazine.

This year, those huge outlays for basics—or discovering them for time. Marketing outlays, on average, have been cut to about 44% of sales, estimates Lehman Brothers Inc. Advertising has been refocused on

ONLINE SALES GROWTH SLOWS

Some analysts think online sales this Christmas season could double, to \$10 billion. But that's quite a stretch from current sluggish growth rates.



The consumer electronics category did post decent sales gains, thanks to continuing robust demand for videodisk players and digital televisions and cameras. But the growth is likely to come at the expense of profits because of deep discounting led by players such as

ried. RadioShack Corp.'s CEO, Leonard H. Roberts, predicts that his company could show double-digit sales increases in November and December "without having a fire sale." He cites insatiable demand for wireless phones, DVDs, direct-to-home satellite systems, and

in the history of our company," says Roberts.

Still, for most retailers, such optimism is unfounded. They're getting ready to fend off the Grinch and are even writing their wish list to Santa for Christmas 2001: a Federal Reserve

tal. Already, Sears says it will run promotions earlier

Walmart and Target Corp., which have expanded their electronics offerings. On Nov. 9, electronics chain Best Buy Co. warned that third- and fourth-quarter earnings would fall well short of analysts' expectations.

Not all electronics retailers are wor-

ried. Roberts figures that the chain is grabbing share from competitors because customers can get better service and selection from "a pure-play digital specialty retailer" that doesn't carry appliances and apparel. "We're going to have the greatest year

Board rate cut and lower oil prices. Hope for a better next year is what passes for optimism this holiday season.

By Wendy Zellner in Dallas, with Stephanie Anderson Forest and Ann Therese Palmer in Chicago



Nov. 22. And just before Thanksgiving, eToys began highlighting a week-long sale, offering 33% off this year's Christmas must-haves. But like the low prices that were set last year to drive traffic—which resulted in big losses—such maneuvers could backfire. "The risk is you condition shoppers to view the Net as a discount venue, and you could damage your profitability outlook," says Lauren Cooks Levitan, an analyst at Robertson Stephens Inc.

Considering the competition, the online sites may have little choice. The advantage they had last year of getting online first has all but disappeared, while traditional retailers from Walmart Stores Inc. to Saks Fifth Avenue are well-versed in cross-marketing, catalog sales and other tactics that will come to the fore this year.

Moreover, many sites have had to give up a major benefit they previously boasted over traditional retailers: lower prices. In order to improve margins and quicken their race to profitability, companies such as Drugstore.com, Amazon, and Ashford have each had to raise prices. "The Net has lost its price advantage, which is some-

ing and online advertising, which is generally considered more effective than sales. "Last year we got into chasing revenues at all costs," says Mike Lannon, gift service manager at Sears. Now, "we have to show we can be disciplined." Others are sticking to the same strategy. "What dot-

coms are doing now is much more like the advertising that comes out of the brick-and-mortar world," says Mark M. Zandi, chief economist at Economy.com Inc., an economic consulting firm.

The same goes for sales promotions. In mid-November, Amazon offered free shipping for orders over \$100, through

thing that may have protected these companies," says Carl Steidtmann, chief retail economist at PricewaterhouseCoopers. One more reason, before this Christmas shakeout is over, that a lot of e-tailers could wind up as broken baubles under the tree.

By Heather Green in New York

By Paula Dwyer

THE CANDIDATE AS A CAMPAIGN SPECTATOR

ELECTION 2000 CAMPAIGN FINANCE

The outcome of the Presidential election may remain shrouded in a Florida fog. But one fact emerges clearly from the mists of Campaign 2000: The hugely inconclusive struggle was the costliest election in history. Candidates, parties, and interest groups spent \$3 billion, up a staggering 50% from the \$2 billion record set in 1996.

But it wasn't just the amount of money that got thrown around that changed the game this year. It was who was hurling it. Loopholes in election laws allowed political parties to spend unlimited amounts of soft money contributed by wealthy individuals, labor unions, and corporations on TV ads for candidates. And special-interest groups bought record amounts of TV time under the guise of "issue ads," which don't explicitly urge the election or defeat of a candidate but whose acerbic messages are clearly meant to influence voters. The result: Many candidates became spectators at their own campaigns. "Voters were barraged by ads," says E. Joshua Rosenkranz, president of the New York University School of Law's Brennan Center for Justice, a nonpartisan think tank. "But candidates simply were not in control of what was being said."

The use of soft money in advertising began as an experiment in 1996, when President Clinton and the Democratic Party spent \$40 million on ads promoting Clinton's reelection. House and Senate party committees copied the audacious ploy in the 1998 midterm elections, but on a smaller scale. This year, with control of both houses at stake and campaign costs escalating, the congressional parties went all-out. House and Senate Republicans took in \$85 million, up from \$37 million in 1996. Democrats did even better by raising \$88 million, up from only \$15 million in 1996. For the first time, outsiders and parties outspent the candidates in most of the competitive House and Senate races, says the Brennan Center.

The battle for Kentucky's third congressional district is instructive. There, GOP incumbent Anne M. Northup won a close race against

Democratic challenger Eleanor Jordan. Industry groups pushed to reelect the business-friendly Northup, while labor sought to dump her in favor of Jordan. Between June 1 and Sept. 20, Northup's TV spending totaled \$431,000, while the House Republicans' campaign committee and business interests led by drug companies spent slightly more, \$499,000, to help. Jordan's spending was even more overshadowed: \$194,000 vs.



MONEY TALKS

The parties and special-interest groups spent over \$3 billion, often muting the candidates' own messages



outsiders' \$725,000. Says Rosenkranz: "Northup and Jordan were mere proxies in a battle between organized labor and the drug industry."

That's a problem because the drumbeat of powerful forces interested less in serving Kentucky residents than in winning access and power in Washington can mute the candidate's message—or distort it. Michael J. Malbin, director of the Campaign Finance Institute in Washington, D.C.,

says that voters often confuse third-party ads with candidate ads, and hold the candidates accountable. "It has to give office-holders pause when they get blamed for ads over which they have no control," says Malbin. Another worry is the de-localization of politics. House campaigns usually are waged over such local issues as easing traffic congestion, improving local school systems, or cleaning up a nearby river. But when vested interests nudge those concerns aside in favor of national matters, voters can lose interest. "This is why Americans become cynical and turned-off," says Scott Harshbarger, president of campaign watchdog group Common Cause. "They think their voices and their votes don't count." Finally, such campaigns become far more bitterly partisan.

A ban on soft money would stall the invasion. Soft money, after all, pays for all those TV issue ads. But while the chances for barring soft money have improved, reform is still a long shot. A prohibition passed the

House last year but was stalled by the GOP in the Senate. With the Senate's new makeup, the bill might now have up to 57 backers. But getting the last three votes needed won't be easy. Majority Leader Trent Lott (R-Miss.) will make it difficult for any of his troops to abandon the GOP's opposition to a soft-money ban. Even Democrats may waver, now that they've outraised their GOP counterparts for the first time. "This [2000 election cycle] was not the endgame," says political analyst Charles Cook. "It's halftime, and we're going to see one heck of a fight in 2002." That means more candidates may become bystanders as the party pros and special interests swoop in and take over their campaigns. Hold onto your hats—and your wallets—in 2002.

Dwyer has covered campaign finance since 1990.

WHO WILL HELP ELLISON RUN ORACLE? ASK AGAIN LATER

A persistent leadership void has everyone guessing

Early in November, Oracle Corp.'s stock price spiraled downward as investors trembled over rumors that the software maker's chief financial officer, Jeffrey O. Henley, was about to leave the company. Turns out the rumormongers fingered the wrong executive. Henley is sticking around—but Gary L. Bloom, the executive vice-president previously considered a like-successor to Oracle chairman Lawrence J. Ellison, is taking a power nap. Bloom said on Nov. 1 that he'll become CEO of Veritas Software Corp., a Mountain View (Calif.) company that makes data-management software.

The management void has got investors worried, even if Ellison is playing it cool. "There's no one person Oracle whose departure is going to hurt this company," says the chairman, including me." Nevertheless, Bloom's departure is the second high-profile exit from Oracle since June, when Chief Operating Officer Raymond J. Lane left the company after Ellison took many of his responsibilities away and consolidated his own authority. "It's clear that Larry is a terrific visionary," says J.P. Morgan analyst William Epifanio II. But he's not an operations guy." Fears at Oracle could stumble without a go-to hands-on manager at the top sent the stock down sharply. By Nov. 20, Oracle's shares had fallen more than \$4, to 4.75. In total, investors have erased about \$135 billion—nearly half of Oracle's market value—since Sept. 1.

GO AND INTELLECT. You would think these would be heady times for Oracle. The company has set an example for e-commerce, providing the database software of choice for companies that want to do business online. Profits soared 1%, to \$501 million, in the quarter ended Aug. 31.

But Bloom's departure highlights a growing problem that Oracle is having difficulty solving: a leadership vacuum. Ellison, an executive whose vast intellect seems matched only by his ego,

owns an Italian Marchetti fighter jet and is building a \$40 million estate modeled on a medieval Japanese palace. Although the company has largely succeeded thanks to his vision, he has always been an executive who needed someone to turn his big ideas into smart business strategy. In the early 1990s, for example, Ellison helped make Oracle

the king of so-called relational databases—software that managed data for corporations and helped them analyze it. But from the mid-1990s on, it was Lane, Bloom, and others who provided the operations skills that turned the company into the powerhouse it is today.

Moreover, since joining Oracle eight years

ago, Lane has been largely credited with turning Oracle's sales force into an efficient, well-managed machine. During his tenure, sales jumped eightfold, to \$10 billion. Bloom handled dull but necessary tasks such as business development, partnership programs, and marketing. When Lane left, he became the heir apparent. "I'm a firm believer that no one person holds up the fort," is all Bloom will modestly claim. Maybe so, but with his departure, it's unclear who will bring organization and discipline to Oracle's executive suites. "Oracle does better when it has the yin to Larry's yang," remarks Marc Benioff, a former Oracle executive who now runs Salesforce.com, a sales management Web site.

So who will step into the role vacated by Lane and Bloom? Most observers point to CFO Henley. "The company is not without adult super-

vision as long as Jeff Henley is there," says a former senior Oracle executive. He joined the company in 1991 from Pacific Holding Co., which owns pieces of Dole Food and Castle & Cooke, just as auditors found questionable practices in the way Oracle booked

revenue. After the company was forced to restate its 1990 earnings, Henley restored its credibility and fiscal health.

Although some Oracle watchers think Henley may have enough on his plate as CFO, that may be a moot point. According to Benioff, "What Larry wants, Larry gets." For Oracle's sake, the company had better hope that those Internet rumors of Henley's departure were just wrong, not premature.

By Jay Greene in Seattle with Jim Kerstetter in San Mateo, Calif.

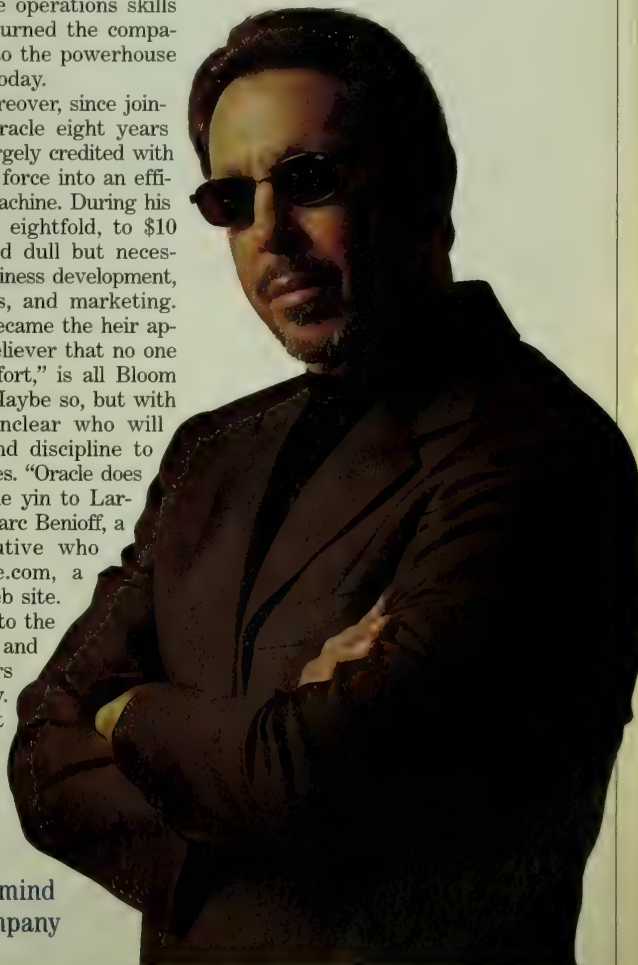


EXEC V-P BLOOM

ORACLE'S BIG PROBLEM



FLYING SOLO
CEO Ellison is a Web visionary, but he has never had a mind for running the company



COMMENTARY

By Christine Tierney

CAN SCHREMPPE STOP THE CAREENING AT CHRYSLER?

When Jürgen E. Schrempp made his bold deal to merge Daimler-Benz with Chrysler Corp. in 1998, all of Detroit buzzed with fears that overbearing Germans would march in and big-foot the American carmaker. Now, investors might wish they had.

The Germans have finally come to town. Three days after firing CEO James P. Holden on Nov. 17 and installing Daimler veteran Dieter Zetsche in his place, they then axed three Holden aides, including Theodor R. Cunningham, executive vice-president for global sales and marketing, and Kathleen M. Oswald, chief administrative officer. After suffering one disaster after another, Schrempp and his team perhaps gave U.S. managers too much free rein, even as problems careened out of control.

Now that they are in the driver's seat, will the Germans do better? The problems are enormous, and the German management may be seriously out of touch. A month ago, Schrempp vowed recovery would occur in the fourth quarter. Today, he concedes it could be a year away. Following Chrysler's \$512 million loss in the third quarter, most analysts expect it to lose that much in the fourth quarter, too. This will drag down operating earnings for the first time since Schrempp restructured Daimler-Benz in 1995. This year, DaimlerChrysler net profits will probably drop 27%, to \$4.5 billion, and in 2001 a further 18%, to \$3.7 billion, says Rod Lache of Deutsche Banc Alex. Brown Inc. If Zetsche can't stem the troubles, Schrempp could be shown the door.

UGLY TRUTH. Even before the ink on the pink slips had dried, Schrempp and Zetsche sounded conciliatory at meetings with Chrysler managers and dealers. But they didn't deny the ugly truth. Chrysler minivans and SUVs face stiff competition, mostly from Japanese models such as Honda's

**GLUG! GLUG! GLUG!**

Chrysler is expected to lose over \$500 million in the fourth quarter

Odyssey. Chrysler sales are falling despite huge incentives it is offering customers, as costs soar. Even more discouraging is the U.S. slowdown. And Chrysler is usually the first in Detroit to feel a downdraft. "Chrysler has always been the canary in the mine shaft," says researcher Sean McAlinden at the Center for Automotive Research in Ann Arbor, Mich.

The slowdown has already hit. Auto makers in the U.S. assemble 8.6 million minivans and light trucks a year. That capacity will grow nearly 20% over the next three years. But demand is starting to soften.

For now, Daimler has given vague signs of how it will restructure and reposition Chrysler. But Zetsche is expected to cut production and eliminate unsuccessful models. The big un-

known is how deep the cuts will go. Chrysler has already pared its product-development funds from \$48 billion to \$36 billion. More staff cuts are expected.

Chrysler's 4,400 dealers aren't likely to be spared, either. Zetsche is expected to streamline the network—the same tactic he used to help turn Mercedes around in the mid-1990s. Although painful at the time, it paid off, as he weaned Mercedes clients off

incentives. And Zetsche could get surprisingly little opposition. Dealers themselves say they real-

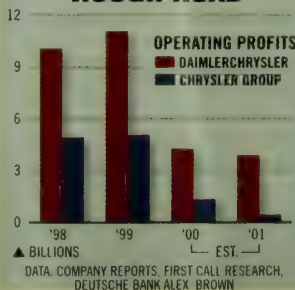
ize the unwieldy network is part of the problem. "There are just too many domestic dealerships. We're competing with each other," says Herb Chambers, owner of Chambers Motorcars in Boston.

This sort of downsizing usually cheers up stockholders. But shares have slid another 15% since news of Holden's ouster broke. Altogether the stock has fallen 60% from a post-merger high, to 39. The company's market capitalization is now just \$39 billion, about 20% less than Daimler-Benz sported before it bought Chrysler. But investors aren't likely to become believers again until solid signs of a recovery come in.

Schrempp doesn't bear the biggest share of blame for Chrysler's downward spiral, of course. But by waiting so long to install his own team, Schrempp lost a crucial opportunity to get a grip on Chrysler's woes. Now it falls squarely on him and his German lieutenants to fix the mess in a tougher, grimmer economic environment.

With Jeff Green
in Detroit

ROUGH ROAD





CONFIRM
SHIPMENT
HERE

Want to make your business more productive? Make it more portable.

*access
company network*

send report

schedule meeting

*read corporate
e-mail*

The Sprint PCS Wireless Web™ for business gives your employees a fast, secure connection to your company's network, even when they're out of the office. With their wireless Internet-ready Sprint PCS Phone™, they can submit reports, place orders, send and receive e-mail, even access Microsoft Exchange and Siebel eBusiness Applications – all in real time. Plus, they'll enjoy crystal-clear calls, thanks to the only all-digital, all-PCS nationwide network serving more than 300 major metropolitan areas and all major airports.

To start making your business more productive, call 1-888-214-1559 or visit sprintpcs.com.



The Sprint PCS Clear Wireless Workplace.® Because business can't wait.™

Sprint PCS®

Sprint PCS Wireless Web Browser is not available while roaming off the Sprint PCS Network. Subject to credit approval. Sprint PCS Wireless Web service may not be immediately available in select affiliate markets. Terms and restrictions for Sprint PCS Wireless Web services are available in the Wireless Web brochure. ©2000 Sprint Communications Company L.P. All rights reserved. Sprint, Sprint PCS, Sprint PCS Wireless Web, Sprint PCS Phone and the diamond logo are trademarks of Sprint Communications Company L.P.

COMMENTARY

By John Shinal

BROADBAND'S PIONEERS MAY GET BEATEN, THEN EATEN

If the Baby Bells are the turtles and the upstart phone companies the hares, it's now clear that the turtles are winning the race to wire the world for high-speed Internet access. On Nov. 20, San Francisco-based NorthPoint Communications Inc. restated third-quarter earnings because of delinquent customers. Five days earlier and for the same reasons, Covad Communications Group Inc. of Santa Clara, Calif., lowered its results, which were already poor enough to force Covad President and CEO Robert Knowing to resign on Nov. 1.

Both Covad and NorthPoint build DSL networks, short for digital subscriber lines. It's a technology that allows phone customers to get far faster Internet access than what's normally available through traditional phone lines. A promising idea, DSL companies were until recently a sizzling-hot market for investors. Now they're in the dumpster. The combined market value of Covad, NorthPoint and a third stand-alone DSL company, Rhythms NetConnections, Inc., has fallen to \$1 billion from \$10 billion in January. "In 1998, people were throwing money at us. Now, the day of reckoning has come," says Knowing.

Boy, has it ever. Increasingly, the upstart DSL companies are being hit by stiff new DSL competition from the former Bells and from companies that offer high-speed access over TV cable lines, like AT&T's AtHome service. That's keeping the price of basic DSL service at around \$40 per month. Moreover, while those larger players have deep pockets for their ambitious rollouts, the DSL companies have had trouble collecting from mom-and-pop Internet service providers who resell their DSL services. Both NorthPoint and Covad blamed these small providers for their deteriorating financial condition. "There's not enough value in that supply chain to sustain all these companies," says Reed Hundt, former chairman of the Federal Communications Commission and now a NorthPoint board member.

The result: The DSL upstarts are now drowning in red ink. Through the first nine months of 2000, Covad, NorthPoint, and Rhythms NetConnections of Englewood, Colo., have lost a combined \$1.15 billion on sales of \$279 million. With their current spending plans, none is expected to be profitable before 2003. Yet the three have had to

existing customer base, ramping up marketing campaigns and signing up new customers more quickly and cheaply than the stand-alone DSLs. In the third quarter alone, for instance, SBC Communications signed up 117,000 subscribers, while Covad, Rhythms, and NorthPoint added a combined 108,000.

CRUNCH TIME FOR DSL COMPANIES

The three independent national providers of DSL service, Covad Communications Group, NorthPoint Communications, and Rhythms NetConnections, face huge hurdles:

■ Many cash-strapped Internet service providers can't pay their bills. Covad and NorthPoint were unable to collect from such customers in the third quarter.

■ Without a clear path to profitability, raising new capital has become difficult. But none of these companies is expected to show a profit until 2003.

■ The Baby Bells, who were slow entrants to the DSL market, now sign up the bulk of new subscribers.

■ Stock prices have plunged 90% or more this year. From \$10 billion in January, their combined market caps total about \$1 billion.

spend hundreds of millions of marketing dollars to win customers. Unexpected technical and installation snafus have also taken their toll. "It was harder than we thought it would be," says Elizabeth A. Fetter, NorthPoint's president and CEO.

Meanwhile, the Bells, while slow out of the gate, are catching up fast. They've been able to leverage their

EMERGING LEADER. The irony for the threesome is that their troubles have hit at just the point in time when demand for DSL service is booming. The number of DSL lines is expected to reach 11.3 million in 2003, up from 2.3 million in 2000. Analysts expect DSL will pass cable as the most popular broadband connection in 2003.

Now, with their cash running out, the independent DSL providers need partners to survive. In August, NorthPoint said it would merge with the DSL unit of Verizon Communications, which paid \$800 million in cash for a 55% stake. And SBC paid \$150 million for a 6% stake in Covad in November.

"We're a scarce asset. There are a lot of folks interested in us," Rhythms President and CEO Katherine Hapka says.

For good reason. All three upstarts have built up a nationwide DSL reach that the Bells lack.

Should any of the four regional Bells invade one another's turf, buying one of the upstarts would be easier than building from scratch. And thanks to their diminished market caps, "these companies are low-hanging fruit,"

says Jeffrey Kagan, an independent telecom analyst in Atlanta. If that happens, consumers and small businesses will get broadband from the same place grandma got her voice line: the local phone company.

Shinal covers networking and telecom companies from Silicon Valley.



MEDIA

PLAYBOY'S
NOT-SO-ENERGIZED BUNNY

The brand's efforts on TV and online are stalling

First it was exclusive clubs and buxom bunnies. Then came casinos and licensed products. And more recently it has been cable-TV channels and online "mansion parties." For 47 years, Playboy Enterprises Inc. has been quick to shuffle strategies to keep its aging brand alive, even as readership for its flagship magazine has plummeted. But now, with the Nov. 14 announcement of yet another loss and the cancellation of a long-expected initial public offering, the outfit's newest game plan—a mixture of Internet and TV—is looking like roadkill.

This year alone, as losses have risen, investors have lopped 60% off Playboy's stock, bringing it to under \$11 a share. They took 3% off its shares after CEO Christie Hefner announced the \$6.51 million third-quarter loss on declining revenues of just \$77.9 million. And they've remained cool to the planned \$50 million IPO for Playboy.com. "The market wasn't going to give us the valuation that we wanted," says Hefner.

While the dot-com bust has been the big reason for pulling the offering, Playboy has found the Internet a less than swinging place. While Net experts say pornography makes up 35% of all online paid content, Playboy hasn't been able to turn a buck on its mix of articles, pictures, and licensed merchandise. Last year, the company lost \$9.07 million on its online ventures, and that's expected to balloon to \$24.25 million in 2000, accounting for most of the company's expected \$24.5 million in red ink.

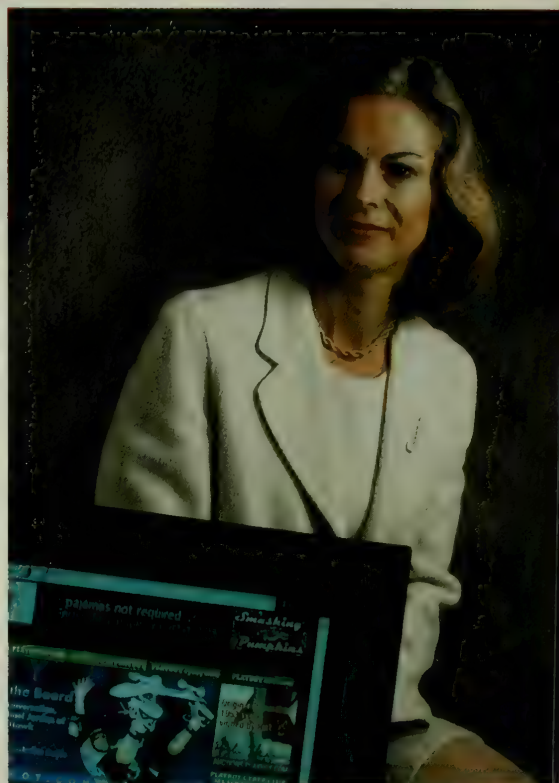
Why such a rough go? Competition, for one. It's way too easy to find free pornography on the Internet that's far more revealing than Playboy's modest offerings. And viewers seem loath to pay \$60 a year for such extras as streaming videos of parties at founder Hugh Hefner's Los Angeles mansion or celebrity nude photos from the magazine's archives. Since the subscription site launched in 1997, only 65,000 people have signed up for such goodies. And

they don't even get to see the full magazine online. They have to go to the newsstand for that—though fewer readers do. Circulation, which has slipped for over 20 years, is now down to just 3.1 million, less than half what it was in the '70s.

The monthly's prolonged slide is what drove Christie Hefner to dump money-losing efforts pioneered by her dad while pursuing electronic media. Since taking over in 1988, she has chopped costs by closing the last of the once-famed Playboy clubs and selling one of Hugh's mansions. To grow, in 1998 she acquired Spice Entertainment, an adult-TV production company. Then, last year, she inked a \$100 million, five-year international TV deal with Latin America's Cisneros Group.

But television, which has become Playboy's most profitable new bet, hasn't exploded as expected. Operating income from its entertainment division, including TV and video, is expected to slide to just \$18.55 million in 2000 from \$44.53 million last year. The reason: After taking in \$30 million up front in 1999, Playboy will now take in smaller annual revenues from Cisneros.

More recently, the Internet has



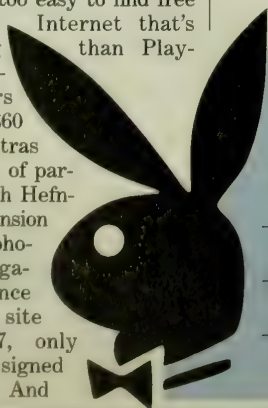
HEFNER: Rebuffed by a younger audience

been Hefner's most pricey play. In 2000 alone, she expects to sink \$25 million into Playboy.com.

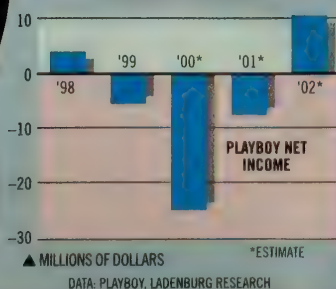
Next year she'll leverage that into online gaming, returning to an area Playboy left in the early 1980s. Hefner plans to develop that new business segment by opening a London casino in 2002. "CONSERVATIVE?" To critics, it's all a little, too late. "The family is extraordinarily conservative. In the hands of a richer and more aggressive guy like Rupert Murdoch, the company could be doing revenues two to three hundred percent more," grouches Mark Boyar, president of New York-based Boyar Asset Management, holder of over 400,000 shares. Adds Jack Trout, brand consultant at Trout & Partners of Greenwich, Conn., the Hefners' company "has been out-Playboyed by a million different places—not only is it not sensational anymore, it's kind of conservative."

Hefner still isn't convinced her efforts to find new media niches for the tired old bunny have been worthwhile. "Our profit centers will shift from print and publishing into electronic, which are the higher-margin businesses," says Hefner, who expects to turn a profit in 2002. The question is: Can she keep investors interested until then?

By Pallavi Gogoi in Chicago



AGING PLAYBOY



Digex and Spalding

**We manage Web servers,
They manage to improve your game.**

Together, we do e-Business.

Spalding has been a leader in golf ball manufacturing for over 100 years – that's their business. Through Spalding.com, they offer only the BEST products – Ben Hogan, Etonic, Strata and Top-Flite. At Digex, we may not know much about sporting goods but we do know what it takes to run a successful e-Business.

We supply the hardware, software and pre-engineered platforms that include best-of-breed technology to get your site up and running – fast and reliably. Our world-class data centers and networks are optimized for performance and availability, so your site is online 24x7x365. We provide the administration, monitoring and security services necessary to make sure your site remains secure.

**Spalding is a hit for its online customers.
Digex is a hit for Spalding.**

digexSM

Digex keeps e-business in business™

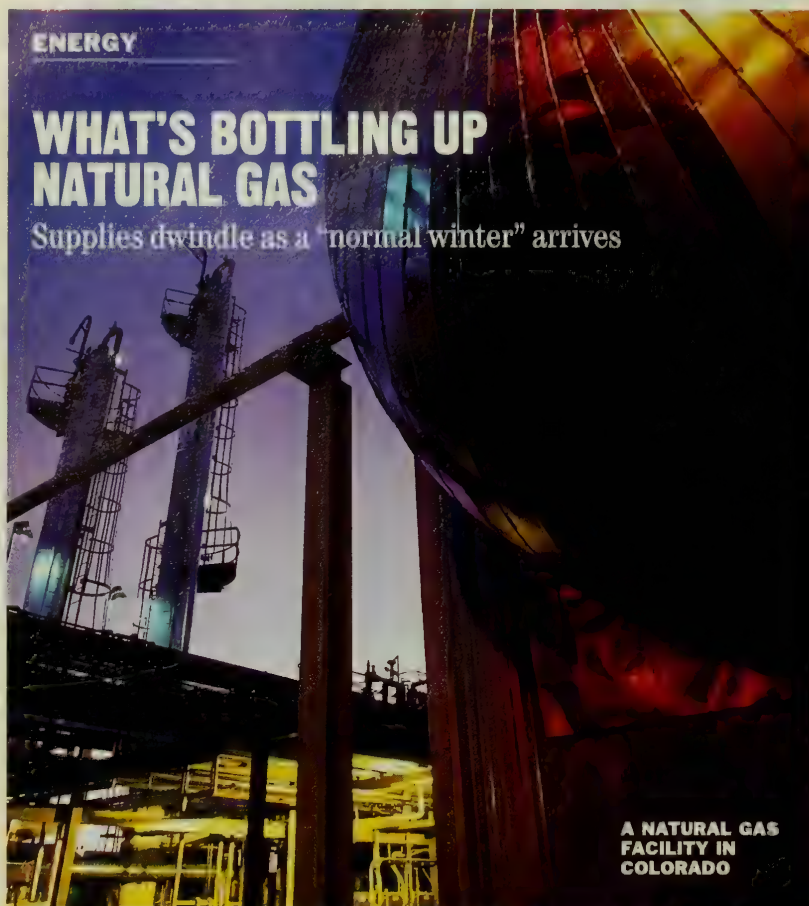
www.digex.com/spalding 1-800-455-2968 Ext. 501

Where managed hosting began.
Where managed hosting is going.

ENERGY

WHAT'S BOTTLING UP NATURAL GAS

Supplies dwindle as a "normal winter" arrives



A NATURAL GAS FACILITY IN COLORADO

For years, the energy industry has been saying that clean-burning natural gas is the fuel of the future. Lately that flame has gotten too hot for its own good as problems have piled up. In mid-November, natural gas prices hit an all-time high of \$6.50 per thousand cubic feet. That's nearly triple what gas was selling for at this time last year—and it is likely to get worse.

Moreover, natural gas utilities across the country have been warning customers for months that home heating bills could jump as much as 40% this winter—and even that may be conservative for some regions. Because of an early cold snap on the West Coast, pipeline capacity got so tight in Southern California that 80 industrial customers already saw their gas service shut off several times.

What gives? A surging economy, increased use of natural gas for home heat, and a spate of new gas-fired electricity generation plants have sent demand soaring. High oil prices have also played a role. While many industrial users and electric utilities would usually switch to oil when natural prices go

so high, this year that's not an option.

Meanwhile, new natural gas fields are being depleted faster than ever, while exploration spending has yet to recover from a steep decline three years ago. And Old Man Winter could add to this year's problems. The last three winters were among the warmest on record, but that looks set to end. "If the National Weather Service forecasts are accurate and we have even a normal winter this year, we could see more supply disruptions and prices going even higher," says Peter Lund, vice-president for pipeline development at PG&E Corp.'s national energy marketing group.

Add it all up, and the balance between supply and demand has gotten seriously out of whack. U.S. consumption is projected to increase 3.3% this year, to 22.2 trillion cubic feet. Overall, that's nearly a 40% increase from 1985.

Industrial and con-

sumer demand share the blame. The percentage of newly built homes heated by natural gas, for instance, has increased from 39% to 64%. And in the last year, almost 30,000 megawatts of new natural gas-fired power plants have come online, a 60% increase.

NO DEPOSITS. Gas production has yet to catch up. After staying flat for the prior six years, U.S. production is expected to increase only 0.7% this year to about 18.2 trillion cubic feet. Normally, imports, mostly from Canada, make up the difference. But even Canada is now having trouble increasing production.

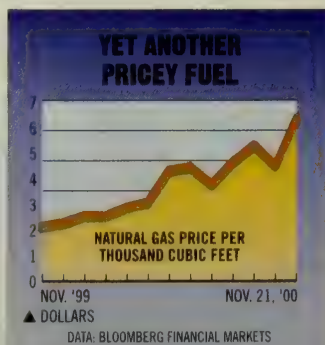
A major reason is the depletion of big deposits. Thirty years ago, a typical field in the Gulf of Mexico, which accounts for one-quarter of U.S. production, would contain 430 billion cubic feet of gas. Today, the average field then holds less than 30 billion cubic feet. Says Salomon Smith Barney energy analyst Robert Morris: "They are finding fields the size of beach balls where they used to find Goodyear blimps."

That has gas producers scrambling. In mid-October, the number of rigs drilling for natural gas in the U.S. hit a ten-year high of 855—twice last year's level. To maximize output, companies such as Houston-based Apache Corp. have been dusting off 50-year-old well data and using new technologies to look for gas in fields that may have been drilled two or three times before. "We are beginning to see an increase in production," says Mark Papa, chairman of EOG Resources Inc., a large natural gas producer. "But we expect to see high prices continue for much of next year."

The oil and natural gas price hike look to be a boon for the nation's coal industry. Because of U.S. environmental concerns, coal has lost ground to natural gas-fired facilities in recent years. Now the freefall may slow. In mid-September, Wisconsin Energy Corp., a gas and electric utility in Milwaukee,

announced it is looking to build two new coal-fired plants in order to have a diverse fuel base. That's the first new coal-based generation proposed in the U.S. in at least five years. If coal and natural gas prices stay this high, coal will start looking better and better.

By Christopher F. Meri in Los Angeles





Simple to the point of "duh."

The revolutionary new HP e-PC is built fast and lean, without any unnecessary old technology. And with all three of the major components easily swappable, it is simple to support and deploy. Complete with Microsoft® Windows® 2000 for improved reliability and manageability. Once again proving that if there is less to go wrong, less will.

Demand a better computer.



THE INTERNET

LET'S KEEP THIS EXCHANGE TO OURSELVES

The B2B boom moves from the general to the company-specific

Since last autumn, Trane Co., a maker of air-conditioner parts, has been red-hot with the business-to-business Internet crowd. Each of the horde of B2B exchanges targeting the construction industry wants Trane to join. "Construction.com, MyPlant.com, My-Facility.com—we get up to five calls a week," says James A. Bierkamp, head of Trane's e-business unit.

But after some consideration, Bierkamp did not see what any of those e-marketplaces could offer that his company couldn't do itself. So in May, Trane rolled out its own private exchange, which allows its 5,000 dealers to browse, buy equipment, schedule deliveries, and process warranties. The site lets Trane operate with greater efficiency and trim processing costs—without losing control of the presentation of its brand name or running the risks of rubbing elbows with competitors in an open exchange. "Why let another party get between us and our customers?" asks Bierkamp.

MY WAY. He is hardly alone. Since last year, scores of third-party and consortium e-marketplaces have appeared that were supposed to be a boon to suppliers. But it hasn't turned out that way. Many are floundering, while private exchanges are mushrooming. Internet researcher eMarketer Inc. estimates that 93% of B2B e-commerce will be conducted through private sites in 2000. "In the next three years, there'll only be two or three open exchanges per industry running—vs. hundreds or thousands of private marketplaces," says John J. Fontanella, a senior analyst at AMR Research Inc.

There's no mystery behind these numbers. Whether a company opens its own exchange or joins a consortium, it has to put in much the same work and front roughly the same costs. But with

their own e-marketplaces, companies can offer perks such as better volume pricing, instant inventory checks, and online customer service. Companies with their own marketplaces also benefit more from the lowered procurement and processing costs that come from using B2B exchanges. Earlier this year, for example, truckmaker Paccar Inc.

launched Truckxchange.com but quickly shelved plans to make it an open B2 marketplace. "Reducing [processing costs gives us a competitive advantage," says Paccar Chief Investment Office Patrick F. Flynn. "Why just give that advantage to our competitors?"

At the same time, companies with their own systems don't face the hassle that can come from joining an open exchange. Chief among them: the struggle to build a consensus among rivals about business practices or a common technology platform. Many also worry about sharing pricing and inventory information with competitors. Airline industry exchange Orbitz LLC and agricultural B2B Rooster.com are still in a holding pattern, thanks to internal haggling. "The need for agreement among competitors really slows down the consortium B2Bs," says Paul A. Penle at Ernst & Young LLP.

Beyond that, many executives fear they can't promote their brand names in open e-marketplaces. "All customers will see on an exchange is a supplier name and a price," says Charles R. Richter, director of strategy and planning for Internet software company InterWorld Corp. And Emerson Electric Co. Executive Vice-President Charles A. Peters worries that the benefits of its power supply products, such as their greater efficiency and reliability, will get short shrift at a shared site. "We feel that we're brought down to a common denominator

a public exchange," he says.

Of course, in some industries, it's not an either-or proposition. A Merrill Lynch & Co. survey of 19 large auto parts suppliers found that most intended to join Covisint, the planned e-business exchange supported by General Motors, Ford, and DaimlerChrysler. "Covisint will be too big to ignore," says Kevin Moyer, director of e-business at parts maker Dana Corp. Nevertheless, more than half the suppliers plan to build private exchanges as well. For now, they have little choice. While Dana's site has been up and running since August, industry watchers don't expect Covisint open until mid-2001.

By Darnell Little in Chicago



WHY SUPPLIERS ARE SHUNNING B2B EXCHANGES

BRAND DILUTION Many companies believe that the power of their brand names will be lost among all their competitors.

TECHNOLOGY B2B exchanges usually can't let members offer up-to-the-minute inventory management or billing systems.

COMPETITION Any advantage provided by the exchange is available to all rivals. Some fear their customers will jump ship.

"I registered my rocks"

www.auctionjeweler.com



Bruce Verstandig, founder of Auctionjeweler.com, registered his domain name to put his business online at register.com. Visit us at www.register.com or call us at 1-800-7-WWW-NET, and we'll help you register your domain name right over the phone.

register

• com

the first step on the web

EDITED BY ALETA DAVIES

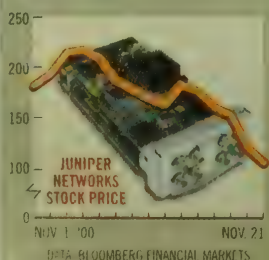
A WINDFALL FOR AT&T WIRELESS?

JOHN ZEGLIS, THE CEO OF AT&T Wireless, may soon get a big boost in the competition for dominance of the U.S. mobile phone market. The wireless company is close to a deal with Japan's NTT DoCoMo for a multibillion-dollar investment and cutting-edge Net technology, according to sources close to the situation. DoCoMo, which has led the world in developing technology to surf the Web from a mobile phone, could invest as much as \$10 billion in AT&T Wireless and would license its Net software to the company. The investment would give Zeglis plenty of capital to bid for wireless licenses that the federal government will soon auction off.

CLOSING BELL

TELECOM DISEASE

Not even Juniper Networks, with profits expected to rise over 70%, to more than \$253 million in 2001, is immune to the telecom meltdown. On Nov. 20, Morgan Stanley Dean Witter's Christopher Stix lowered his rating, even as researcher Dell'Oro Group reported that Juniper is taking sales from Cisco Systems. It now sells 31% of all big Web routers. That wasn't enough to hold its multiple at 380 times expected 2000 earnings. Juniper's stock plunged 21%, to 121½



Earlier this year, AT&T Wireless raised \$10 billion in an initial public offering. Its biggest competitor, Verizon Wireless, was planning to raise as much as \$15 billion through its own IPO this year, but the rocky stock market forced the company to postpone its offering indefinitely.

FLYING THE PRICIER SKIES

UNITED AIRLINES, WHICH infuriated fliers last summer with delays and cancellations caused by labor troubles, is socking business travelers again. On Nov. 17, the world's biggest airline hiked round-trip fares on last-minute bookings by \$100 to \$200. By Nov. 19, other major carriers had matched United's steeper prices—the sixth industrywide hike this year. United wouldn't explain the rise, but it came only a month after its pilots ratified a four-year contract giving them the industry's highest wages. There may be more trouble ahead: United's mechanics, frustrated in their attempts to negotiate big raises, plan a possible strike after Christmas.

TO CHINA IN A BROWN AIRPLANE

IN THE BATTLE OVER POTENTIALLY lucrative new U.S.-China air routes, United Parcel Service is a winner. On Nov. 21, the Transportation Dept. awarded it 6 of the 10 new weekly flights negotiated in a 1999 U.S.-China treaty. UPS will get direct access for the first time, competing with FedEx, which got access in 1995. The remaining four went to incumbents, with United Airlines taking two new routes, and FedEx and Northwest Airlines one each. China also tentatively agreed to a deal that could give American Airlines and Delta Air Lines access through

HEADLINER: KENNETH CHENAULT

NO RECOUNT NEEDED HERE

The future is arriving four months early at American Express. On Nov. 17, Harvey Golub announced that he will step down as CEO at yearend instead of next April, as originally planned. Golub, 61, says he decided to leave early because his chosen successor, Kenneth Chenault, 49, is ready to take over. The CEO has been methodically shifting his executive responsibilities to Chenault since naming him president and COO in 1997. Golub is expected to transfer the chairman's title to his protégé at AmEx'



annual meeting in April.

Chenault's ascent is unlikely to bring big changes at the credit-card and travel services giant. The 19-year AmEx vet played the key supporting role in Golub's back-to-basics retooling in the '90s. AmEx looks set to post record earnings in 2000 for the second successive year. Chenault's challenge will be to keep revenue chugging at 15% a year as the economy slows. To do so, he'll have to cook up new ways to chip away at the market share of archrivals Visa USA and MasterCard International.

By Anthony Bianco

their respective partners, China Eastern Airlines and China Southern Airlines.

LA RESISTANCE ON THE WEB

CAN LOCAL GOVERNMENTS LAY down the law for foreign Web companies? The jurisdiction debate is coming to the fore after a French judge's Nov. 20 ruling requiring megaportal Yahoo! to block French customers' access to portions of its site that sell Nazi-related memorabilia. While tough to enforce, the ruling could set a precedent on whether or not global Net companies must adhere to local laws. Jean-Jacques Gomez ruled that Yahoo must set up a three-part filtering system within three months or be fined \$13,000 a day. Yahoo, which already prohibits the sale of Nazi-related goods on its French site (www.yahoo.fr), is reviewing the decision.

NARY A GLIMMER AT LUCENT

THE FOURTH-QUARTER REVENUE woes at Lucent Technologies just won't die. On Nov. 21, CEO Henry Schach said the company will lower reported revenues for the quarter by about \$125 million or 2¢ a share, citing a "revenue recognition issue." It all won't confirm forecasts for first fiscal quarter 2001. Shares plunged 16% for the day; 7½% for the year. Lucent lower its targets three times last year, mostly because it bet on the wrong technology in optical networking, where Nortel Networks has pulled ahead.

ET CETERA...

- Ticketmaster Online-Ci search will buy Ticketmaster from USA Networks.
- Time Warner will open high-speed cable lines to service provider EarthLink.

CARRIER AND ISP SERVICES
COMMUNICATIONS
DESS
I-COMMERCE
SERVICES
MANAGED NETWORKS
WEB HOSTING

© 2000 PSINet Inc. The PSINet logo is a trademark of PSINet Inc.



350 MILLION PEOPLE MAY
DROP BY TODAY.
TIME TO SAY "HELLO."

The Internet world is knocking. PSINet helps your business answer. We give you all the tools you need to maximize on-line communications. Everything from multicurrency e-commerce and dedicated hosting to multimedia services, private IP networking, and more. It's what we've done for thousands of small- and medium-sized companies as well as more than a third of the Fortune 500®. Your opportunity is knocking. Open the door. Call or contact PSINet at 1-800-395-1150 or www.psinet.com.

PSINet
THE INTERNET SUPER CARRIER





WYNTON MARSALIS. COMPOSER-PERFORMER. VIRTUOSO.



VALOR™

MOVADO™

THE MUSEUM® WATCH. PUSHING THE ARTFORM™.

TUNGSTEN CARBIDE. VIRTUALLY SCRATCH-PROOF. WATER RESISTANT. MEN'S AND WOMEN'S.

BAILEY BANKS & BIDDLE

1 800 651 4BBB

EDITED BY JOHN CAREY

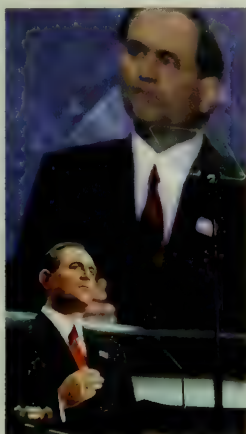
A SLOWDOWN COULD HIT GOP GOVERNORS WHERE THEY LIVE

For years, Virginia has been sitting pretty. Because of a high-tech boom that sent tax revenues soaring, it has been able to cut taxes while significantly boosting spending for roads, schools, law enforcement, and health care. But it's becoming increasingly clear to Governor Jim Gilmore and his bean counters that the good times aren't going to last. With the national economy slowing and tech companies stumbling, Republican Gilmore is agonizing over a series of tough fiscal decisions for 2001. Unless he finds millions in cost savings to balance the budget, the centerpiece of his 1997 campaign—eliminating the property tax on automobiles—will be delayed. "The economy is slowing, and you have to make adjustments," he says.

Gilmore isn't the only one bracing for a fiscal lurch. All across the country, Fed Chairman Alan Greenspan's "soft landing" strategy is creating crash landings for state budgets. Until recently, states have been rolling in dough, with revenues outpacing budget projections by up to 10%, says Ray Scheppach, executive director of the National Governors' Assn. But this year, revenues are coming in at more than 1% below estimates. Already, 10 states are being forced to slash current-year spending to head off deficits. "We're moving into a period when governors are going to be squeezed," Scheppach says.

JUST REVENUES. What's going wrong? Softer corporate profits, a big dip in stock-option redemption, and sales taxes tied to Net commerce are causing revenues to stagnate. At the same time, unanticipated expenses are exploding. The annual growth rate in Medicaid spending has tripled from 5% to about 15%. And expenditures will rise even more if the slowdown forces more people to apply for government benefits.

The slowdown has political as well as fiscal consequences. It poses particular risks for the nation's 29 Republican governors, who captured a majority of state capitals in 1994.



GILMORE: Budget squeeze

Booming tax receipts have allowed them to give voters both the tax cuts they want and the increased services they demand. Indeed, state appropriations increased an average of 6.1% in each of the past three years—nearly double the growth rate of tax revenues and about twice the growth rate of the federal budget. Among the big spenders: Texas Governor George W. Bush, who has presided over budget increases of more than 30% since he took office in 1995. In addition, 31 states reduced taxes by a total of \$16.4 billion in the past two years.

Now, however, these popular GOP leaders can't avoid angering some constituents as the softening economy forces hard choices. With 24 of their 29 governorships up for grabs in the next two years, budget cuts could cost them politically. In contrast, only 12 of the 19 Democratic governors face election in 2002.

The GOP strategy for minimizing the damage is to stick to its tax-cut plans as much as possible—even if it means trimming budgets. Pennsylvania's Tom Ridge, for instance, promises to "set priorities and keep spending down" so he can afford a seventh consecutive year of tax relief. Idaho's Dirk Kempthorne is taking a neo-Keynesian approach: pump-priming the lagging economy in parts of his state by proposing rural tax credits. While the state is still running a surplus, "it's time to take care of things on the to-do list," Kempthorne argues.

But even if Republican governors manage to keep voters happy with tax cuts, a souring economy could hurt them. The reason: When slumps hit, voters almost always blame the guys in power. "The economy is important when it's bad," warns Governor Gilmore, the incoming chair of the Republican Governors Assn. The challenge for the GOP will be to maintain its grip on state capitals if the good times roll away.

By Richard S. Dunham

CAPITAL WRAPUP

INSURERS TEAM UP?

► With health care at the top of the political agenda, insurers are rethinking their strategy. Until now, they've been divided into managed care, represented by the American Association of Health Plans, and more traditional insurers, who belong to the Health Insurance Association of America. But members of both groups believe it would be better to speak with one voice on legislative and regulatory efforts—and are pondering a merger. A move to pursue a union, which would

combine the AHA's strong federal lobbying with HIAA's better state grassroots unit, is one to two weeks away.

PRICEY PENTAGON PARTS

► Is the \$600 hammer making a comeback? A new General Accounting Office report shows that the prices of some spare parts jumped by 50% or more in 1998—and for nearly 3,000 parts, prices shot up at least 1,000%. One example: A 5¢ washer rose to \$182. The Pentagon blames reduced volumes and outdated price lists.

HILLARY THE BOGEYMAN

► It's too early to know how well Democrat Hillary Rodham Clinton will perform as a New York Senator. But already, she's become a potent symbol for raising cash—for the Republican Right. In a Nov. 17 fund-raising letter, the Heritage Foundation, a conservative Washington think tank, asked supporters to help fight Hillary and the new "leftward tilt" in Congress. Heritage President Edwin J. Feulner calls the First Lady "the most dangerous" of the "radical" new members.

FRANCE

WELCOME TO THE REAL WORLD

Vivendi's grand design now gets put to the test

This should be Jean-Marie Messier's victory lap. Anti-trust authorities have cleared his takeover of Seagram Co., the Canadian distiller turned entertainment conglomerate. And shareholders are poised to give final approval of the deal in early December. That will create the world's second-largest media group, Paris-based Vivendi Universal.

But even before Chairman and CEO Messier assumes command of his transatlantic empire, there are challenges aplenty in his backyard. Vizzavi Ltd., a European Internet portal central to his plans for tapping the mobile Internet, appears stuck on the starting blocks. Messier faces a huge task in readying his pay-TV network, Canal Plus, for the digital age. And now that rival Bertelsmann has cut a deal with online music bad boy Napster Inc., the pressure is on Messier to spell out his vision for selling music online.

PROFIT POWER. You have just stepped into the big leagues, Monsieur Messier. A consummate dealmaker, the 43-year-old French exec has been promoting the merger as an ideal marriage of Universal's rich film and music holdings with Vivendi's distribution network. Yet while Messier has access to 80 million customers through its telephone and TV holdings, they don't yet have the equipment they need—from Web-enabled cell phones to TV set-top boxes—to use the new services Messier is promising.

To be sure, media giants such as AOL Time Warner must also develop the technology to realize their Web dreams. And

HAPPIER DAYS
Bronfman,
Messier, and
Lescure in June,
and the Grinch



both Vivendi and Seagram are in good health: Vivendi's first-half earnings were up 67%, to \$1.25 billion, and Seagram has been reporting good profits, thanks in part to a surprisingly good year at the film studio, which just released *Dr. Seuss' How the Grinch Stole Christmas*. Messier is hoping for 35% annual growth in cash flow from the merged company.

Impressive—but Vivendi's stock has drifted steadily down since the merger was announced. "Vivendi is presenting a strategy that does not make sense to investors," says a French banking executive. When he met recently with leaders of nearly 50 U.S. pension funds, the source adds, "not a single one" wanted to invest in Vivendi.

Messier's plan is to make Vivendi Universal a powerhouse in the Internet's fastest-growing markets. And U

ersal Music, the world's biggest recording company, is central to his ambitions. Most analysts reckon that annual online music sales will top \$3 billion within three years, as music companies set up subscription services for downloading music or simply listening to it "streaming" from Web sites. Along with many others in the industry, he's betting that the convenience of cell phones will soon make them the main device for getting music over the Net.

PORTAL PROBLEMS. That's why it's urgent for Messier to get Vizzavi, a joint venture with Vodafone AirTouch PLC, up and running. Vizzavi is a Web portal designed for use with PCs, mobile phones, and interactive digital TV. The idea is to make Vizzavi the "default" portal for subscribers of Vodafone and of Vivendi's French telephone subsidiary,



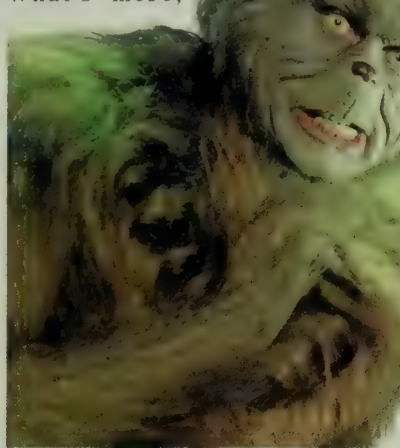
getel—many of whom will want to download music. "Vizzavi has a competitive advantage thanks to our partner cell-phone operators, and our content," says Frank Boulben, CEO of the Vivendi unit that oversees Vizzavi.

Sounds good. But so far Vizzavi operates only in France and appears to have few subscribers. Like other European mobile portals, Vizzavi was originally designed for phones using wireless access protocol, a slow-moving technol-

ogy that has flopped with consumers. So Vizzavi's expansion plans are on hold until new Web-enabled cell phones come onto the market.

Most of Vizzavi's competitors are likewise looking to the next generation of cell phones. But while Vizzavi is starting from scratch, many rivals are already well established. Yahoo! Inc. already has mobile portals ready to launch in eight European countries. "It's too late" for Vizzavi, says Zaheed Haque, the chief executive of room33, a Swedish company that provides software to portals.

"They're up against tremendously strong players." What's more,



MESSIER'S NEXT HURDLES

DIGITAL MUSIC With Bertelsmann and Napster teaming up, Messier must either join them or rapidly develop Vivendi Universal's sites, such as Farmclub.com

INTERNET PORTAL Messier must move quickly to expand Vizzavi, the planned Europewide portal that is owned jointly with mobile phone behemoth Vodafone Group

INTERACTIVE TV Vivendi needs to invest billions to provide next-generation digital technology to European subscribers of pay-TV giant Canal Plus

DATA: BUSINESS WEEK

Messier can't count on Universal's music riches to lure listeners exclusively to Vizzavi. To win European antitrust approval, Vivendi had to promise that Universal's content would be freely available to competing distributors.

Messier also faces a costly catchup game at Canal Plus. The pay-TV network will soon offer set-top boxes that allow subscribers to surf the Web from their televisions and so download and store music and videos. The question is

who will pay for the boxes, which analysts think will cost about \$400 each to make. Pay-TV companies such as Britain's British Sky Broadcasting Group PLC have suffered huge losses by providing free set-top boxes to customers. If Canal Plus followed the giveaway strategy it would have to spend \$8 billion on the boxes. Canal Plus already reported a loss of \$80

million in the first half of this year because of heavy investments.

Such numbers are worrying to Canal Plus employees, who fear that digital investments will increasingly draw money away from creative endeavors. On Nov. 15, former Canal Plus Chief Executive André Rousselet published a front-page article in *Le Monde* expressing his fear that the merger would be "the end" of the network. The next day, current CEO Pierre Lescure fired back with another front-page article arguing that the deal would strengthen Canal Plus. On Nov. 23, Messier is to attend a mass meeting of Canal Plus employees in Paris to answer questions about the merger.

Smoothing ruffled feathers at Canal Plus is hardly Messier's only challenge. Another is Bertelsmann's plan to finance Napster if it switches its free file-sharing service to a subscription-based model. Might Universal, which has sued Napster for alleged piracy, eventually join in that deal? For now, Universal seems to be pursuing its own Web strategy. The company already offers more than 300 titles for sale over pay-per-download sites such as rollingstone.com, and it plans to launch a subscription-based service with Sony Corp. early next year. To be sure, Bertelsmann and Napster have more to lose than Universal does, if the industry's top player spurns their venture. But Messier can't afford to pursue a go-it-alone strategy either. Initiatives that focus on one label are doomed to fail," says analyst Matt Bailey of online music research company Webnoize Inc.

Some longtime Vivendi-watchers are dubious that Messier can clear all these hurdles. "There is more than a 50% chance that the company will eventually understand that its strength is more as a content powerhouse than as an Internet distribution powerhouse," says Edouard Tétreau, an analyst at Crédit Lyonnais Securities in Paris. Messier is determined to press ahead. But for the ambitious Frenchman, this race may not be a sprint, but a marathon.

By Carol Matlack in Paris

RUSSIA

THE FRIENDS OF VLADIMIR

The new crony capitalists are Putin's pals from St. Petersburg

Things are going swimmingly for Swedish telecom giant Telia as it rapidly gains access to provide mobile coverage in Russia. Over the last six months, it has acquired stakes in Russian companies that hold mobile-phone licenses covering over two-thirds of this vast nation. Credit that remarkable progress to an invaluable connection: Telia has hooked up with Telecominvest, a St. Petersburg telecom-holding company founded in 1994 by two longtime friends of Russian President Vladimir V. Putin, himself a St. Pete native. One of the founders, Leonid D. Reiman, 43, is now Putin's Communications Minister; the other, Valery N. Yashin, 59, is the head of Svyazinvest, Russia's state-controlled telecom giant—as well as chairman of Telecominvest.

So much for the promised end to cronyism in Russia. Back in March, when

he was elected President, Putin vowed to cut the insider ties that bound business titans—the so-called oligarchs—and the state. And indeed, he launched a campaign against such infamous moguls as Vladimir Gusinsky and Boris A. Berezhovsky, who had close ties to predecessor Boris Yeltsin's Kremlin. But now a new cadre of business insiders is quietly attempting to take their place—seemingly with Putin's implicit blessing. And the leading figures are coming from Putin's own backyard: St. Petersburg.

Today's in crowd includes not only Reiman and Yashin but Putin's fellow Petersburgers, Vladimir I. Kogan, also known as Putin's banker. Kogan, 37, is president of Bankers' House St. Petersburg, a financial holding company that owns Promstroibank St. Petersburg, Russia's 15th-largest bank with \$700 million in assets. Putin kept his

personal savings at Promstroibank and owned 23 shares worth \$13,000. The bank is now installing ATMs in Russia's White House and State Duma, courtesy of a contract with the Russian government, which will give him greater access to Moscow's political elite.

ENVIOUS RIVALS. Kogan himself has become a fixture at the Kremlin, where his friendship network includes not only the President but also former Prime Minister Sergei V. Stepashin, now head of Russia's Audit Chamber, the investigative branch of the State Duma. Stepashin's wife is in charge of Promstroibank's Moscow operations. Envious rivals have taken note: "Kogan can reap dividends from his relations with high-placed officials in the Putin administration," says Yury Rydnik, president of rival St. Pete bank Baltoneximbank.

What's emerging in Putin's Russia

BUDDIES IN BUSINESS AND GOVERNMENT



VLADIMIR I. KOGAN, 37

POSITION Chairman of the supervisory board of Promstroibank St. Petersburg

DEALS Installing ATMs in Russia's White House and State Duma. Pushing into Moscow political elite circles in a bid to become a businessman with national clout.

CONNECTIONS Friend of President Putin, who held a \$10,000 deposit in Promstroibank St. Petersburg, as well as 23 shares in the bank worth \$13,000.



LEONID D. REIMAN, 43

POSITION Communications Minister since November, 1999

DEALS Founded mobile holding company Telecominvest in 1994 with Yashin. Reiman was Yashin's deputy at Petersburg Telephone Network from 1992 to 1999.

CONNECTIONS Close friends with Putin since the early 1990s, when Putin, as deputy mayor of St. Petersburg, approved privatizations and investment.



VALERY N. YASHIN, 59

POSITION Head of state-controlled telecom giant Svyazinvest and chairman of mobile holding company Telecominvest

DEALS Over past year, Telecominvest bought stakes in mobile operators covering two-thirds of Russia.

CONNECTIONS Longtime friend of Putin, whose wife, Lyudmilla, earned \$1,500 in 1998 and 1999 for administrative work at Telecominvest.

DATA: PUTIN'S PRE-ELECTION INCOME DECLARATION, PROMSTROIBANK, ST. PETERSBURG, TELECOMINVEST

**WE DIDN'T
WRITE THE BOOK
ON THE
NEW ECONOMY.
JUST
THE TRAINING
MANUAL.**



SmartForce™ e-Learning. It's not just the training manual for the new economy, it's the catalyst for getting there. That's because SmartForce e-Learning gives your people the skills they need to succeed in this new, Internet-driven world. A world that demands a total solution for enterprise e-Learning. Just ask Unisys, PricewaterhouseCoopers or CSC, who already use our platform to create smarter, more e-savvy work forces. Better yet, see for yourself how the world's #1 e-Learning company can help transform your business to e-Business. SmartForce e-Learning. The new economy best seller.

Go to www.smartforce.com/neweconomy or call 1-888-395-0014

SmartForce™
The e-Learning Company



PROMSTROIBANK: Raided by St. Petersburg police

million car plant near St. Petersburg. Then, two days before Putin's election, Ford Russia sold an undisclosed stake in the plant to Promstroibank. "The bank has helped us keep track of the new faces in government," says Ford Russia's president, Alain Batty.

As for Telia, its links with Yashin and Reiman go back to 1992 when it joined forces with Yashin's Petersburg Telephone Network to establish a regional mobile-phone company. In February this year, Telia spent over \$80 million for a 25% stake in Telecominvest, which took over Petersburg Telephone Network's mobile interests and gained stakes in other operators. "Recent political changes were very favorable to us," says Telia Vice-President Bo. Magnusson.

One question, of course, is whether businesses linked to the St. Pete crowd are now

getting special favors at the expense of other companies. Telecom analysts and market players certainly thought so early in November. That's when the Communications Ministry awarded Telecominvest's subsidiary, MSS Saratov, a GSM license for operations in a big swath of Volga River territory. The contract award was made without a tender, so Saratov did not have to compete for the prized license. The move prompted charges of insider dealing. Industry watchers widely believe Reiman and Yashin have retained a large stake in the company. "Reiman appears to think he's above the rules," says Tom Adshead, a telecom analyst at Moscow brokerage Troika Dialog. Telecominvest says neither Reiman nor Yashin now own any shares of the company. Both men declined to comment.

What's more, on Nov. 15, Reiman's ministry suspended a GSM license held

by SMARTS, a rival to Telecominvest in the Volga region. "It's another case of the Communications Ministry selectively enforcing regulations to favor Telecominvest," says Ari Krel, a telecom analyst with Moscow brokerage United Financial Group. The Communications Ministry says both moves were above board. The ministry is not legally required to hold tenders to issue licenses. And the ministry says it suspended SMARTS's license because the company failed to meet a deadline for starting operations. But analysts charge that the license suspension seemed more like an attempt to root out Telecominvest's rivals because it was the first time the ministry had ever enforced these regulations. Reiman refused to comment.

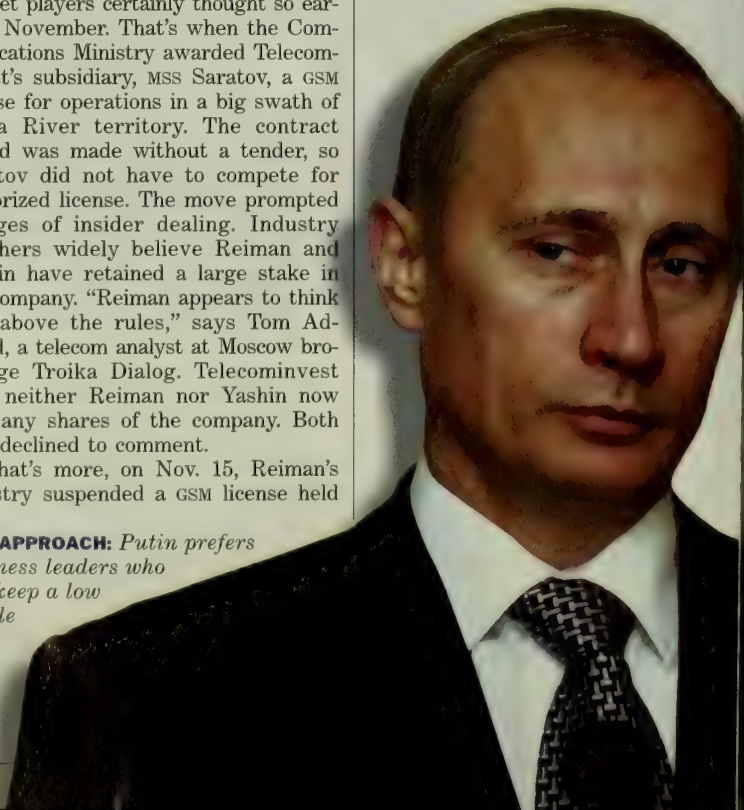
However low-profile the Putin-connected St. Petersburg folks may want to be, rivals may be gunning for them. On Nov. 16, Kogan's Promstroibank was raided by St. Petersburg city police, who confiscated documents sought by local prosecutors for a case against the bank's directors for alleged bribery. Raid or no, Kogan seems set on expanding Promstroibank beyond its St. Petersburg base. And telecom mogul Yashin, too, continues to expand his empire. Russia's most visible Yeltsin-era oligarchs have been sidelined. But make no mistake: In Putin's Russia, connections still matter.

By Catherine Belton in Moscow

not a replica of the Yeltsin-era structure of rule by flamboyant oligarchs—snapping up hunks of state assets for bargain prices and loudly asserting themselves through their own media empires—but a more discreet edifice in which select, low-key figures, mainly those with past ties to Putin, seem to have favored access to the Kremlin. Ex-spy "Putin has a KGB approach to big business. Business leaders should not draw attention to themselves. Otherwise they'll be sidelined," says Ruslan Linkov, the head of the St. Petersburg branch of liberal Democratic Party of Russia. Putin's preferred method for sidelining business barons who have political ambitions? Prevent them from creating media empires—or take them away, as he already has done with Gusinsky and Berezovsky.

FOREIGN BENNIES. This new system of buddy business is hardly the level playing field that so many investors—and Putin—have called for in Russia. But for particular enterprises, including some foreign ventures, there are benefits. Kogan's rise, for example, is a welcome development for Ford Russia. The Ford Motor Co. unit had the good fortune to link up with Promstroibank before Putin's meteoric ascension to the Kremlin. Back in 1996, Ford Russia became a client of Promstroibank when it began work on a \$150

KGB APPROACH: Putin prefers business leaders who can keep a low profile



Digital Camera, Video Recorder, MP3 Player



Say, is that a
digital camera video
recorder MP3 player
in your pocket?

ever before has so much fit into something so little. With a body about the size of a wallet, the Fujifilm FinePix 40i digital camera takes 80-second video clips, captures high-resolution digital pictures and plays MP3's. You can even instantly play back your images and videos on the camera's LCD screen and speaker. It's proof that bigger is not necessarily better. Find out more about the remarkable Fujifilm FinePix 40i by calling 1-800-800-FUJI or visiting www.fujifilm.com.



(actual size)

 **FUJIFILM** digital

Get the picture

COMMENTARY

By Geri Smith and Elisabeth Malkin

VICENTE FOX MAY BE SETTING HIMSELF UP FOR A FALL

Moisés Salas has been selling candy and cigarettes outside a Mexico City office complex for 17 years. He clears around \$14 a day, barely enough to support his wife and four kids. But the 37-year-old Salas hopes life will get better once Vicente Fox is sworn in as President of Mexico on Dec. 1. "Let's hope that it's a government that governs with justice, sincerity, and follows the law," he says.

Mexico is filled with great expectations as it awaits the inauguration of the first opposition politician to hold the presidency after 71 years of single-party rule. Fed up with authoritarian government, widespread corruption, and a string of crippling economic crises, Mexicans overwhelmingly voted on July 2 to make the former Coca-Cola Co. executive their next leader.

Yet high hopes could also lead to deep disappointments. Fox, 58, must now make good on a long list of promises, including a pledge to sustain economic growth at 7% a year and create 1.35 million new jobs annually. It would take a political magician to pull this off in just six years, the length of a presidential term in Mexico. And the scope of Fox's legislative ambition is huge, while the political obstacles are great.

TAX REFORM. The battles will start even before Fox assumes office. In late November, his center-right National Action Party (PAN) intends to introduce controversial legislation to open up Mexico's electricity industry to private competition. Previous attempts at reform have been shot down. And the PAN, which lacks a congressional majority, must win the backing of the long-ruling Institutional Revolutionary Party (PRI) and the left-of-center Party of the Democratic Revolution (PRD). But both parties, which suffered humiliating defeats at the polls, are leery of the plan, which they believe will lead to an unpopular privatization of the entire industry. "They are absolutely mistaken if they think we're going to go along with that," says Martí Batres, who heads the PRD's 60-person delegation in the lower house of Congress.

Fox might have chosen to start off his term on a less contentious note. But his advisers say Mexico needs up to \$50 billion in new investment to keep pace with fast-growing electricity demand. Fair enough. Yet Fox faces other tough legislative fights. In his first month in office, he must ram through an austere 2001 budget just as Mexico's economy is riding a \$5 billion oil windfall. His advisers believe that spending must be reined in to compensate for a cooling U.S. economy, which absorbs most Mexican ex-

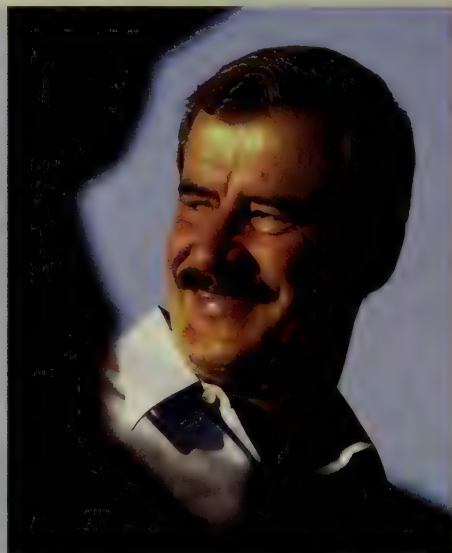
many politicians, who argue the measure will hit the poor hardest.

Fox's advisers maintain that the impact on the poor will be softened by targeted subsidies and better welfare benefits. But boosting the tax take is notoriously difficult to pull off. Fox will have to deploy his considerable charisma and hands-on negotiating style to make any progress. As governor of the state of Guanajuato, he worked effectively with an opposition-dominated legislature. His business experience could also be a plus—

TO-DO LIST

- ▶ Work with opposition-dominated Congress to pass key energy, budget, and tax-reform laws
- ▶ Live up to promises to create 1.35 million jobs a year and sustain 7% annual growth
- ▶ Find resources to fund job-training and micro-credit programs to reduce crushing poverty
- ▶ Wipe out corruption in a country whose justice and law-enforcement systems are weak

DATA: BUSINESS WEEK



NEW PRESIDENT FOX: He must push through an austere budget in the face of a windfall

ports. Wise indeed—but consumers never like it when the punch bowl is taken away.

Tax reform is also high on the Fox agenda, since the new government wants to fund ambitious antipoverty and job-creation programs. Fox expects to submit a sweeping tax-reform proposal to Congress by March. There is broad consensus that Mexico needs a fiscal overhaul, but the Fox package will still draw fire.

The Mexican Treasury collects only 17% of gross domestic product in taxes, compared with 30% of GDP in the U.S. Tax evasion is rampant, and loopholes abound. So the Fox team has floated a plan to extend Mexico's 15% value-added tax to previously exempt items, such as food and medicine. That has outraged

something Mexico's recent Ivy-League-educated technocrats-turned-Presidents have lacked.

Mexicans have entrusted Fox with nothing less than the task of reshaping the country. In the end, perhaps the best he can do is to lay the foundations for such a transformation. "I don't think he has done a good job bringing people's expectations in line with reality," says political scientist Luis Rubio, director of the Center for Research & Development. The hard reality will become apparent in Fox's first 100 days.

Smith and Malkin cover Mexican politics and business.



Don't move. We'll come to you.

2001
sable

The 2001 Mercury Sable has foot pedals* that move forward or backward at the push of a button. So they're never too close or too far away. Plus a Personal Safety System™ that includes dual-stage front airbags† and energy-absorbing safety belts. How else does the Sable accommodate you? Click or call.

www.mercuryvehicles.com ■ 888.566.8888



Mercury
LIVE LIFE
IN YOUR
OWN LANE

Optional.
Always wear your safety belt and secure children in the rear seat.

EDITED BY ROSE BRADY

CANADA FEELS A HARD WIND BLOWING FROM THE RIGHT

On Nov. 28, the day after their national elections, Canadians will likely have the same Prime Minister they've had since 1993: Jean Chrétien, boss of the Liberal Party.

But Canadians will get something else post-election: a new, powerful right-wing opposition led by Stockwell Day, who has shocked the Establishment by demolishing the country's moderate conservatives and posing a stiff challenge to Chrétien himself. How Day carries himself in opposition could determine whether his hard-right agenda becomes a cornerstone of national policy.

Day, the 50-year-old former pastor and treasurer of Alberta province, won the leadership of the conservative Canadian Alliance only in July. Now, Day and the Alliance—which started as a far-right party in Canada's prairie provinces—are giving Chrétien and the Liberals a run for their money. The campaign has shaped up to be rough, with Liberal leaders accusing Day's supporters of being racist, anti-Semitic, and anti-immigration, and the Alliance shooting back that liberals are using scare tactics to stop defections to the Day camp.

NATIONAL PULPIT. Polls show the Liberals likely to win: The party is enjoying 45% support, vs. the Alliance's 25%. But the once-powerful Progressive Conservatives and the separatist Bloc Québécois are polling at or under 10%. And few thought the Alliance would gather this much support on its platform of radically lower taxes and a lot less government. The Liberals will struggle to pass new laws in such a divided Parliament.

Short of an outright victory, a national pulpit in Parliament is just what Day wants. "I am going to be very vigorous as member of the opposition to go after and expose the record of the Liberal government," he told *BUSINESS WEEK* while campaigning in Vancouver on Nov. 16. Day's goals are to preach the virtues of a kind of Thatcherite conservatism to Cana-

ans and lay the groundwork for a shot at the Prime Minister's job the next time a general election is called, by 2005.

Since the Alliance will be in the minority and cannot propose legislation, Day's big power will be to hammer at Chrétien during the daily Prime Minister's question time in the House of Commons. Also, says Alliance Campaign Manager Jason T. Kenney, the party will be trying to drum up more support, especially from the ranks of the crumbling Progressive Conservatives. Although the Alliance has gained in

British Columbia in the campaign, it has attracted few voters in liberal Ontario. And while some Progressive Conservative insiders have joined the Alliance, leaders such as former Prime Minister Brian Mulroney refuse to do so.

Undeterred, Day will keep making national issues of his main provincial policies. Like Margaret Thatcher and Ronald Reagan in the 1980s, he wants to slash currently generous subsidies for job-creation programs and privatize businesses such as the Canadian Broadcasting Corp. Most important is Day's tax policy. He wants to tax incomes over \$100,000 at 25%, compared with 29% now. Canadians earning less than that would pay 17%. Day even favors an eventual move to a flat 17% levy. Partly in response, Chrétien's Liberal government unveiled \$100 billion in promised tax cuts just five days before the Prime Minister called the election.

What could block Day from creating a permanent force in Canadian politics are the Alliance's positions on social issues and dismantling the welfare state. Many voters cringe at Day's support for fundamentalist Christian views and his willingness to hold a referendum on banning abortion. The last time, in the 1970s, few expected either Thatcher or Reagan to rise to power. Day has up to five years to make his case.

By Petti Fong in Vancouver, B.C.



DAY: Surprising strength

GLOBAL WRAPUP

AFTER FUJIMORI

► Many Peruvians cheered when their President, Alberto Fujimori, suddenly resigned while visiting Tokyo on Nov. 20. His departure ends a decade of strong-arm rule. Now it will be up to an interim President to maintain stability as Peru prepares for new elections scheduled for April. Congress was expected to tap 63-year-old Speaker Valentín Paniagua, a member of the opposition Popular Action party, for that post on Nov. 21.

Paniagua faces a tough job. To con-

solidate power, analysts say, he must form a strong Cabinet that includes both Fujimori allies and opposition forces. The government must "guarantee fair elections, avoid economic collapse, and investigate corruption," says Augusto Alvarez, an analyst at Apoyo Comunicaciones, a local think tank. Last May's election, in which Fujimori won a third term, was marred by charges of fraud. He made a surprise decision in September to end his term early and call new elections after his top adviser, Vladimiro Montesinos, was filmed allegedly bribing a congressman.

As many as 12 rivals could be on the Apr. 8 ballot. Prominent figures expected to run include Stanford University-educated economist Alejandro Toledo, who mounted a challenge to Fujimori last time. Civil rights ombudsman Jorge Santistevan and Carlos Boloña, Fujimori's Economy Minister, are also likely to throw their hats into the ring.

The uncertainty is taking a toll on economic growth, which could be as low as 1.5% next year. Wary investors are likely to stay on the sidelines until a new President takes power in July.

By Jane Holligan in Lima



HAUSPIE AND LERNOUT: They've stepped down as co-chairmen

BELGIUM

FROM WORLD-CLASS TO WORLD-CLASS DISASTER

Software hotshot L&H may be headed for a breakup

Just last spring, Belgium's Lernout & Hauspie Speech Products appeared on the brink of greatness. Its appeal was natural-language software, which would permit users to surf the Web simply by talking, and eventually even translate both spoken words and text. Microsoft Corp. and Intel Corp. had snatched up stakes in the company, and retail investors followed. By last March, with a market cap topping \$8 billion, L&H was snapping up U.S. companies Dragon Systems Inc. of Newton, Mass., and Dictation Corp. of Stratford, Conn. This Belgian company was world-class.

It still is world-class—a world-class disaster, that is. L&H has admitted to errors and irregularities in its revenue reports and has postponed a Nov. 1 deadline for publishing an independent audit. It acknowledges that third-quarter revenues will be at least 24% below forecasts. Co-founders Jo Lernout and Pol Hauspie have stepped down as co-chairmen, the stock has fallen from

more than \$70 in March to \$3.75, and the company faces a Securities & Exchange Commission investigation and a debt crunch. Now the company's best bet may be to auction off its best parts.

What happened? L&H tried to build a giant on a technology that was ready to take only baby steps in the marketplace. The impact on L&H's reputation is ruinous. "No one will buy a piece of software with the Lernout brand name again," says Patrick Michelsen of Fortis Bank in Brussels. An L&H spokesman admitted that the company will have to restate earnings but said it's an issue of interpreting accounting rules, not fraud. "HEMORRHAGING." No matter. Although L&H's new chairman, Roel Pieper, a former Tandem Computer and Philips Electronics executive, says he wants to keep the company together, he faces pressure from investors to sell off assets. L&H boasts an inventory of software that translates simple commands in 20 languages along with a traditional, human translation business that the company

BUSTING UP A FORMER BELGIAN HIGHFLIER

Lernout & Hauspie looks set to sell its best assets

TRANSLATION This division does about \$100 million in revenue a year, earning 40% margins. It has built up a formidable database of vocabulary in 20 languages. Berlitz, the main competitor, may be interested. But human translation, even if aided by computers, is not a high-tech, high-growth business.

SPEECH-RECOGNITION TECHNOLOGY L&H software already can handle dictation at up to 160 words a minute. An established tech company such as Philips or IBM, both active in speech recognition, or an upstart such as Silicon Valley's Nuance Technologies or Speechworks International might be a buyer—provided L&H's respected researchers remain on board.

DATA: BUSINESS WEEK, LERNOUT & HAUSPIE, FORTIS BANK

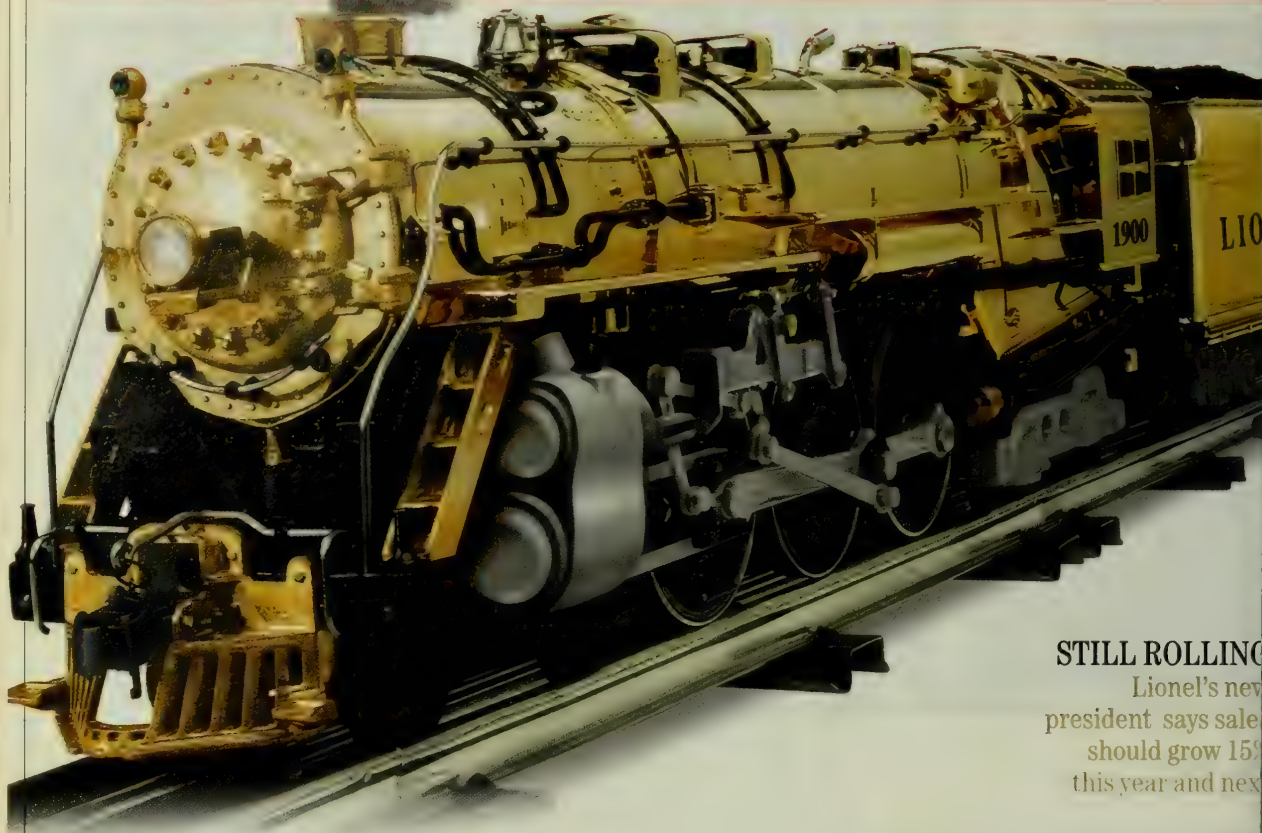
says will pull in about \$100 million in revenue this year.

The other software divisions could be sold in a big chunk to a competitor such as Philips or IBM Corp. "They got a good patent portfolio from Dragon," says Ozzie Osborne, general manager of IBM Voice Systems. "The question is how many Dragon people are still there." Good point: Software businesses are only as valuable as their programmers, and no one expects key employees to hang around L&H. A spokesperson says L&H still has 5,400 employees, though he admits "attrition is above average."

L&H must pay back about \$230 million in debt by the end of March, but has only \$150 million to \$200 million in cash, and it is draining funds as customers flee. "They have to stop the hemorrhaging," warns analyst Pierre-Paul Verelst of ING Barings in Brussels. Analysts predict a bankruptcy, though an L&H spokesman sees "no immediate" danger of that.

The worst consequence of the meltdown is its effect on the technology's development. Speech recognition could now be relegated to the research departments of giants such as IBM and Philips. "I think the growth potential is tremendous, but this technology needs time to develop," says Alex Waibl, a professor at The Robotics Institute at Carnegie Mellon University in Pittsburgh. Time is just what L&H lacks.

*By William Echikson in Brussels,
with David Rocks in New York*



STILL ROLLING
Lionel's new president says sales should grow 15% this year and next

TURNAROUNDS

THE TOY-TRAIN COMPANY THAT THINKS IT CAN

Enthusiasts are running Lionel again. Even a rock star is lending a hand

Chances are, if you were a kid or parent anytime between 1930 and 1960, you played with a Lionel train set. With real smoke, clanging bells, and wonderfully detailed metal cars, they were the toy of choice for generations. They appealed to children's fascination with technology and noise and to that particularly 20th century pride in mobility. Baseball legend Joe DiMaggio bragged about his trains. Pope Pius XII had a set. There's even talk among collectors that Texas Governor George W. Bush keeps one at his ranch. In 1953, Lionel sold 3 million engines and freight cars, making it the biggest toy manufacturer in the world.

Ten years later, the company was going nowhere fast. It had changed hands more than once, lost focus, and even started using plastic. The kind of kids who used to pore over the annual catalogs hardly gave the pages a second glance. They were too busy with their slot cars and space toys. The company languished for the next three decades, barely managing to stay in business.

Then a group of investors, including the late Paramount chairman Martin Davis and rock star and Lionel collector Neil Young, came to the rescue in 1995. In early 1999, they brought in Richard N. Maddox, a longtime executive at toy company Bachmann Industries and a

lifelong train enthusiast. Maddox was close to retirement when they offered him the job, but he quickly shelved any plans to head to the golf course. "It's the dream of every railroader to work at Lionel," he says.

Maddox has had his work cut out for him. He faces a fierce rival, Mike's Train House (MTH), run by a former Lionel subcontractor. To reinvigorate the venerable Lionel brand, which turned 100 this year, he has introduced new models and technology. He's also spruced up the catalog and set up dozens of licensing deals. "We're trying to excel in things whimsical, clever," he says. Lionel LLC is bringing back some vintage a

essories—stylized nuclear power plants, or example. And it's trying to stay current—its freight cars now transport popular autos such as the new Volkswagen Beetle. Maddox's own favorite is the just-launched \$1,800 Challenger team locomotive. The two-foot-long toy is a remake of a classic Lionel train.

Though Maddox is trying hard to persuade the Pokémon generation of the charms of the train set, he makes sure to pay attention to Lionel's most loyal customers—who can usually be found at train shows. It is this group of mostly male, mostly grown-up hobbyists who are the serious toy-train buyers these days. Maddox, whose first job was assembling toy trains for customers at a hobby store in Philadelphia, is a regular at the shows. He spends his time talking with collectors, soliciting their ideas for new models.

They're aging, sure, but they spend real money. In all, toy trains are a nearly \$1 billion business. But most people buy smaller trains, which Lionel doesn't other with. The market for the bigger, elaborate models that Lionel makes is just \$250 million. This isn't the video-game business.

IDS THESE DAYS. That's not to say that Lionel wants to be too retro. At the hesterfield headquarters outside of Detroit, the design staff is about a decade younger than most Lionel collectors. And Maddox, whose office is full of toy trains, has put together licensing deals for everything from Hallmark ornaments to train-themed computer games. The Learning Curve International, an educational toy company in Chicago, makes battery-powered train for toddlers. Companies offer Lionel train lunch boxes, clothing, even cookie tins. Licensing revenues have more than tripled in the last couple of years, Maddox says.

The privately held company doesn't release financial results, but Maddox says sales should increase 15% this year and another 15% in 2001. Lionel won't be more specific except to say that it's bigger than Mike's Train House, which expects to hit \$60 million in sales next year. Greg Feldman, managing partner of Wellspring Capital Management, the investment firm that now owns Lionel, says the company has never had higher revenues than this year. And the important holiday shopping season is just beginning. (Yes, even collectors spend more in December, thanks in part to Lionel's annual Christmas trains.)

The company's 2000 catalog is its largest ever: two volumes, with nearly 100 pages of models. It includes everything from the classic gateman, who

pops out of the station when trains pass, to the most modern of accessories, a wireless remote control. Neil Young, who declined requests for an interview, developed the device to control the sounds and speed of as many as 99 trains at one time. It's an extreme version of a remote control that he had designed years earlier so that his two sons, who have cerebral palsy, could manipulate their toy trains. For each Lionel train, Young

also has created and mixed everything from the whistle sounds to simulated commands from the engineer.

But it's not just technology that is reinvigorating Lionel. The youth perspective is helping too. In the company's visitor center, dozens of trains speed along tracks while groups of kids wearing engineer hats scamper around. It's the perfect environment for people like 30-year-old Eric Schreffler, the unofficial



LIONEL BACK ON TRACK: A 100-YEAR HISTORY

1900 Joshua Lionel Cowen puts toy trains in New York shop windows to attract customers. The trains turn out to be so popular that he starts a company, Lionel Manufacturing, to produce them.

1926 Lionel absorbs rival Ives Manufacturing.

1934 Rocked by the Depression and banking scandals, Lionel enters receivership. An agreement with Disney to produce a car toy featuring Mickey and Minnie Mouse helps turn the company's fortunes around.



1953 Lionel becomes the world's largest toy manufacturer.

1959 After turning over control of the company to his son, Lawrence, Cowen finally sells his remaining stock to investor Roy



Cohn—precipitating a short-lived Cohn takeover. A succession of owners follows, including General Mills in the late '60s.

1986 Real estate developer and longtime Lionel customer Richard Kughn buys the long-struggling company and attempts to revive the brand.

1995 Wellspring Associates LLC, in partnership with rocker Neil Young, buys Lionel.

1999 Wellspring brings in Richard N. Maddox, a lifelong train enthusiast, as CEO.

2000 Lionel introduces the Challenger train for \$1,800. The privately held company claims sales are now increasing 15% a year thanks to product innovations and improved marketing.



Look for DLP[™]
technology in
products made
by these
manufacturers.



A TEXAS INSTRUMENTS TECHNOLOGY

3M • Acer • Agfa-Gevaert
ASK • Barco
basysPrint GmbH • Boxlight
Christie Digital Systems
Clarity • Compaq
ComView Graphics
Davis • Diamond Visionics
Digital Projection • DWIN
Dreamvision • Electrosonic
Gretag Imaging AG • Hitachi
IBM • IMAX • InFocus
Lanelco • Liesegang
Light & Sound Design
Marantz • MCSi • Mitsubishi
Noritsu KOKI • NEC
Optoma • Panasonic • Philips
PLUS • Proxima • Raytheon
Runco • Sharp
SIM2 • Sony • Synelec
Toshiba • Viewsonic
Yamaha • Zenith

www.dlp.com

 **TEXAS
INSTRUMENTS**

Marketing



HARD AT WORK

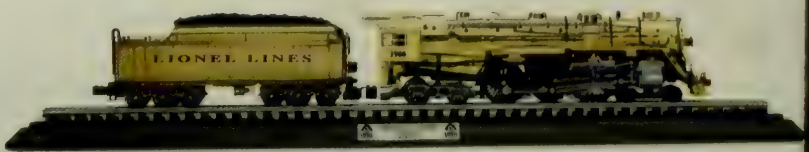
Maddox, at Lionel headquarters, is engineering a comeback

"whimsy" engineer, to come up with new products. His first idea was a tank car with a Tabasco hot sauce theme. His favorite: an Egyptian-style car, complete with plastic mummies. The unofficial Lionel historian is 29-year-old Todd Wagner, who has tracked down long-forgotten blueprints of trains from the 1920s and 1930s that were gathering dust in old Lionel storerooms. Now the company is using those plans to build more authentic historical models. How does he like his job? "We're grown men playing with trains every day," says Wagner. What more could he want?

Founder Joshua Lionel Cowen didn't intend to start a train company. When he started out in a New York City loft in 1900, he wanted to make electrical devices. He invented his first train, a simple wood box on wheels powered by

primitive batteries, as a marketing gimmick. The trains carried other toys around shop-window displays. But customers just wanted to buy the train. Cowen took the hint. He soon managed to buy his biggest rival, Ives Manufacturing. He proved to be a shrewd marketer. His catalogs, which featured fathers and sons playing together, were a study in persuasion. And he often included comparisons between his best models and competitors' cheapest to show his advantage in quality.

SIDETRACKED. But once Cowen sold out in 1959, Lionel was in for a rough ride. A series of management teams, including General Mills Inc., tried to keep the company going, but the quality of the trains slipped. In 1983, the owners moved the manufacturing to Mexico, lost track of production, and missed the holiday season. By 1985, they had returned to Michigan. For a full three decades, the company's service was no better than say, Amtrak's. "They'd have one great product, and then the next one would



Lionel hopes a weariness with high-tech gadgets and computers will lead youngsters to toy trains



A TEXAS INSTRUMENTS TECHNOLOGY

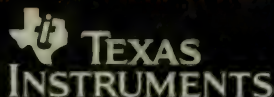
PROJECT FREEDOM WITH THE EASE OF DIGITAL LIGHT.

Making presentations on the go is no longer a flight of fancy. With Digital Light Processing™ technology by Texas Instruments, leading manufacturers continue to set the standard for the lightest and brightest portable projectors available. And now, TI DLP™ imaging technology is revolutionizing the industry, creating a new category of ultralight, microportable projectors that are half the weight of your notebook computer. So now you're able to make brilliant presentations in places you never dreamed possible. From microportable and large-screen projectors to high-definition home entertainment and digital cinema, DLP™ technology meets all of your projection and display needs. Let your ideas take flight, no matter where you are. To find out more about DLP™ processors and the products using this technology, visit our Web site or call 1-888-DLP-BY-TI.

www.dlp.com

Digital Light Processing, DLP and the logo are trademarks of Texas Instruments.

DIGITAL LIGHT PROCESSING: DEMAND VISUAL EXCELLENCE

**TEXAS
INSTRUMENTS**



LOOK AT SALES.

LOOK AT INVENTORY.

LOOK AT PROFITABILITY.

REALIZE YOU HAVE
THE POWER TO
OWN THE MARKET
AND ACHIEVE GLOBAL
DOMINATION.

LIE IN WAIT.

COGNOS®



ou live for this moment. When your business vision becomes sharply focused and you find a new source of value staring you in the face. At Cognos, our mission is to deliver this moment again and again. We call it The Cognos Moment. And it happens in thousands of companies every day, driving their e-business strategy and success. Our world-leading business intelligence software solution gives you an immediate, enterprise-wide view of your business. Which everyone in your organization can use to create strategic business value, instantly. If you'd like to see how to experience a Cognos Moment, visit cognos.com/moment today. After all, the world is out there for the taking.



LORY DAYS

any Lionel train collectors began their hobby in the 1950s

ve cheap plastic bells," says 52-year-old roton (Conn.) collector Bob Coniglio.

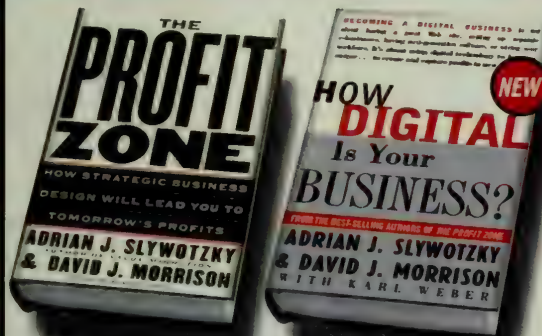
Today, Lionel's scrappiest opponent is like Wolf, of MTH. He is so intent on eating Lionel that he keeps the company's name spelled out in bricks on the replace mantle in his Columbia (Md.) me. "It keeps me focused," he says. oft built detailed, expensive recreations classic Lionel trains for five years beginning in 1988. When Lionel orders owed, Wolf started designing his own ains. That ended the relationship with onel. MTH has sued Lionel, claiming at Lionel subcontractors in South Ko- a stole MTH designs. That case is pend- g. "There's no doubt I'd like to own em, but I don't have that kind of mon-," Wolf says, figuring Lionel would ch more than \$60 million.

Next year, Wolf plans to introduce echnology that should allow owners to ok up their trains to the Internet to agnose problems and even download w sounds and functions. But Lionel n't so sure that bringing those two orlds together is smart. Lionel execs lieve that toy trains will catch on with ds precisely because they're a change m today's high-tech toys. "We really lieve that our product requires some agination," says Maddox. "You touch You create your own atmosphere."

least a few younger consumers see it at way. Ten-year-old Zack Horne is ilding a new train set in his suburban isconsin home, starting with a hand- e-down from his uncle. "I like my train tter than the computer," he says. Take at, PlayStation.

By Jeff Green in Chesterfield, Mich.

Looking for your profit zone in the digital economy? You just found it.



MERCER
Management Consulting

Also available as an ebook and a Random House AudioBook



The Profit Zone showed you how exceptional companies reinvent themselves to stay ahead of the competition—and in the profit zone. Now, *How Digital Is Your Business?* offers insights on how to capture your digital profit zone—by harnessing technology to create new and unbeatable value propositions for customers.

For more information and to download excerpts, visit: www.howdigitalisyourbusiness.com

In nature we see reflections of our children.

The tree is the strong one.
The ocean, rambunctious and untamed.
The sky, the absolute dreamer.

And to choose the tree over the ocean would be like choosing one child over the next.

An impossibility as large as the world itself.

The world's leading environmental groups are working together. To find out how you and your employer can help, please visit our Web site at www.earthshare.org.

Earth Share
One environment. One simple way to care for it.

NEW WORLD

NEW CAPACITY ON DEMAND



Special price available only through ShopIBM for pSeries 640 with POWER5-4 375MHz copper chip, 1GB memory, 91GB disk, limited use. All other prices not included. Actual reseller price may vary. Prices, specifications and availability may change without notice. IBM, the IBM logo and the e-business logo are trademarks of International Business Machines Corporation. UNIX is a registered trademark of The Open Group. All other companies or product names are trademarks or registered trademarks of their respective owners. © 2000 IBM Corporation. All rights reserved.

NEW SERVERS

[@server]

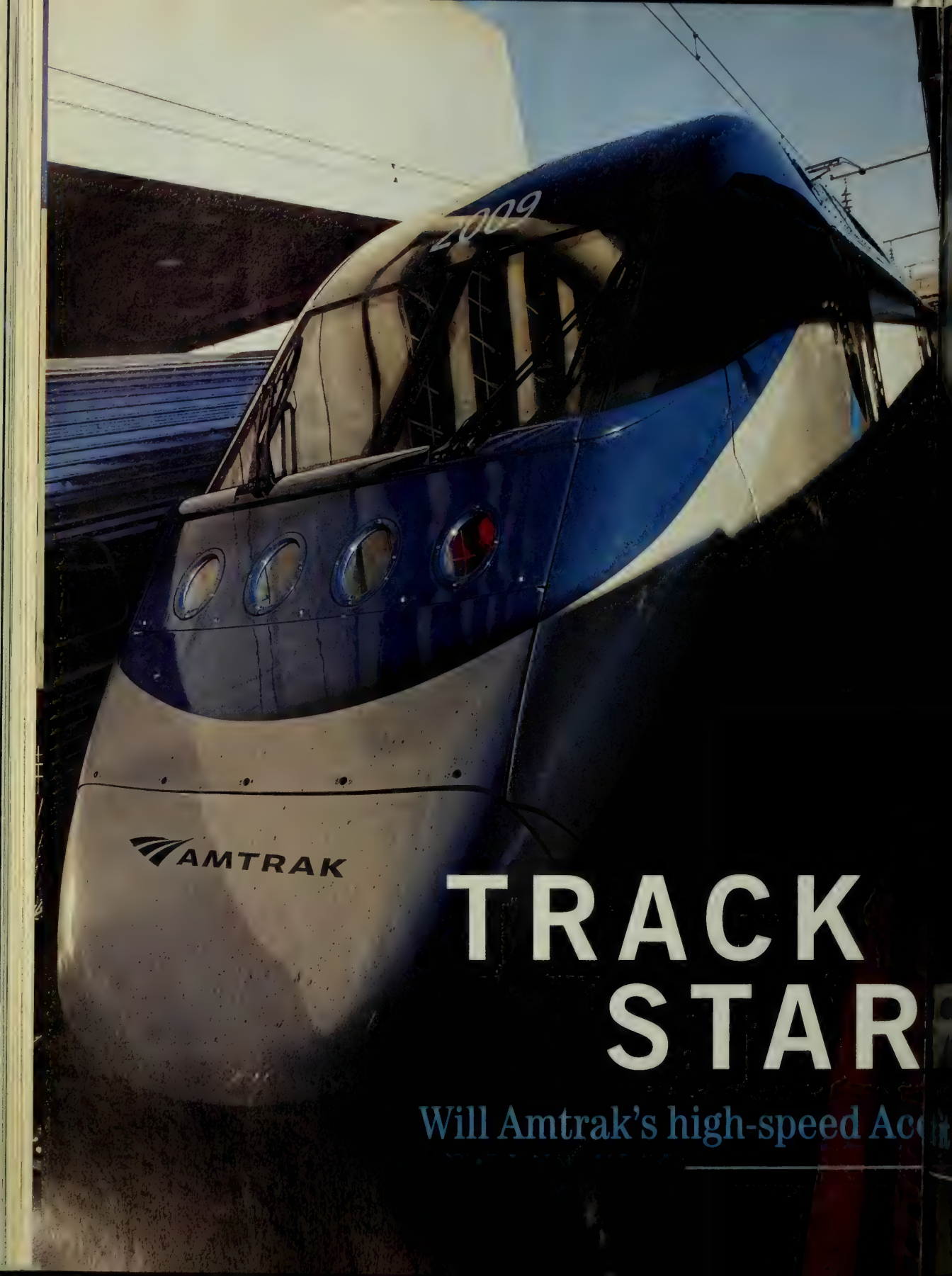
For the next generation of e-business.

New IBM servers offer additional growth capacity, ready to activate as needed on a pay-as-you-grow basis. In e-business today, you can't afford not to be prepared for

everything. However, most companies can't afford the cost of preparing for everything. That's where capacity on demand thinking comes in. IBM's new Capacity Advantage can provide additional internal processor capacity or entire servers, preinstalled onsite. In the event of increased traffic or other growth needs, the capacity can be activated, 24x7, with a few simple clicks. Only then are you charged the cost of the equipment! No new boxes, no shipments, no delay — just a service-oriented solution to managing real growth and real cash flow. For details on capacity offerings and new IBM servers, go to **ibm.com/eserver/cod**

IBM industry-standard rack, containing the IBM @server pSeries 640 UNIX® server and additional capacity on demand servers. pSeries models start at \$13,599.²

IBM



 **AMTRAK**

TRACK STAR

Will Amtrak's high-speed Acela



Like a Bullet On the New York-Boston route, the Acela will zip along at 150 miles an hour

When it comes to high-speed travel, the trains in Europe and Japan have long made the service on North American rails seem downright pokey. That changes on Dec. 11, when Amtrak's sleek new Acela, from "acceleration excellence," hits the tracks. America's own bullet train will shave 30 minutes off the quickest ground trip between Washington and New York. From downtown to downtown will take just 2 hours and 44 minutes. More impressive is the New York to Boston run. Then the Acela Express will zip along

at 150 mph, shortening the clickety-clack time by 45 minutes, to 3 hours and 23 minutes. Naturally, travelers can expect to pay more for the extra speed. One-way fares start at \$120, a hefty 50% premium over current Metroliner fares.

By midsummer, 20 of the new stainless-steel Acela trains will be whizzing past familiar 100-mph Metroliners, which will stay in service. (Don't be fooled: These have also been renamed Acela as part of Amtrak's enormous ad campaign.) To tempt business travelers from standard trains and shuttle flights, every seat on the Acela has

PHOTOS JAMES LEYNSE/SABA

PHOTO EDITOR ANDREW POPPER

TEXT NICOLE ST. PIERRE

at it on track for profits?

Photo Essay

an electrical outlet for a laptop, plus conference tables surrounded by swivel chairs.

Riders will find cushy seats, extra-wide windows, spacious bathrooms, and overhead luggage compartments, and yes, beer on draft. The question is, will these and other plush amenities be enough to reinvigorate train travel? Amtrak, which perennially takes a red-ink dunking, is banking on it. The carrier predicts its souped-up trains will generate \$180 million in revenue by the end of 2002. That's when Congress will pull the plug on federal subsidies on Amtrak's operating costs. Today, Amtrak carries 70% of the traffic

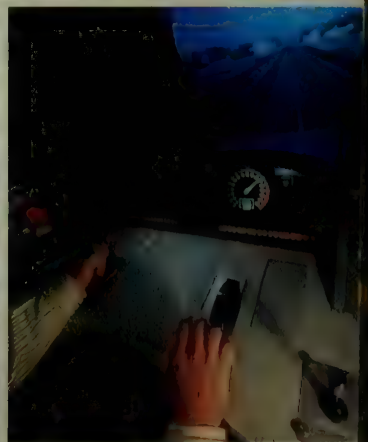


Plattsburgh, N.Y. *Bombardier and Alstom of Montreal teamed up to manufacture the 12,500-horsepower trains, modeled after France's TGVs*



Cruisin' *By mid-summer 2001, 19 more Acelas will join the one that's ready to go*

Wilmington, Del.
A \$4.7 million training facility uses computer graphics and a motion simulator





Over 100 European destinations.



The world has gotten smaller. You have to reach your clients, colleagues and partners as quickly as possible. Our job is to get you there comfortably and hassle-free. And we do. We fly nonstop from 14* U.S. cities to Europe, where we serve over 100 destinations. With our Star Alliance partner, United Airlines, we can take you from almost anywhere in the U.S. to almost everywhere in Europe you have to be. For reservations, call your travel agent, call Lufthansa at 800 645-3880 or visit www.lufthansa-usa.com

*Introducing Denver and Phoenix service March 25, 2001.

Also introducing Washington-Berlin and Los Angeles-Munich nonstop service.

Only on Lufthansa or Star Alliance members, United Airlines or Austrian Airlines, and you can accrue or redeem miles in either Lufthansa Miles & More[®] or United Mileage Plus[®], in accordance with the terms and conditions of the programs. Lufthansa Miles & More members earn 2,500 bonus miles when booking their Lufthansa flight via our website for travel through March 31, 2001.

There's no better way to fly.SM



Lufthansa

A STAR ALLIANCE MEMBER 

AVAYA COMMUNICATIONS INC. 2000 AVAYA DRIVE
BURLINGTON, MA 01803-1198
TEL: 781.434.4000 FAX: 781.434.4001
WWW.AVAYA.COM

AVAYA
communication

Do



Communication without boundaries

Imagine a network that thinks.

That knows who's there. Understands your

company's relationship with each customer.

And sends them where they need to go.

Immediately. Automatically. No matter which wire

(or wireless) they came in on. Avaya solutions

don't just move communication around,

but treat it intelligently. Extracting, adding, and

using information about each contact. So you can

handle every customer like your best customer.

Visit avaya.com or call 866-GO-AVAYA.

Can your communication network make the most of every contact?

Photo Essay

between Washington and New York, but the opposite is true between New York and Boston. On that run, Amtrak has only 30% of the market, and air shuttles handle 70% of passengers. "That's where we think our market share can double," says Amtrak CEO George Warrington.

Some analysts wonder how much of the express train's revenues will be cannibalized from Amtrak's regular service, vs. generating new ticket sales from erstwhile shuttle fliers. And if the Acela does steal riders from the the airlines, how will they respond? Despite its efforts to restructure unprofitable routes and operate an on-board mail service, Amtrak posted a \$900 million deficit last year.

With the deadline for self-sufficiency



Cheers Wisconsin Governor Thompson at a Union Station gala. Amtrak is lobbying Congress for authority to issue \$10 billion in bonds to expand high-speed service beyond the Northeast



PR Run Politicians, media reps, and Amtrak employees disembark in Boston

Spiffy Inside, Too Riders will find cushy seats, extra-wide windows, large bathrooms, and beer on tap



ON A CLEAR DAY, YOU CAN SEE
THE FUTURE OF YOUR BUSINESS.

Consulting Services

Financial Planning

Performance Management

Technology Services

International Services

Information Integrity

Assurance Services

You don't need a crystal ball to see the future of your business. You just need a CPA. With their insight, knowledge and foresight, CPAs can help you achieve top performance in a rapidly changing business environment.

They see the openings others overlook. They see the ones to avoid.

So you can clearly see what's ahead for your business.



The CPA. Never underestimate the value.SM



delivers

Nokia broadband technology changes





the world

Rewrite the rules

Nokia delivers broadband @ the speed of demand.

Nokia makes the hardware that delivers broadband faster than ever. With Nokia's field-proven, next generation DSL and innovative wireless broadband systems, our customers get the scalability and flexibility they need to deploy broadband on demand. And when they add wireless LAN capability using one of our Nokia Home Gateway products, they'll really deliver customer satisfaction. With over 200 million loyal customers, Nokia has learned something about how to deliver. And isn't delivery what broadband's all about these days?

Visit us at www.nokia.com and start rewriting the rules your way.

NOKIA
CONNECTING PEOPLE



Heading North Many of the tracks, tunnels, and bridges that are being renovated date back to the 1930s

Tech Ready Every seat boasts an electrical outlet for the laptop-and-cell-phone crowd



New Look Conductors and station workers will wear updated uniforms



looming, the success of speedy trains is critical. Ten other rail corridors across the U.S. are gearing up for high-speed rail service. But getting antiquated infrastructure up to snuff isn't cheap. Amtrak has spent \$2 billion to beef up track and overhead wiring in the Northeast. Yet 70-year-old electric wiring still prevents the 150-mph train

from topping 135 mph south of New York.

When I rode the Acela Express in November, it offered a class of comfort that beats a shuttle flight any day. Train food is still train food. But in the first-class dining room, delivered by uniformed staff and served on china, the dinner sure tasted fine.



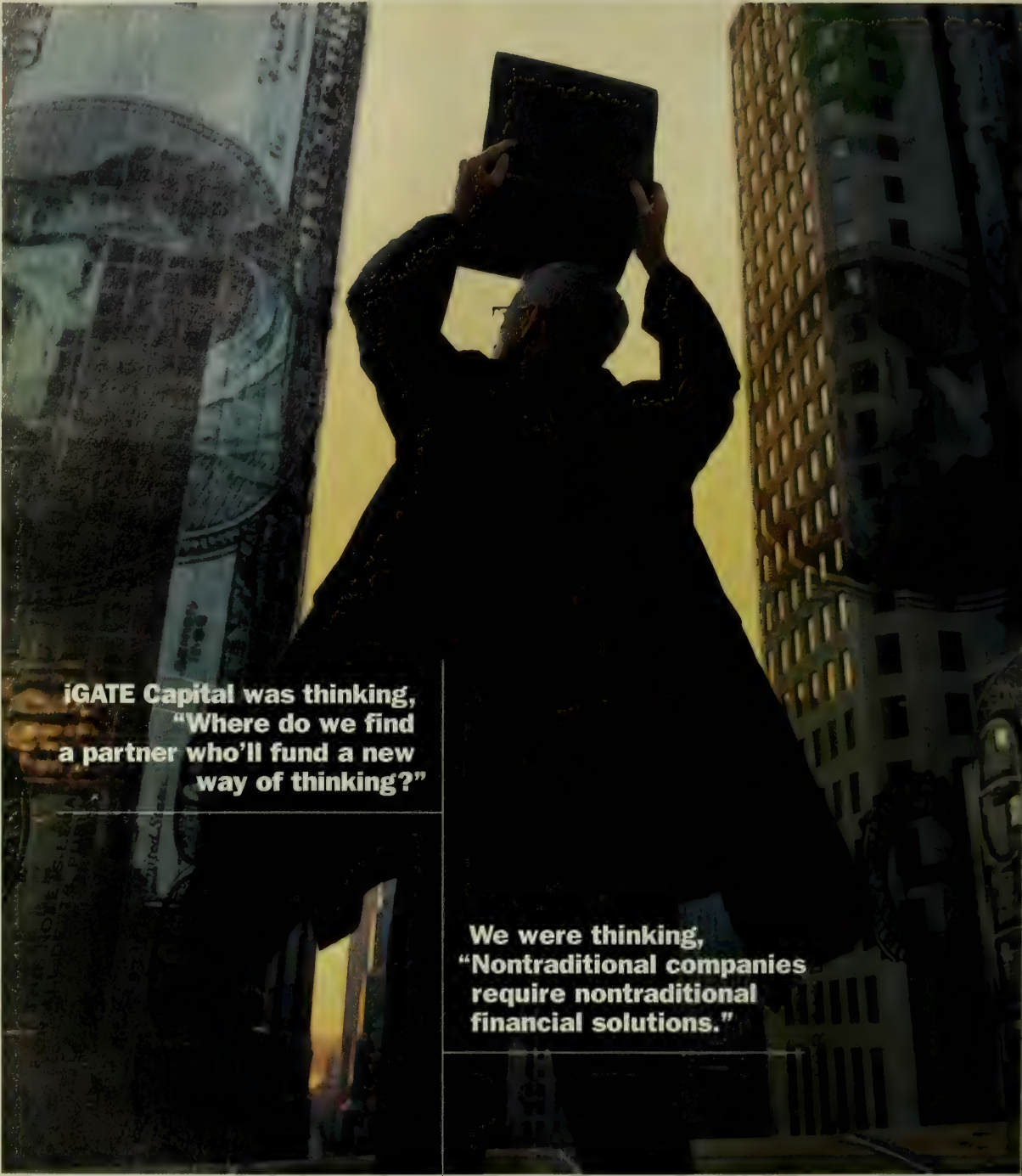
boring is
beautiful

Your business is exciting enough—you don't need the adrenaline rush of wondering if your business-to-business Web sites and corporate portals all have timely, accurate information. Or if everyone will be able to get the information they need, when they need it.

With Xpedio™ Content Management from IntraNet Solutions, you can publish business content from any data source to the Web, automatically. Your users can access personalized, secure content from any Web client—including mobile and wireless devices. And you'll deploy in days, rather than months. It's why more than 1,250 companies and 350 partners rely on IntraNet Solutions' products to make managing Web business content so routine it's a bit... well, boring.

www.intranetsolutions.com

IntraNet
SOLUTIONS
Business Content Management™



**iGATE Capital was thinking,
"Where do we find
a partner who'll fund a new
way of thinking?"**

**We were thinking,
"Nontraditional companies
require nontraditional
financial solutions."**

PNC
Advisors

BlackRock

PNC
Mortgage

PNC
Bank

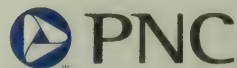
PNC
Real Estate
Finance

PNC
Business
Credit

PFPC

Ventur
Bai
@PN

The strength of PNC is the strength of a leader who can provide flexible, customized financing. In the case of iGATE Capital, a global holding company specializing in e-services, we provided a hybrid loan based on cash flow and potential equity value. For your one-stop solution, call us at 1-888-PNC-7030, or visit www.pnc.com.



The Thinking Behind The Money

COMMENTARY

By Stan Crock

WIN THE MEDIA, WIN THE WAR

A Palestinian mob hurls rocks and Molotov cocktails at Israeli troops equipped with the latest high-tech weaponry. The Israelis respond with tear gas, then rubber-jacketed bullets, then missiles. Palestinian casualties mount as TV cameras roll. The Israelis win the skirmish but lose another public-opinion battle. Welcome to what defense experts call the "fourth generation" of warfare.

A decade ago, some farsighted analysts saw this coming. In an article in the October, 1989, *Marine Corps Gazette*, civilian military theorist William S. Lind and four military officers analyzed the evolution of modern warfare. The first phase, they wrote, was based on massed manpower, arranged in lines and columns and armed with smoothbore muskets. The second relied on massed firepower and exploited new rifle technology as small groups of troops advanced in rushes. The third was exemplified by the German blitzkrieg: The idea was to bypass the enemy's forces quickly, rather than attack them frontally.

MEDIA FIGHT. In the fourth generation, the writers predicted, combat would be even more dispersed. The battlefield would once again envelop entire societies, as in more primitive and ancient cultures. Military objectives would no longer focus on annihilating tidy enemy lines, but rather on eroding popular support for the war within the enemy's society.

"Television news may become a more powerful operational weapon than armored divisions," the authors wrote.

The combatants are changing, too. In latter-day David-vs.-Goliath show-

downs, nation-states are fighting non-nation-states—clans or religious or ethnic groups—in places like the Mideast, Africa, and Europe. And the Goliaths often lose. A Somali clan drove the U.S. out of Mogadishu. Hezbollah ousted the Israeli army from southern Lebanon. The Chechens have humbled Russia's army. All learned the lesson taught by the Vietnam War: Major powers have lit-

of staff of the Marines Corps War-fighting Lab. Instead of spraying crowds with pellets, the Marines will use countersnipers to neutralize the handful of enemies with guns. Another option: nonlethal weapons. Among those under development: antipersonnel microwaves that raise the body temperature of a target to as high as 107°F, chemical slicks that make demonstrators fall down, and sticky

foam that hardens—immobilizing protesters.

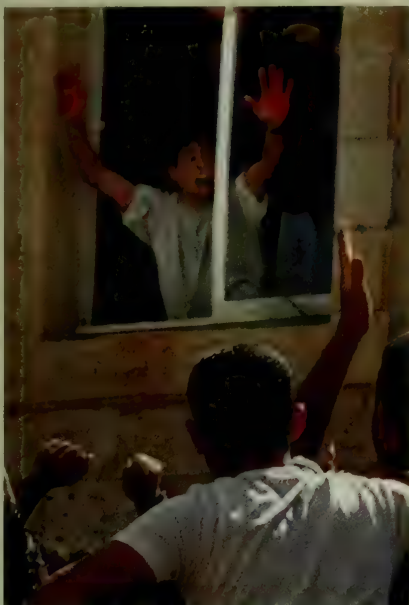
NEW GROUND. But war has three dimensions: physical, mental, and moral. And it is the battle for the moral high ground that may pose the biggest problem for nation-states.

"There is no solution at the technical level," says Lind. "The problem is at a much higher level of war." He argues that for Israel to win, for example, it must adopt the tribal behavior of the Palestinians,

who hail fallen warriors as heroes and exult when an enemy is killed. But that could cause a backlash against Israel and lead to international intervention, says Michael Eisenstadt, a senior research fellow at the Washington Institute for Near East Policy.

The Davids, of course, can blunder by, say, blowing up a school bus. But the fact is that it's hard for a Goliath to win sympathy. Pentagon analyst Chuck Spinney believes the Kosovo Liberation Army got thousands of Kosovars to leave their homes to magnify the extent of ethnic cleansing and demonize Serbian strongman Slobodan Milosevic. That's the type of tactic multibillion-dollar weapons systems will never counteract.

Crock covers the Pentagon.



PR BATTLE: Palestinians exult in Israeli death (left) and make martyrs of their dead (above)

tle appetite for televised loss of life.

What is being waged now is low-tech war in populated areas where combatants are hidden among civilians—and are often the civilians themselves. It's a strategy that undermines advanced weaponry designed for open spaces and large targets. "A lot of capabilities we have just simply aren't relevant," says Michael G. Vickers, director of strategic studies at the Center for Strategic & Budgetary Assessments, a Washington think tank.

The U.S. military is slowly grappling with the disconnect between weaponry and current conflicts. In field training, the Marines have reduced average casualties in urban war games from 38% to 12%, according to Gary Anderson, a former chief



THREE LABOR GROUPS ARE TARGETING THE E-TAILING GIANT

LABOR

A UNION FOR AMAZON?

Organizing efforts couldn't come at a worse time



REP WRATH: Seeking shorter hours and higher pay

This year's Nasdaq meltdown may have savaged Amazon.com Inc.'s stock along with the rest of high tech, but the online retailer remains one of the country's most promising e-commerce companies. Now this paragon of the New Economy faces a decidedly Old Economy threat: labor unions.

In mid-November, no fewer than three union groups launched recruitment drives among the company's 8,000 employees. Their efforts highlight the fact that large numbers of employees at e-commerce companies have Old Economy problems and concerns. One union is targeting Amazon customer service reps, who complain of long hours, subpar pay, and hourly quotas of customer e-mails they must respond to, piecework-style—not to mention options under water. The other two union groups are talking to the

Seattle company's 5,000 blue-collar warehouse workers, who have similar gripes.

All this activity couldn't come at a worse time for Amazon. While the company's sales are on track to nearly double this year, to an expected \$2.8 billion, profits are still at least a year or two away. Once-patient investors have slashed Amazon's shares to 25% as of Nov. 20, from 113 last December. Amazon CEO Jeffrey P. Bezos has been trying to cut costs with a view to lifting margins—and distribution centers are a key focus.

Worse, the unions hope to capitalize on Amazon's vulnerability as it enters the crucial holiday season. The company's sales growth slowed this year, but analysts expect it to boom in the yearend crush. Bezos is holding daily meetings with top managers to ensure that Amazon can handle the flood of orders.

Union leaders, who know all this, hope to use the threat of worker disruption to force Bezos not to oppose unionization. They want him to agree to quick elections and to not campaign against them. "Workers should act when they have the greatest leverage, and this is clearly the time of year when they're most needed by this company," says Duane Stillwell, a former organizing director of the Laborers union, who is heading up a warehouse-worker drive. "I'm not concerned at all that it will disrupt the holidays," says Bezos, after a tour for reporters of the Fernley, Nev., warehouse. "We don't believe in unions, because everybody is an owner, and everybody has rights as individuals to talk about workplace concerns."

The Amazon union drives are the first real test of organized labor's ability to



**TOGETHER WITH LOTUS,
KELLOGG SAVES
\$500,000
EACH YEAR.
PROVING THAT
THE PRIZE
ISN'T ALWAYS JUST IN THE BOX.**

Kellogg® employees and retirees get the most from their Lotus® solution: the quickest, most efficient answers to HR benefits questions. By leveraging a Lotus Domino™-based solution, Kellogg People Services Center provides accurate answers on policies and keeps data current, all at one central location. And everyone likes saving \$500,000 each year. This is one of the ways super.human.software helps e-business people work together.

To learn more, visit www.lotus.com/superhumansoftware

SUPER.HUMAN.SOFTWARE

Lotus.

An IBM Company

The Workplace

penetrate the New Economy. The customer service rep effort is being mounted by the Washington Alliance of Technology Workers (WashTech), a unit of the Communications Workers of America (CWA). The CWA has scored big recruitment gains among wireless and broadband workers, but mostly at Bell companies where they already represent traditional phone workers. WashTech, formed to help so-called permatemp programmers at Microsoft Corp., has a few hundred members at Seattle area high-tech companies. It also has had several dozen members at Amazon for more than a year. But until now, WashTech hasn't tried to form actual bargaining units to sign union contracts with a company.

NEW DAY. The warehouse drives are being mounted by the Prewitt Organizing Fund, an unusual freelance union-recruitment outfit founded by Stillwell. A second attempt comes from the United Food & Commercial Workers (UFCW), which represents supermarket workers. The UFCW had been working with Prewitt but broke off to push its own drive. It has organized several hundred workers at online grocer Peapod Inc., but that's because the company gets most of its food from unionized supermarket chains, giving the UFCW leverage.

Amazon workers say they are acting now because they are fed up with a giant that still acts like a startup. Service reps, who say they were attracted to Amazon in part because of its team spirit, are calling their group Day2@Amazon.com, because: "Bezos is always telling us, 'It's Day One, we can't stop or rest,' and we think five years of Day One is generating lots of problems for us," says Zach Works, a 24-year-old rep in Seattle. He and others say management no longer listens to their problems. They routinely work 50-hour weeks, going up to 70 in the holidays, says Jennifer McDaeth, another Seattle rep. And managers change their shifts, sometimes on as little as a day's notice, making the job even more stressful, she says. "We're known as a customer-centric company, but all this makes it harder to do our job," says McDaeth.

Reps are also unhappy about their pay, especially since their much-vaunted options aren't worth what they

ters that employees shouldn't expect to make quick money: "An obligation of ownership is long-term thinking," he says. But the stock plunge has hurt. Zach Works started at \$10 an hour, \$2 less than his prior job at a bottled-water company. He got promoted but says his current \$13 an hour isn't competitive with other customer-rep jobs in Seattle. Works received options that now number 1,500 after stock splits. But the stock dipped below

his \$21 strike price last month before rebounding. "Most of my colleagues are under water, and we all know it will be many moons before we see any benefit from our options," he says. Employees say they also worry that the company will move their jobs to new offices in North Dakota and West Virginia, where Amazon pays as little as \$7 an hour.

The warehouse workers pose the more serious threat of disruption. They fill all the orders, so a slowdown or walkout could damage the company's ability to get through these critical holidays. Still, warehouse employee turnover is high and many are newly



HOLIDAY HEADACHE? Amazon is most vulnerable at its warehouses

hired, thus less willing to buck management, so organizing could prove more difficult.

Not that they don't have gripes. They earn \$7.50 to \$9.25 an hour with skimpy benefits considerably less than similar workers who belong to the UFCW or other unions, organizers say. Warehouse workers, too, often work 60-hour weeks especially during the holiday rush. And unlike the reps, they get only 100 options, vested over 5 years.

I came here because I make 50¢ more an hour than I did as a nursing aide, but it's just not worth it to work so many hours every week," says a worker at Amazon's Campbellsville (Ky.) distribution center. Amazon declined comment on specific allegations.

It's not clear yet how much support their organizing effort will garner. Prewitt, a nonprofit group that helps unions do organizing, has been talking to warehouse workers since last spring, says Stillwell. On Nov. 16, about 30 organizers fanned out to "blitz" Amazon warehouses, passing out petitions to hundreds of workers. Stillwell concedes that the effort won't succeed long-term unless a full-

WHY SOME WORKERS WANT A UNION

No fewer than three union groups are trying to recruit members among the e-commerce giant's warehouse and customer service workers. Some of their gripes:

SERVICE REPS SAY:

- Hourly pay of \$11 to \$13 an hour isn't competitive.
- Many employee stock options are under water.
- Overtime is excessive: Workweeks run up to 70 hours during the yearend crush.

■ Jobs may be threatened by Amazon setting up service centers in lower-wage North Dakota and West Virginia, as well as India.

WAREHOUSE WORKERS SAY:

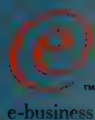
- Hourly pay of \$7.50 to \$9.25 an hour isn't competitive.
- Benefits aren't, either: Family medical coverage costs hundreds of dollars a month.
- Too much overtime: Workweeks run 50 hours or more.
- Options limited to 100 per worker that vest over 5 years.

amazon.com

fledged union sponsors. The 1.5 million-member UFCW has the muscle to mount a serious drive, but infighting between the two groups could undermine progress.

Even so, the union activity puts Bezos in a bind. The day the news broke, Customer Service Vice-President William Price called emergency meetings of all reps for the next day, where he warned against the dangers of unionization. But the company responds with an all-out war, it could wreck the feel-good culture that has motivated many Amazon employees. Either way, the holiday madness Amazon has been gearing up for is likely to be even crazier than anyone thought.

By Aaron Bernstein in Washington, with Rob Lytle in San Mateo, Calif.



LOTUS HELPED

MAIL BOXES ETC.®

**IT SPEED ITS CRITICAL CALL
RESPONSE TIME**

**FROM 14 DAYS TO
FOUR HOURS.**

NEXT QUESTION, PLEASE.

The cause of the quick turnaround? A comprehensive knowledge solution that also allows MBE franchisees to find answers to 60% of their own questions. Built with Lotus Domino™, the solution lets franchisees collaborate with corporate headquarters to get answers on operational questions, technical support and more. This is one of the ways super.human.software helps e-business people work together.

To learn more, visit www.lotus.com/superhumansoftware

SUPER.HUMAN.SOFTWARE

Lotus.

An IBM Company

COMMENTARY

By Charles Haddad

OSHA'S NEW REGS WILL EASE THE PAIN—FOR EVERYBODY

Sheree Lolos will never forget the night five years ago when her arms went numb. She had spent her eight-hour shift as usual, pouring a total of 12,000 pounds of plastic scrap onto a conveyor belt at a windshield factory in Springfield, Mass. That night her arms tingled and burned. The next day she and her supervisors shrugged off the pain as temporary, and she continued to work in coming months—until she could work no more. Doctors later told her that lifting and pouring for up to 60 hours a week, week after week, had damaged the nerves in her arms. Today, at 44, Lolos says she can't even wash her hair without pain. "I cry in the shower because I can't keep my hands over my head to wash out the soap," she says.

More than 600,000 people a year miss at least one day of work due to injuries from repetitive stretching, bending, or typing, government statistics show. Their pain has become the rallying cry of the Occupational Safety & Health Administration (OSHA), which on Nov. 13 issued 1,688 pages of detailed ergonomic standards—three years in the making—for everything from how much employees should type or use a mouse in a day to how many pounds they should lift (table, page 94). The new regs mark the first time OSHA has defined repetitive stress as a hazard and ordered employers to take corrective measures. The rules, which go into effect on Jan. 16, 2001, cover all 102 million workers not employed in agriculture, construction, railroads, or maritime industries.

HEAVY LIFTING. The standards have been bitterly opposed by some business groups. The National Association of Manufacturers (NAM) and other trade organizations immediately filed suits in federal court to block the new regs, charging that OSHA had overstepped its statutory role. They also argue that OSHA has badly underestimated their cost. Some groups even question the whole premise of ergonomic regulation, saying that companies have done more than enough voluntarily to reduce repeti-



tive stress injuries (RSI). "Regulation is for when the market fails," asserts Ronald Bird, chief economist at the Employment Policy Foundation, a conservative think tank in Washington. "The market isn't failing with ergonomics. Sales of ergonomic furniture are soaring."

Critics do make some good points. OSHA's cost estimates may be too low. And compliance will be more difficult for small and midsize companies. This is especially true for businesses where the work requires lots of lifting and straining, including convenience stores, trucking, nursing homes, and supermarkets.

But in the long run, the regulations are likely to do more good than harm—for companies and workers alike. About 40% of the workforce is

LIGHTER BURDEN

Companies stand to save \$9.1 billion a year in medical and compensation claims

at companies, mostly large employers, that are already in compliance with the rules, OSHA estimates. In fact, company efforts have cut RSI cases by 15% since 1998, according to

the Bureau of Labor Statistics. These companies' experience bears out OSHA's claim that the long-term savings from fewer worker injuries offset the up-front costs employers incur to alter machinery or work practices. "I haven't seen anything in the OSHA rules that is out of whack with what we've done," says Brad Joseph, manager of ergonomics and safety at Ford Motor Co., which has spent millions to redesign computer workstations and assembly lines to deal with RSI.

Indeed, the new standards are

Finance your dream online.



home

You've found the right home...now find the right mortgage. Visit the American Express Mortgage Center to access the lowest rates on hundreds of loan products. You can check current rates, choose a down payment and select the closing option that works best. Plus, use powerful online tools to quickly calculate your monthly payment, get answers to your questions or find out if refinancing is right for you. Best of all, you can apply for a mortgage online and get instant approval. Make your dream home a reality with the American Express Mortgage Center. It's another financial resource to help you do more.

online trading

mortgages

investments

1-888-297-1972 americanexpress.com



American Express Mortgage Center is available through Prism Mortgage Company, a residential mortgage licensee and Equal Housing Lender. Arizona Mortgage Banker License No. BK-0901891; California Finance Lender and Broker License #6036308; California Residential Mortgage Lender License #4130326; Licensed by the Department of Corporations under the Finance Lenders Law; Illinois Residential Mortgage License #3162; Massachusetts Mortgage Lender License #ML1484 and Mortgage Broker License #MB2000; New Hampshire First Mortgage Banker & Broker License #6412-MB; Licensed Mortgage Lender - New Jersey Department of Banking; Licensed Mortgage Banker - New York State Banking Department; Licensed by the Pennsylvania Department of Banking. American Express Financial Advisors Inc. Member NASD and SIPC. American Express Company is separate from American Express Financial Advisors Inc. and is not a broker-dealer. © 2000 American Express Financial Corporation. All rights reserved.

It took him
five years to build
a local business.
He's taking it global
at light-speed.

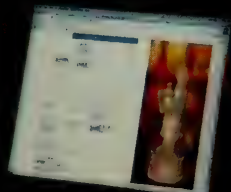


With the **Optical Internet** Lucent is creating, a business knows no boundaries. We're building all-optical networks that are four times faster than today's—with the speed and capacity to connect local markets to global markets. So businesses large and small can serve new customers anywhere in the world. Change the way people communicate, and you change the way they do business. Lucent Technologies. We make the Internet move at light-speed.

Expect great things.SM

Lucent Technologies
Bell Labs Innovations

www.lucent.com
1-888-4-LUCENT



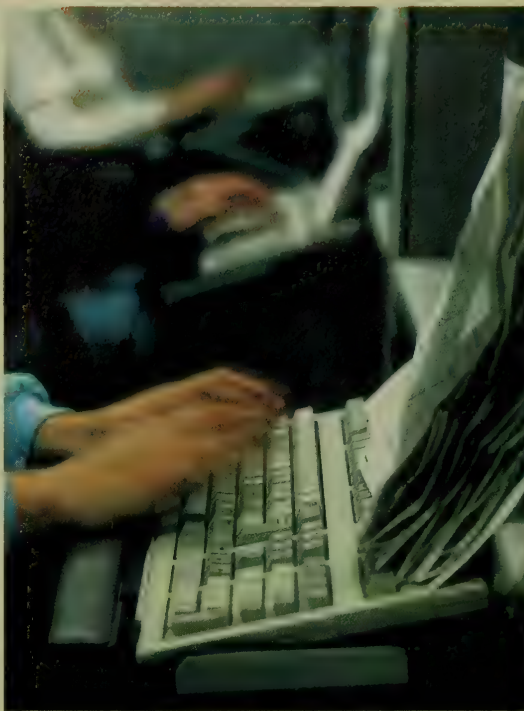
The Workplace

similar to ones adopted by Japan, Britain, and Canada. "Five years from now, everyone will wonder what all the hullabaloo was about," says OSHA chief Charles N. Jeffress.

If nothing else, the standards eliminate much of the controversy about RSI that now plagues employers. For years, companies have struggled to determine whether, for example, an employee's carpal tunnel syndrome came from too much typing on the job or too much tennis at home. The new standards don't so much set limits as provide what OSHA calls "screening tools"—tests for employers to sort out such questions. So if the employee types for more than four hours without a break in a day, the employer must assume responsibility and fix the problem—regardless of how much tennis the employee plays. Employers can attempt a quick fix, within 90 days. But if that fails, they must begin a comprehensive rebuilding of the workplace to eliminate the risk.

TUNNEL VISION. By the same token, however, the company wouldn't have to cut all typing to four hours a day. Instead, it could do what many already have done: buy different keyboards, tables, or chairs, or allow workers to take more breaks. And if the typist types continuously for fewer than four hours a day, the employer bears no responsibility for any carpal tunnel, even if the worker does nothing at home that might be a suspected cause of the injury. What's more, employers can ignore the screening tools completely if no one complains of injuries.

But won't such detailed criteria force companies to shell out billions? OSHA calculates that implementation will cost an average of \$250 per workstation in offices and factories. The overall tab to business will total \$4.5 billion in the first year, it figures, diminishing after companies make needed one-time changes. By contrast, NAM pegs the price at \$781 per employee, or \$6.7 billion in the first year. The Small Business Administration offers one of the higher estimates: nearly \$20 billion in year



REDEFINING RISK

Employer groups are up in arms over new regulations issued by the Clinton Administration that define risky work practices, such as:

- Using a keyboard or mouse without a break for more than four hours total a day
- Lifting more than 75 pounds at any one time or more than 55 pounds more than 10 times a day
- Kneeling or squatting for more than two hours total a day
- Working with the back, neck, or wrists bent or twisted for more than two hours total a day
- Using vibrating equipment (such as chainsaws and jackhammers) for more than 30 minutes total a day

SOURCE: OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION

one. "In our industry, everything is made of stainless steel for sanitary reasons," says Dan McCausland, director of worker safety at the American Meat Institute, which represents meatpackers. "You can't buy much stainless steel for \$250."

But even if critics are right about the cost—independent experts don't agree on who's closer to the mark—the naysayers ignore the savings companies can reap. The regs should slash RSI incidents by 75%, or 460,000 cases

a year over the decade OSHA thinks it will take companies to comply, the agency estimates. If that happens, companies could save \$9.1 billion annually in reduced medical and compensation claims and fewer lost work days. Even if the savings come in lower, employers will gain in the long run.

Take 3M. In the mid 1990s, the company spent \$60,000 on new ramps, forklifts, and training at a sponge factory in Tonawanda, N.Y., so that an aging workforce no longer had to manually lift 130-lb. blocks of sponge. The result: Workers' comp claims fell to zero, from scores a year earlier. And productivity soared, shaving hours off the time it took to load up trucks with sponges, says 3M ergonomics manager Nancy Larson.

3M also began moving aggressively on keyboard use. It bought ergonomically correct workstations, with adjustable chairs and tables, for all office workers. Like many large companies, 3M hired experts to write its ergonomic standards, such as requiring regular breaks from typing, which managers are responsible for enforcing. "I know it sounds unreasonable, but limiting continuous typing to no more than four hours at a time is based on research and makes sense," says Larson. "We've got kids coming out of college who are already injured from overuse of computers."

Lots of other companies have done the same thing, experts say—and reaped savings. "Our workers' comp has been reduced by 60% to 70% since our ergonomic standards were introduced in 1994," says

Greg Durham, safety and health manager at Dallas-based Texas Instruments Corp.

No question, an ergonomic overhaul will be painful for those companies that haven't yet grappled with such issues. But for most, the likely outcome will be dramatically fewer employees with problems like Lolos'—and long-term cost savings to boot.

Haddad covers technology from Atlanta.

BusinessWeek

THE RESOURCE FOR ENTREPRENEURS

Frontier



**FORECAST
2001**

**What's Ahead for
Small Companies**

**The Business
of Predictions**

**Wireless:
The Next
Tech Boom**

Prognosticators
Roger Herman,
Jennifer Jarratt,
and Edie Weiner

DECEMBER 4, 2000 ♦ FRONTIER.BUSINESSWEEK.COM



AT&T
teleconference
services



Now reserve teleconferences online!

**Reserve online to save
time and effort with:**

- Recurring reservations
- Instant confirmations
- Emails to participants
- 24x7 reservations and changes

And receive instant confirmation. Sign up for AT&T TeleConference Services now and see why it's never been easier to call a meeting. Our Online Reservation Service enables you to reserve, book, and change your one-time or recurring reservations 24x7. You can even email participants with meeting details automatically. Whether key individuals are across town or across the globe, AT&T enables you to get back to your business at hand. You can provide project updates, expedite decisions and brainstorm any time of the day as if everyone were in the same room. You can even get recording and transcription services for a narrative account of your teleconference. AT&T can also provide a trained specialist if you need additional support during your teleconference. It's never been easier to make a teleconference. And best of all, now you can even save up to 38% with our new off-peak rates. Reserve your next teleconference today at: www.att.com/conferencing



1.800.232.1234 | www.att.com/conferencing

Entrepreneur's Web Site

frontier.businessweek.com
Look for more news and advice
every weekday at frontier Online

TECHNOLOGY

Read the online version of Digital
Manager every Tuesday. Consult
Buyer's Guide every day

FINANCE

Look for regular updates on inter-
rates for small companies and
venture capital

WORK & FAMILY

Hamburg Coplan and Pam
Siedels balance personal and busi-
ness lives, Monday and Wednesday

ART ANSWERS

Read the online version of our help col-
umn for managers of small com-
panies every Tuesday and Thursday

ENTREPRENEURIES

Read the Global: "Asian Entrepreneur"
column by former investment banker
Andy Oh as she chronicles her ad-
ventures at an Internet startup in Sin-
gapore. Look for it on Fridays

S: Create your own sales leads,
online loan searches, and a start-
up guide for budding entrepreneurs.
D: Keep in touch with our week-
ly e-mail newsletter. Send your
subscription request to frontier@businessweek.com

FRONTIER

Supplement of Business Week Magazine
100 Avenue of the Americas
New York, NY 10020

E-mail: frontier@businessweek.com

Phone: 212 512-2511

Editor: Rick Green

Managing Editor: Fred Strasser

Copy Editors: Larry Kanter, Robin D. Schatz

Contributing Editor: Kimberly Weisul

Managing Editor: Robin J. Phillips

Chief: Marc Miller

Editor: Sarah B. Davis

Production Director: Peter K. Niceberg

Design Editor: Kathleen Moore

Illustrator: Don Morris Design



F.24 Forecast 2001: What's Next?

Divining the future is big business
for these small companies. After
reading the tea leaves, they have
some predictions on how 2001 will
shake out for entrepreneurs

F.34 Wireless Future

Next time someone calls you
"plugged in," it may be an insult.
New cutting-edge tools cut the cord
on palmtops and PCs and turn air-
port lounges into instant offices

F.40 A Startup Diary

David Friend had every reason to
be confident when he started eYak.
He had already made a ton of mon-
ey creating other companies from
scratch. So why has his newest tech
venture been such a difficult ride?

Departments

F.4 Letters

A few choice
words from our
readers



F.6 InBox

Making hackers
hate you, moving
the goal line for
federal contracts,
entrepreneur chic, and more

F.10 Trends

A lot of small businesses are
using the Web to get out the
message this holiday season

F.12 Who's Hot

David Feldman's
MachZ, a "PC on
a chip," cuts com-
puting down to
Lilliputian size



F.14 Politics

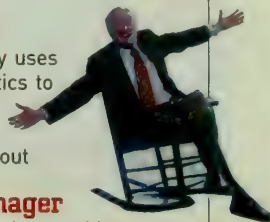
Never mind who the President is.
Here's what entrepreneurs really
want from Washington this year

F.16 Global Reach

Some people might have reser-
vations about opening a hotel in
Ramallah. Not Abdel Hamid
Kased

F.18 Chronicles

F. Reid Buckley uses
tough-love tactics to
teach execu-
tives how to
get the words out



F.21 Digital Manager

Application service providers
were supposed to make your life
easier. What happened?

F.48 Life & Co.

Women entrepreneurs overseas
have a lot of life lessons for you

F.50 Under 30

J.R. Badian's business plan is
so simple, it fits on the back of
a postcard. In fact, it is a postcard

Cover photograph by Andrew Brusso



"I always chuckle when I read these 'I can't find anyone to hire!' articles.... If your organization can't solve its staffing needs, then you are looking in the wrong place for the wrong person"

The Wrong Stuff

THE ARTICLE "Those Soaring Salaries" (Oct. 9), about why business owners are giving themselves raises, contained critical factual errors. Amy R. Lewis is quoted as saying, "I wanted to embrace the latest and greatest stuff." In actuality, Lewis did not use the word "stuff" but rather the term "technology." The quote makes Lewis seem unprofessional and uneducated. Also, the article quotes Lewis as saying: "Once we had venture capital funding, I decided it was time for me to have a break." This is not true. Lewis has not, is not, and will not "have a break" from her position. Lewis remains at the helm of PerfectPractice.MD and is instrumental in all aspects of running the company. The reporter incorrectly states that Lewis expects to take an additional \$50,000 per year raise. At no time did Lewis mention a dollar figure to the reporter.

CYNDEE PRIVITT
PerfectPractice.MD
Sandy, Utah

Room To Grow

THE STORY ABOUT labor shortages, "No One Left to Hire" (Sept. 11), implied our company has given up on growth. In fact, Alessi Manufacturing Corp. has continued to grow in spite of the depleted labor market. To combat the overwhelming shortage of qualified machinists, Alessi has purchased over \$3.5 million in modern, state-of-the-art equipment within the past two years. This has enabled us to grow by eliminating some of the technical skills otherwise required in operating manual equipment.

While going through this transition, Alessi had to decline several thousands

of dollars of business that could have been handled on existing equipment if skilled help had been available. I think our business could have, and should have, conservatively, grown to be a third larger than it is today had we been able to hire skilled machinists. But we still continue growing to serve our customers.

RICHARD ALESSI
Alessi Manufacturing Corp.
Collingdale, Pa.

Are You Hiring?

REGARDING "No One Left to Hire," I would greatly appreciate knowing where the labor situations described in the article exist. With 20 years of experience, 2 college degrees, and knowledge of 3 languages, I have been unemployed for over a year and would welcome the opportunity to have someone chasing after me to fill a position.

DENNIS SACASA
Coral Gables, Fla.

Knowing What You Want

I ALWAYS CHUCKLE when I read these 'I can't find anyone to hire!' articles ("No One Left to Hire"). Having been part of the human-resources staff of a major New York corporation, I speak from a position of experience. If your organization can't solve its staffing needs, then you are looking in the wrong place for the wrong person.

Recently, I had the displeasure of watching an open position remain unfilled at a company we were working with. The client needed an office manager with a wide range of previous experience. To me, that means some-

one with maturity, HR exposure, and a variety of prior supervisory positions. The client was presented with a choice of candidates and, of course, the client was unhappy with them all.

In fact, any one of the candidates would have worked fine, and there was one who was ideal. The client found fault with every single one of the candidates, with comments ranging from "too aggressive" to "not the right experience." To make matters worse, the position had been filled three times in the past three years; obviously, something was wrong on the management side.

I believe we see these articles because clients don't know what they want, have a problem articulating their needs, and, most important, fail to keep their expectations in line with reality.

And I am sure that some of your readers cringed at the suggestion that companies hire people with checkered pasts. In the financial world, this is something that you legally cannot do. The banking and security firms require fingerprint and credit checks as a prerequisite to employment. Consultants and temporary staff are also subjected to this intense scrutiny.

BEN BASSARO
New York, N.Y.

Corrections/Clarifications

A photo on page F.29 of "Those Soaring Salaries" (Oct. 9) did not identify the person pictured. It was Briana Bennitt, president of the Economic Research Institute.

Because of a production error, the photos of Joe Paternoster and Robert Morriss on page F.36 of "The Bumpy Road to Global Trade" (Oct. 9) were reversed.

CONTACT FRONTIER

frontier welcomes your letters. Please include a street address with daytime and evening phone numbers. Letters may be edited for length, clarity, and content, and may appear in electronic and print editions. E-mail your letters to frontier@businessweek.com, or send them to Business Week frontier, 1221 Ave. of the Americas, 46th floor, New York, NY, 10020.

We All Know Who Invented The Airplane

Visioneer Invented One Touch Scanning

Visioneer's revolutionary OneTouch technology is changing the way people think about and use scanners.

Visioneer's OneTouch 8650 uses a JET (JPEG Enhancement Technology) compression engine and an Automatic Document Feeder to fly through multi-page documents at 3 pages per minute. It even scans legal size documents—up to 50 pages at a time.

Take off with the latest Intelligent Imaging Solution from Visioneer and find out how simple it is to fax, copy, e-mail and store all your documents and images with the OneTouch 8650. It's fast, easy and affordable.



Visioneer
ONE TOUCH

8650

Features

- 50 page capacity Automatic Document Feeder
- 3 PPM at 200 dpi in black and white
- 600 x 1200 dpi, 36-bit color
- 7 buttons: scan, copy/print, fax, OCR, email, custom and cancel
- Dual USB and Parallel Interface
- Affordable technology—\$299.99

 **visioneer®**
Intelligent Imaging Solutions

www.visioneer.com/onetouch

EDITED BY KIMBERLY WEISUL

Make Hackers Hate You

SKILLED HACKERS number only 3,000, says William Malik of researcher Gartner Group. But most small-business defenses are weak, and hackers know it. You stand a 50% chance of getting hacked by 2003 if you manage your own computer security, Gartner says—and more than half the victims won't be aware of the breach.

How to protect yourself? For dial-up access, consolidate individual desktop modems into one easy-to-defend unit or "pool." Outsource fire wall and intrusion services—for less than half the salary of a good tech pro, says Gartner. Smaller companies can get a free five-user fire wall from NetGuard Inc., at www.netguard.com.

SO THEY SAY

"Does it make sense to outsource a stapler?"

—RONALD SCHMELZER, of ChannelWave Software, on the wisdom of outsourcing software when an off-the-shelf version will do (page F.21).

TAKE THIS JOB...

64%

of small-business owners say they make more money than they did as an employee

ONE IOTA



Model Entrepreneurs

A STAR HASN'T BEEN BORN—yet. But clothing maker Slates is auditioning entrepreneurs for its fall 2001 advertising campaign.

Slates says it's looking for "passionate entrepreneurs." Mark Thornton figures he qualifies. The 27-year-old studied conservation in Tanzania for five years, then co-founded Livingstone Expeditions, a San Francisco-based African safari company. "We're fairly attractive guys," says co-founder Sam Cimino. "It's worth a shot in the dark." Which they hope will lead to a shoot under the lights.



A Reluctant Helping Hand

YOU'D THINK President Clinton's recent order that federal agencies give at least 5% of their work to small and disadvantaged businesses would be good news for the small and disadvantaged. Well, the Departments of State and Labor already have 5% goals, and they do a lousy job meeting them. In 1999, the Small Business Administration contracted 7.5% of its work with qualifying companies. Too bad SBA's goal was 8%.



CLINTON: Will his order change things?

NOW THAT FEDERAL AGENCIES HAVE TO CONTRACT 5% OF THEIR WORK TO SMALL DISADVANTAGED BUSINESSES, WHO WILL MAKE THE GRADE?

Leaders

	1999 SHARE OF CONTRACT!
◆ AGENCY FOR INTERNATIONAL DEVELOPMENT	10.6%
◆ TREASURY DEPT.	7.8
◆ SMALL BUSINESS ADMINISTRATION	7.5
◆ COMMERCE DEPT.	6.9
◆ GENERAL SERVICES ADMINISTRATION	6.5

Laggards

◆ HOUSING & URBAN DEVELOPMENT	2.9%
◆ NASA	2.7
◆ LABOR DEPT.	2.5
◆ STATE DEPT.	2.1
◆ OFFICE OF PERSONNEL MANAGEMENT	0.6

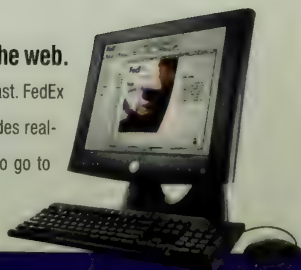
DATA: FAILING TO MEET THE GRADE, OFFICE OF REPRESENTATIVE NYDIA VELAZQUEZ

FEDEx IS GEARED UP TO LAUNCH THE MOST IMPORTANT E-BUSINESS IN THE WORLD. YOURS.

FedEx
eCommerce Builder

It's so simple. Go to fedex.com and get the tools you need to build a successful business on the web.

Whether you build your site or have FedEx build it for you, your business can be online and ready to move merchandise fast. FedEx eCommerce Builder gives you essential tools like integrated shipping, which streamlines the shipping process and provides real-time FedEx tracking. You get sales and marketing tools, and with 24/7 tech support, FedEx is always there to help. So go to www.fedex.com/ecb/12 or call 1-877-315-3465. Your e-business is waiting.





News and advice from our
small-business Web site

A Date With An Angel

SINCE NASDAQ'S April plunge, angel investors have become a lot more careful about where they put their cash. Frontier asked David Gerhardt, head of angel group The Capital Network, for some funding advice in these more demanding times.

What's important to investors now that didn't matter eight months ago?

Customer verification. Entrepreneurs need to really talk to customers or potential customers. They need to get a sense that customers will buy their product and pay enough for it.

Have expectations changed about time frame and return?

Angels start to get excited nowadays



STILL VENTURING FORTH: But now, says Dave Gerhardt, angels have become more patient when it comes to returns

when they see a 5-to-10-times return over three to five years. Before, the window was just 18 months to two years.

Which industries do investors like?

There's more interest in health sciences. It was hot 10 years ago, then the bubble popped. Now, it's back. That's the cycle. Maybe next week it will be wireless.

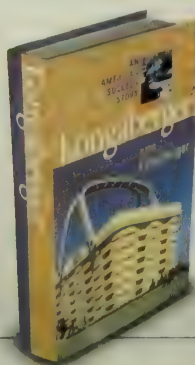


For Armchair Entrepreneurs

SO YOU'VE HAD IT—time to move to the south of Spain and open an inn. Or maybe a high-tech company out West is more your style. Thanks to a slew of new Web sites, you can daydream online—and maybe even find a business to buy. Try BizQuest.com for detailed info up front. BusinessesForSale.com, with its international scope, is the most fun to browse. Ventures4sale.com lets you apply for financing online. Of course, you'll still have to go kick the tires, but at least you'll know if it's a junker or a Jaguar before you look.

A Better Way to Do Business?

DAVE LONGABERGER was a restaurateur, grocer, and pharmacist before he founded Longaberger Co. in 1972. In *Longaberger: An American Success Story*, he argues that business is about philanthropy, that management is simple, and that small-town living is underrated. Naïve? Not so fast—in 1998, Longaberger Co., a basket manufacturer, reached \$700 million in sales.



V.C. Fever Abroad

U.S. startups, despite their reputation as technology innovators, are about to face tougher competition from Europe. While the amount of venture investing in the U.S. has slipped for two consecutive quarters, global venture investing, including buyout funds, is expected to jump 47%, to \$200 billion this year. Of that, some \$70 billion is expected to go to Europeans, says PricewaterhouseCoopers and 3i Group PLC, an equity investment firm in London. In 1999, a banner year for American venture investing, U.S. firms raked in about \$36 billion.

European investing has boomed thanks to new stock markets designed for small-cap companies, changing tax laws and deregulation. The very success of the U.S. has proved inspiring, too. European investors have adopted a "mass belief in the economics the U.S. has achieved with low inflation, low unemployment, high consumer demand, and high innovation," says Martin Gagen, president and CEO of 3i's U.S. operations.

Small Biz Slowdown

The stumbling stock market and slowing sales are forcing small businesses to reexamine their forecasts and budgets. "People are looking at the markets and starting to get worried," says Christopher Wysocki, president of the Small Business Survival Committee. "It's gut-check time."

Only 3% of small businesses reported higher sales in the third quarter, says William C. Dunkelberg, chief economist for the National Federation of Independent Business. Dunkelberg expects sales to weaken further in the fourth quarter, and he says that cutbacks in capital spending are reminiscent of those that preceded the past two recessions.

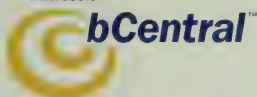


For the full stories, click
Online Extras at
frontier.businessweek.com

**Getting your business on
the Web is one thing.**

**Making it on the Web
is another thing.**

Microsoft®



**Making it easy
is our thing.**

Your thing is owning a business, not running a Web site. So, how do you find time to build a thriving Web presence worthy of your name? Go to Microsoft® bCentral™. With our Business Web Services, you'll get your own Web address, making it easy for customers to find you. You'll have powerful business e-mail, including scheduling and Web file storage. You'll get the tools you need to build your own e-commerce-ready Web site in just minutes. And you'll find easy ways to promote your business to thousands of new prospects. Which means you now officially have one less thing to worry about.

Do big things on the Web. Get Microsoft bCentral Business Web Services for just \$24.95 a month at www.bcentral.com, or call toll-free (866) BCENTRAL*.

Where do you want to go today?

Microsoft®

Valid through February 2003. Certain restrictions apply. See www.bcentral.com for details.
To learn more, call 1-866-BCENTRAL or visit www.bcentral.com.

The Net Before Christmas

CURRENTS

Small biz is stepping up its Yuletide e-mail promos

WITH THE HOLIDAYS upon us, it's no surprise that e-mail boxes are filling up with Web-based marketing drives. But here's something unexpected: Most of those campaigns are being waged by small companies, rather than by the marketing machines of Corporate America.

Out of all small businesses with Web sites, 82% will use e-mail, text links, banner ads, and other online tactics to get the message out this Christmas, according to

But rather than assaulting strangers with spam, savvy entrepreneurs are using the Web to keep existing customers coming back. Courtney Pulitzer Creations, a New York event-planning company with eight employees, uses e-mail to publicize a nationwide series of executive networking get-togethers. Courtney Pulitzer says that 1,000 e-mail messages can generate as many as 750 responses.

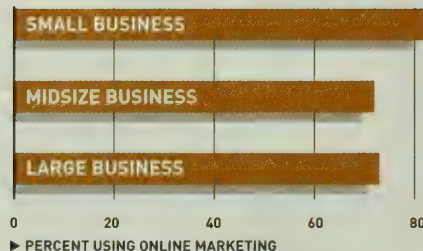
Then there's the price tag. eMarketer estimates that direct mail costs 75¢ to and \$2 per piece. An opt-in e-mail—that is, a message sent only to those who have specifically allowed their name to be sold—runs about 20¢ per name. That helped convince Evelyn Somers, head of marketing at Smarterkids.com, a Needham (Mass.) educational-products retailer with just over 100 employees. Last December, Smarterkids advertised on the Internet, on the radio, on TV, and in print. In the process, Somers discovered that the online campaigns were easier to target and track. So this year, 95% of the company's marketing is being done on the Web, compared with 40% last year. "It's all about getting and keeping good customers," Somers says.

As e-mail volume grows, it's getting tougher to grab consumers' attention. But the low price makes it worth a try. Somers says the cost of her online marketing drives have dropped by a factor of ten over the past year alone. That's a holiday bargain few entrepreneurs can resist.

—KIMBERLY WEISUL

Santa's Little Helpers

ENTREPRENEURS ARE FLOCKING TO THE WEB FOR HOLIDAY MARKETING



a poll by Responsys.com, an e-mail services provider in Palo Alto, Calif., and by IntelliQuest, a research outfit in Austin, Tex. (chart). That compares with just 73% of midsize companies and 72% of big ones. It's quite a switch from last year, when only 54% of small businesses used the Internet for any form of holiday marketing. The better campaigns get response rates of 5% or more.

With limited marketing budgets, "small companies are more willing to experiment," says David Halprin, an analyst at eMarketer Inc., a New York research firm.

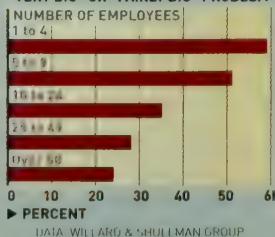


For tips on conducting an online ad campaign, click Online Extras at frontier.businessweek.com

The \$10,000 Question

Asked what would happen if they received an unexpected \$10,000 bill, 49% of entrepreneurs said it would be a "very big" or "fairly big" problem, says The Willard & Shullman Group, a Greenwich (Conn.) researcher. Some said it would sink their company altogether. "Very few small businesses do any kind of budgeting," says Fred Waedt, a finance expert at University of Wisconsin at Eau Claire. That's especially true of service firms, he says, which often start with little outside investment and operate for years without a proper budget.

PERCENTAGE OF SMALL COMPANIES FOR WHOM A \$10,000 BILL WOULD BE A "VERY BIG" OR "FAIRLY BIG" PROBLEM



Companies Stash Cash

Despite a recent series of interest-rate hikes, CEOs of fast-growth companies are taking out more new bank loans as a hedge against an anticipated drop in demand.

Companies that make tangible products are especially worried. In that sector, 29% of CEOs told PricewaterhouseCoopers they had completed new bank loans in the third quarter, compared with 21% last quarter. Only 23% of service-sector companies took out new bank loans in the quarter, up slightly from 22% last quarter. In either case, the new loans are hardly what you'd call a bargain: Companies reported paying an average of 9.88%, up from 8.49% a year ago. For many product companies, slowing demand already is a fact of life: 36% of product companies said they were holding finished inventory at the end of last quarter, up from 23% in the second quarter.

Startups in Brazil

Looking for the next entrepreneurial hot spot? Head to Brazil. The South American nation has the highest rate of startup activity in the world, according to the Kauffman Center for Entrepreneurial Leadership's 2000 Global Entrepreneurship Monitor. One in eight Brazilian adults is attempting to start a new business, the survey found. That compares with one in ten in the U.S. and one in twelve in Australia. Brazil also was the most hospitable to women entrepreneurs, with women starting one new firm for every 1.6 started by a man.

Why Brazil? Good question, says Kauffman Center researcher Michael Camp. Brazil's economy has been growing since the government abandoned longstanding price and currency controls. But this is the first year researchers have looked at Brazil, and Camp says the country's strong showing may be a statistical anomaly.

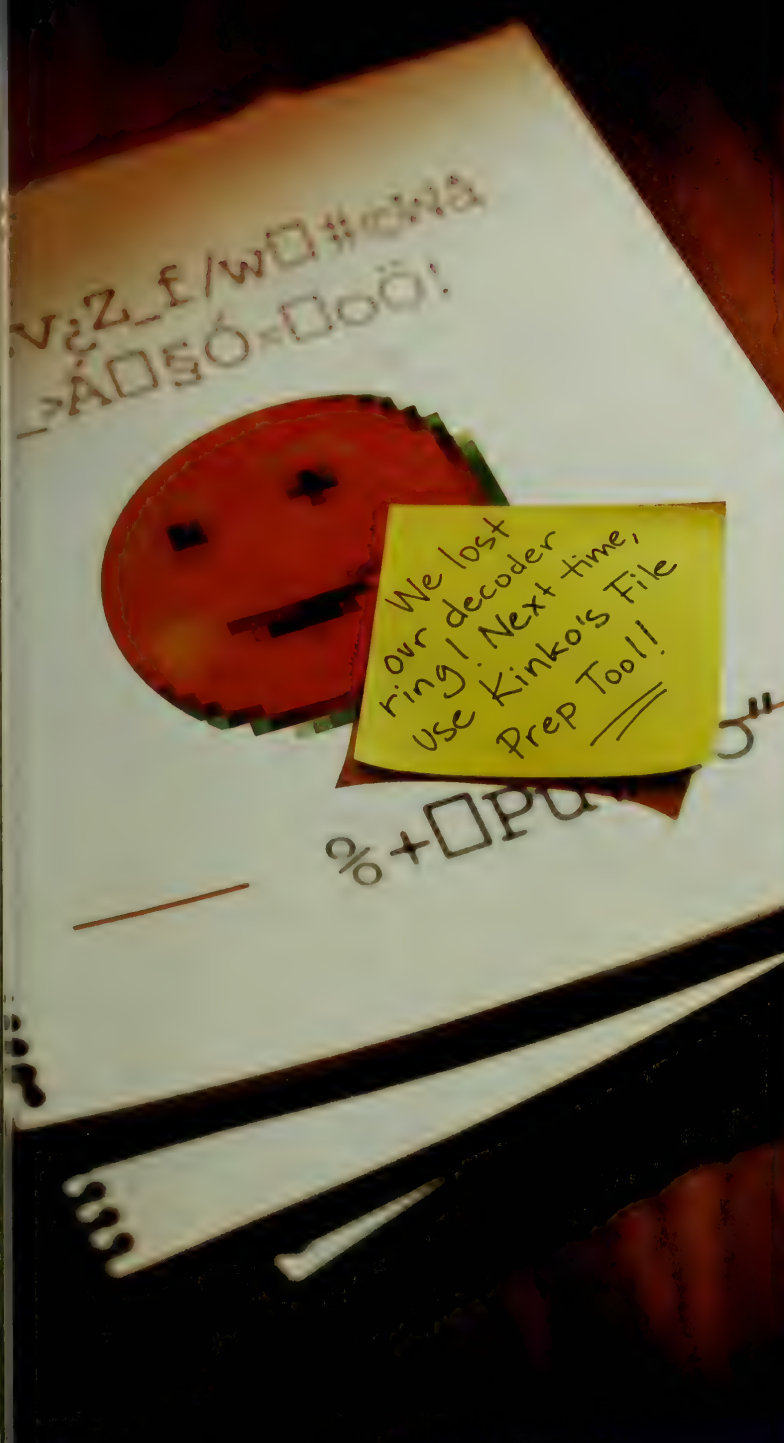


fig. 1 Create your document.

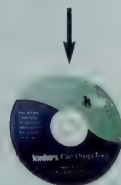


fig. 2 Convert to a print-ready file using Kinko's File Prep Tool™ software.

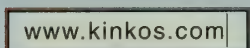


fig. 3 Log on and click: Print to Kinko's™.



fig. 4 Quality output that you can pick up or have delivered.

Now there's a better way to print your document from your desktop. Just visit kinkos.com™ and submit it using Kinko's File Prep Tool™ software. Download your free copy of Kinko's File Prep Tool™ software from kinkos.com™ or get it at any Kinko's location today. And make sure nothing gets lost in the transmission.

ELECTRONIC FILE SUBMISSION • PRESENTATIONS • MANUALS & REPORTS • BUSINESS CARDS

STATIONERY • BINDING & FINISHING SERVICES • SHIPPING SERVICES

kinko's

America Online Keyword: kinkos.com

Open 24 hours • 1-800-2-KINKOS

Kinko's File Prep Tool available in Windows version only. Patent pending. Windows is a registered trademark of Microsoft Corporation. America Online is a registered service mark of America Online, Inc. © 2000 Kinko's, Inc. All rights reserved. Products and services by location and are subject to availability. Kinko's requires written permission from the copyright holder to reproduce any copyrighted work.

The Littlest PC

David Feldman's MachZ computer fits on an inch-square chip but packs plenty of power



IN LINUX WE TRUST: Feldman started his company with \$100,000 in savings

IMAGINE A COMPUTER that's crash-proof and virus-resistant. It runs for hours on a pair of AA batteries and is small enough to fit in the palm of your hand. "It" is the MachZ, a computer chip that might dramatically extend the reach of the Internet.

David L. Feldman, CEO of zF Linux Devices Inc., the Palo Alto (Calif.) company that designed the MachZ, describes it as a "pc on a chip"—a complete computer on a one-square-inch wafer, equal in power to a 1998-era Pentium desktop and preloaded with the Linux operating system. But it's not aimed at desktops: The MachZ's small size, \$53 price tag, and ability to recover from power interruptions and software crashes make it a natural match for the coming wave of Internet-enabled appliances and devices. "With a computer this small," Feldman says, "all sorts of things become possible."

The MachZ was introduced in June, and more than 60 companies are designing products around it—everything

from medical devices and farm machinery to home appliances and vending machines. Typical is March Networks Corp., an Ottawa manufacturer of security systems that is using the MachZ to replace bulkier, costlier computers. "It will take our size down by 60% and cut hundreds of dollars off the cost," says March Networks Vice-President Peter Wilenius.

Feldman was a social worker in California in the late 1970s, when budget cuts led him to enroll in night courses to learn circuit-board design. He launched his first company, Ampro Computers Inc., in 1983. Twelve years later, with about \$100,000 in savings, he left Ampro to start zF Microsystems (named for his son, Zeb Feldman). He changed the name when it became apparent that Linux would find widespread use in microcontroller-based devices. In June, Feldman's 63-person company raised \$15 million in financing from investors including National Semiconductor Corp. and Samsung Co.

zF Linux faces tough competition from Intel Corp. and Transmeta Corp., both of which have designed processors for similar applications. But zF Linux has an edge in this area, says Eric Ross, an analyst with Thomas Weisel Partners in San Francisco. Not only is the MachZ cheaper, but it is a complete computer, not just a processor that a manufacturer must integrate with a system board. Then there's MachZ's crash-resistant design. "It's bulletproof," Ross says.

Feldman expects orders for 35 million MachZs by the end of the year, and he anticipates going public by mid-2001. His computers may be miniature, but his plans aren't.

—DOUGLAS GANTENBEIN



For more profiles of leading entrepreneurs, click Online Extras at frontier.businessweek.com

INSTANT EXPERT

Videoconferencing

Conducting meetings via video technology used to be strictly for big business. Now, thanks to the proliferation of videoconference centers, it's almost as easy as making a phone call.

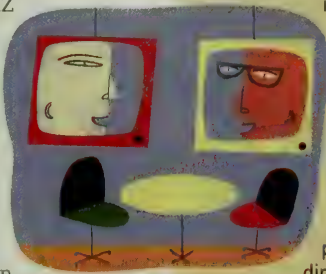
CASE IN POINT

O'Halloran International Inc. in Altoona, Iowa, sells, services, and leases heavy-duty trucks and parts to clients in seven states. With expenses soaring because of rising fuel prices, Jim O'Halloran Sr., chairman of the 80-person company, needed to cut expenses. First to go was travel. Now, instead of flying to meet with customers and job prospects, O'Halloran heads to Iowa Network Services, which provides a complete videoconference setup. An in-house technician ensures the audio and video are "first rate," O'Halloran says, with no awkward delays or glitches. The cost: about \$350 for two rooms and \$90 an hour for long-distance charges. It's money well spent, says O'Halloran, especially when compared with the usual \$5,000-\$7,000 of air and hotel expenses.

RESOURCES

To find a videoconference center, try a Web-based directory like Yahoo!'s (<http://yp.yahoo.com>). Many chambers of commerce, libraries, and corporations rent their equipment when it's not in use. Metropolitan Interactive Videoconference Network (www.mivnet.com) lists more than 6,000 centers worldwide. Face-to-Face Communications (<http://ftf-tokyo.com>) and Pacific Bell Education First Video Conferencing Directory (www.kn.pacbell.com/wired/vidconf/directory.html) also have free locators.

Videoconferencing & Interactive Multimedia: The Whole Picture, by James R. Wilcox (CMP Books, \$39.95), compares various technologies, with 200 pages of reference material. *Personal Videoconferencing*, by Evan Rosen (Prentice Hall, \$39.50), provides a guide to desktop videoconferencing. —JOAN RAYMOND





Copyright © 1999 3Com Corporation. All rights reserved. 3Com, the 3Com logo, and the 3Com logo is a trademark of 3Com Corporation.

Bob's got a guy who knows e-mail.

Gene's got a guy who knows LANs.

Alex's got a guy who just confuses the hell out of you.

Simpler Networking. *anytime*



3COM

Simple sets you free.

3Com Business Networking

3Com's new line of easy-to-understand networking products takes the confusion out of networking. They're easy to work with. Easy to expand. And they're all engineered to give your network the boost it needs to exploit the Internet to its fullest. (Now, that wasn't too confusing, was it?) Just talk to your 3Com reseller or click 3Com.com. Home. Office. Beyond.

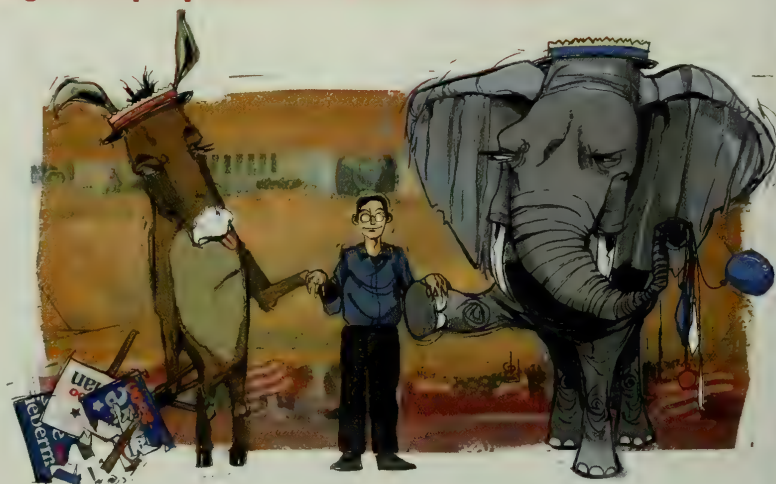
Washington Wish List

If the divided new Congress wants to get something done, it could start with these pragmatic proposals for small business

WITH CONGRESS divided nearly in half and a President picked by the tiniest of margins, it's not likely we'll see sweeping reforms anytime soon. In this regard, small business is as responsible as the rest of the electorate. A national exit poll conducted by The Polling Co. found 47% who identified themselves as small-business owners voted for GOP congressional candidates, vs. 44% for Democrats. The vote among the general electorate was 46% Republican, 45% Democratic.

Can the legislators come together on anything? Who knows? But if they're feeling pragmatic, here's the nonideological wish list for small biz:

Compromise on the estate tax. With surplus projections shrinking fast, an outright repeal of the "death tax" seems like a long shot. But Congress can provide relief to entrepreneurs by adopting the Democratic alternative, which would double the current \$675,000 per person exemption for all taxpayers. This would allow entrepreneurs to pass along their businesses without leaving heirs a huge tax bill. Some 75% of small-business owners would pay no estate tax at all, and most others



would see their tab significantly reduced.

Repeal the installment sales tax. The 1999 Tax Relief Act contained a little-noticed provision requiring taxes on the proceeds of most sales of businesses to be paid all at once, immediately—even if the funds are to be received in installments over several years. Sound obscure? Not to the thousands of entrepreneurs who have had to postpone selling their companies because they lack the cash to pay the taxman. Legislation is on the table to let businesses with receipts of

less than \$5 million use the old pay-as-you-go method of accounting. That's a start. But fairness argues for full repeal.

Encourage association health plans. Such health-insurance purchasing pools, which allow small companies to band together to bring down premium costs, are blocked by state insurance regulations from operating on a national scale. Lifting the ban would give small-business associations new bargaining power—and provide new options for entrepreneurs struggling with double-digit premium hikes.

Offer health-care tax credits. Entrepreneurs need incentives to provide costly health plans. One way to start would be to adopt Al Gore's tax credit for 25% of the premium costs of each employee insured. Meanwhile, workers who buy their own coverage should get to deduct the costs.

As for the prospects, it's easy to be pessimistic. But with two years of gridlock looming, moderate legislators may wind up ruling with a common-sense agenda—proving that, indeed, a divided government is the best government of all.

—LARRY KANTER

2000 ELECTION

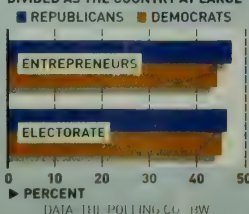
ocratic alternative, which would double the current \$675,000 per person exemption for all taxpayers. This would allow entrepreneurs to pass along their businesses without leaving heirs a huge tax bill. Some 75% of small-business owners would pay no estate tax at all, and most others

Small Business, Big Spender

The National Federation of Independent Business, the No. 1 small-biz lobby, spent a record \$8 million on congressional races. What kind of return did it get? Of the 30 candidates it backed (all GOP), 12 captured House seats and 3 won in the Senate. That's \$530,000 per victory. Was it worth it? National political director Tony Likins notes that both chambers remain Republican. But he admits that Democrats' gains will make passing pro-small-biz legislation harder. "Is it going to be a little tougher this time, without some of our good friends?" he asks. "Absolutely." Among the key losses: Senators William V. Roth Jr. (Del.) and Spencer Abraham (Mich.). But with congressional districts scheduled to be redrawn, Likins sees gains in 2002. "You're going to see heated battles," he says. And, no doubt, even more lavish spending.

—JULIE FIELDS

AMERICANS FIRST
SMALL-BIZ VOTERS WERE NEARLY AS
DIVIDED AS THE COUNTRY AT LARGE



Get the details about key political issues. Click Online Extras at frontier.businessweek.com

IZZED INTRODUCES GOVERNMENT CONTRACTING
ND INTERNATIONAL GATEWAY.

WO POWERFUL RESOURCES TO BUILD YOUR BUSINESS.

OOD ***Make cold calls to potential clients — here and abroad.***

ETTER ***Attend a seminar about domestic and foreign business opportunities.***

ZZED ***Expand your horizons with access to U.S. government contract openings, worldwide business information and a galaxy of support systems to facilitate your national and international expansion.***



Powerful resources for your small business

Brought to you by Citibank, a member of Citigroup, Inc. ©2000 Citicorp. All rights reserved.



War at the Front Door

Palestinian-Americans like Abdel Hamid Kased returned home to invest in peace. Their hopes aren't dead yet

SITTING BEHIND the reception desk in the unlit lobby of the City Inn Hotel in Ramallah, Abdel Hamid Kased wearily eyes a group of uninvited guests: rifle-toting Israeli soldiers, who for the past six weeks have used the hotel's modest lobby as a sharpshooters' base. This is not quite what Kased had in mind when he went into the hotel business.

For nearly 30 years, Kased and his family owned a thriving supermarket in Brooklyn, N.Y. But in 1997, drawn by the prospects for peace in their homeland, they returned to the West Bank to build the City Inn. Located on the edge of Ramallah, the commercial heart of the territory, the three-year-old, 33-room hotel had been booked nearly solid. At its peak, the hotel employed 34 people and was a popular site of meetings for business executives and international development officials attempting to build a new Palestinian economy.

Deep Wounds. Then the peace talks collapsed, and the intersection outside the City Inn's front doors became the site of near-daily confrontations between stone-throwing Palestinian youths and Israeli military forces, who cleared out the guests and occupied the hotel. Several people have been shot just half a block away, phone lines have been cut, and tear gas wafts past the windows most afternoons. "I sit here every day and listen to the gunfire outside," says Kased.

Kased, 51, and his three brothers are among the 2,000 Palestinian émigrés who have returned from the U.S. in the flush of optimism following the 1994 Oslo Peace Accords. "We thought peace would be good for investment," Kased says. For a time, the peace talks



ARAB PALESTINIAN SHOPPING CENTER PROJECT



BOOM AT THE INN: The City Inn has lost nearly \$100,000 since the violence began, says Abdel Kased (above). Nevertheless, "we're determined to keep on building," says U.S.-born investor Sam Bahour (left)

were indeed paying dividends. Before the current round of violence erupted, on Sept. 28, the economy in the West Bank and Gaza was expected to grow 7% this year, up from 6% in 1999. Key to that growth has been the influx of Palestinian-American entrepreneurs like the Kaseds, who have injected much-needed dynamism into the territories, according to Maher Masri, the Palestinian Minister of Economy & Trade.

"It's extremely important to have people from the States here," he says. "They've got knowhow, and they're running projects across the board."

But weeks of clashes have inflicted deep economic wounds throughout the territories. Unable to reach their jobs in Israel since the government sealed the borders six weeks ago, Palestinian workers are losing some \$3.4 million a day in wages. Hundreds of

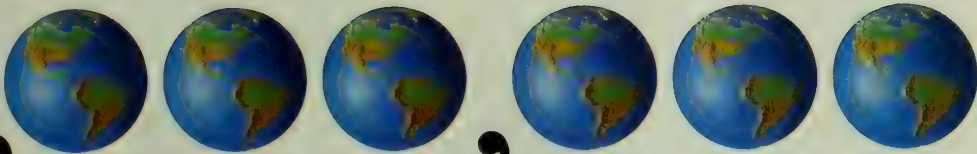
small companies have been forced to lay off workers or close their doors entirely, Masri says. Meanwhile, World Bank officials in Jerusalem say it could be years before foreign investors again feel secure enough to put money into the territories. Says Masri: "The economy has collapsed."

Kased, for his part, estimates that the City Inn, which the family financed with \$1.2 million of their own money, has lost nearly \$100,000 since the violence erupted. There has also been some light physical damage—

broken doors and windows—though he has yet to make an assessment. So far, he says, the Israeli military has refused to compensate him, and Kased expects to wind up in court. It could be a tough fight. "I don't think they have any rights to compensation," says Israeli military spokesman Yaiden Vatikay. "Do the Palestinians compensate us for terror attacks?"

Nonetheless, Kased and other émi-

"I sit here every day and listen to gunfire outside," says Kased

2, ,

business management software customers worldwide.

We're Sage®, the world's leading provider of business management software, with more than 1,200 new customers every business day. For medium-size businesses, there's MAS 90, recommended by more CPAs than any other single-range business management software; Abra, the market leading HR/Payroll solution; and FAS, the standard for fixed asset management, outselling the competition 3 to 1. For larger businesses, there's the Sage Enterprise Suite, which has won the Microsoft® Industry Solution award three years running. For more information, call us at 1-888-878-7822. Or visit us at www.sage.com.

sage

Through knowledge comes control

MAS 90®

Abra®

FAS™

Peachtree®

Sage Enterprise Suite™

grés express few regrets about their decision to return. "I have a real sense of belonging here," says Sam Bahour, a 36-year-old entrepreneur. Born in Youngstown, Ohio, Bahour moved to Ramallah in 1994 to help privatize the Palestinian telecom system. "In the U.S., I would just have become lost in the rat race."

Three years ago, Bahour began working for Arab Palestinian Investment Co., a holding company which has raised \$53 million from investors throughout the Arab world, and created 11 startups across the West Bank and Gaza, including a mineral-water factory, a Hyundai dealership, and a cold-storage facility. Bahour's latest venture is a sleek, \$6.3 million American-style shopping mall to serve the local population. Located a half-mile from the City Inn, the mall was due to open this month with about 100 employees. But for most of October, only a handful of the project's construction crew were able to make it to work. "We're determined to keep building," Bahour says. The project is still months from completion.

With businesses pummeled by the violence, political sympathies are being sorely tested. Bahour announces his views with a sign on the door declaring his office an "Occupation Free Zone" and urging a boycott of Israeli products.

The Kaseds are somewhat more accommodating. They conceived of the City Inn as a meeting place for everyone, Israeli and Palestinian, even designing a logo with olive branches and a pair of shaking hands. "We came back thinking about peace," says Shawki Kased, Abdel's 50-year-old nephew, who also owns a share of the hotel. "Everybody talked about living together and building Palestine." And in spite of it all, that remains the plan, says his uncle. "Of course, I could go back to Brooklyn," he says. The family still owns the supermarket and Abdel Kased returns often. "But whatever happens, this is still my home." Uninvited guests, and all.

—VIVIANNE WALT



For more on global entrepreneurs, click Online Extras at frontier.businessweek.com

The Brutal Tutor

The Buckley School of Public Speaking grooms execs for high-intensity verbal dueling



DRILL INSTRUCTOR: F. Reid Buckley's "curative tortures" provide tough love for the tongue-tied

IT WAS 1985, and executives of Union Carbide Corp. were trapped in the glare of the international media, struggling to explain a deadly gas leak in Bhopal, India. Watching them on television, F. Reid Buckley was appalled—by the accident itself, but also by the company's inept handling of it. "These highly placed business executives were made fools of by the news anchors," Buckley recalls.

What the executives needed, Buckley believed, was a crash course in high-intensity verbal warfare. So that year, he founded a kind of boot camp for the rhetorically deficient, the Buckley School of Public Speaking.

Buckley, the 70-year-old younger brother of conservative columnist William F. Buckley Jr., is a famously skilled debater in his own right, relishing his role as the school's toughest drill instructor. During a visit last summer, he was striding around campus—an antebellum mansion in Camden, S.C.—in knickers, a hunting knife strapped to his belt. As for curricu-

lum, Buckley's students encounter none of the "rhetorical slush" of the Toastmasters or Dale Carnegie. Instead, they hone their verbal skills under what Buckley calls "curative tortures."

Those who smile unconsciously under pressure get their faces taped down in a scowl. Speakers who roam the stage are forced to wear snowshoes. Veteran print and broadcast journalists grill attendees in hostile mock press conferences. Says Buckley: "We push the hell out of them."

Over the past 15 years, some 2,000 students—business leaders, Presidential candidates, foreign heads of state, and even KGB agents, according to Buckley—have lined up for the abuse. "It was an in-

toxicating experience," says Michael Mercieca, a manager at Microsoft Corp. who completed three days of training in July. The course came in handy just weeks later at a companywide conference, when Mercieca addressed an audience of 8,000, including honchos William H. Gates III and Steven A. Ballmer.

Tuition for three days of instruction begins at \$2,500. The school employs about 15 mostly part-time instructors and generates revenues of about \$500,000 a year, Buckley says. In April, Buckley will open a West Coast campus in Seattle, aimed at "entry-level" students, mostly college grads with little or no public speaking experience. But Buckley promises his "tortures" will be every bit as intensive, and his graduates will be in prime fighting condition once they hit the lecture circuit.

—W. THOMAS SMITH JR.



For more profiles of leading entrepreneurs, click Online Extras at frontier.businessweek.com

LOG ON



Staples.comfortable

Wearing too many hats? Relax.

Staples.com can help. With over 45,000 office essentials, we make it easy to keep on top of all your product needs. And with Staples Business Services, you'll also get great deals on over 65 high-quality services. Like Payroll. Web Design. Staffing. Printing. Marketing. And Insurance. All in one convenient location, www.staples.com. And since you already count on Staples.com to save you time and money on all your business supplies, Staples.com makes a smart partner for everything your company needs.

\$30 OFF

your online products order of
\$150 or more.

At checkout use coupon code: 91072

And here's a little extra comfort — \$30
off your next products order of \$150
or more. Feeling better now?

STAPLES.com



Offer expires 2/28/01. Limit one per customer, non-transferable. Coupon cannot be combined with any other "dollar off minimum purchase" coupon. No cash or credit back. Coupon not valid on Downloadable Software or Business Services. Tax and shipping are not included in computing minimum purchase amount. Coupon must be used at time of order. Valid only at www.staples.com.

\$3,000 of comfy office furniture: \$1,920

\$7,000 of new computer equipment & software: \$6,600

\$4,000 staff retreat: \$3,500

creating a place where people want to show up at 9am:

priceless



© 2000 MasterCard International Inc.



Get what you need to turn your small business into something you've always wanted – a great business. The MasterCard BusinessCard.

Business Savings™ program has special offers on products and services that are crucial to small businesses. From insurance planning to incorporation services, online hosting to office supplies, whatever your business needs, we'll help you save.

To apply for a MasterCard BusinessCard, visit mastercard.com or call 1-800-360-3664.
If you already have a card, start saving now at mastercard.com/bizsavings



RANDOM
ACCESS

ASPing for Trouble

Application service providers haven't lived up to their hype. But don't write them off yet

Handheld Security

With "biometric" devices, you can forget about forgotten passwords—and stolen ones, too. These gizmos identify people by distinctive markers such as fingerprints. Now, Advanced Biometrics Inc. has come up with a new security technology that it's marketing initially to small companies. Called LiveGrip, it uses infrared scanners to map the arteries and veins of a person's hand, then matches the analysis against a database of prescanned hand images. For workers, LiveGrip technology might feel less threatening than a retinal scan, and it may be harder to fool than other recognition systems. The first LiveGrip product is ChronoLog, a \$2,995 time clock, being sold to restaurants, retailers, and other small businesses whose hourly workers often punch in for each other.

Data Dump

If you need new computers but get a headache just thinking about moving data from the old ones, AlohaBob's PC-Relocator may provide some virtual aspirin. AlohaBob, from Eisenworld Inc. (alohabob.com), will clone your hard drives. Just hook up the two computers, using a cable or network connection, and then run programs from floppies on each computer. The software takes care of the rest. You won't have to locate program CDs to reinstall applications, recreate configurations and dial-up settings, reconstruct desktops, or copy data. The \$49.95 AlohaBob isn't perfect: For example, it doesn't let you choose applications or data to transfer—it's an all-or-nothing deal. But if you want something that smoothes the copying of applications and data to new computers, AlohaBob's PC-Relocator does the job.

—WAYNE KAWAMOTO

FOR THE PAST YEAR, the hype has been hot and heavy: Application service providers (ASPs) were about to transform the way small companies did business.

Well, you can add ASPs to your list of burst techno-bubbles. These services, which rent expensive programs over the Internet, have received an appropriately cool reception from entrepreneurs. Business owners are rightly worried about data security, the stability of ASP vendors (both technically and financially), and how well the programs work. At the moment, less than 12% of entrepreneurs would consider an ASP, says a recent study by Cahners InStat Group.

Those who would have plenty of choices. About 500 ASPs

offer online access to programs that can do almost any computing chore, from spreadsheets to sales-force automation to setting up e-commerce sites. More than 100 specifically target small business; there are even niche ASPs that cater to accounting firms and dentists. All insist they can cut both costs and time spent on technology.

Most companies spurn ASPs because they find off-the-shelf programs work just fine

But the cure may be worse than the disease. A survey by InfoTech, a Phillips Group research firm in Parsippany, N.J., found that satisfaction with off-the-shelf programs is the most frequently cited reason for not using an ASP. "Does it make sense to outsource a stapler?" asks

Ronald Schmelzer of ChannelWave Software, a Cambridge (Mass.) company that creates Web software to link companies and vendors. The result of this skepticism: Cahners expects fewer than 3,000 small businesses to use an ASP this year, spending a paltry \$7 million.

The original ASPs were anything but the equivalent of staplers. The offerings that burst onto the scene two years ago were mostly huge, custom-built programs for corporate back-office operations, poorly rewritten to run over the Web. They included corporate enterprise-resource management and customer-relationship management software.

While their marketing extolled the benefits of monthly payments, automatic upgrades, no licensing fees, and



fewer technical staff, these programs were hardly plug-and-play. Implementation could take weeks or months. The programs were hard to run, often impossible to customize, and vexing to learn. "The problem was outsourced but not solved," says

dumped into a database containing the same information from 50 competitors renting the same program. With a little skill, someone could gain access to it. "It's not those Jolt-drinking, late-night vigilantes that should frighten an ASP customer, but the customer's next-door neighbors on the ASP's server," says ChannelWave's Schmelzer.

Possibly the biggest worry is putting part of your business in the hands of an unproven startup. Most industry watchers foresee a massive shakeout and consolidation. Gartner Group Inc., for one, predicts that by the end of next year, 60% of ASPs will be history. And if you go belly-up, you could too. "Can you walk into your ASP, pick up the equipment, and carry it out of the building without getting arrested?" asks Kirby Wadsworth, vice-president of Storability, a Southborough (Mass.) company that provides data-

hosted applications to soar to \$1 billion by 2004. A much more bullish InStat pegs spending at a staggering \$7 billion.

Widespread adoption of ASPs will depend on several things. The first is low-cost, accessible broadband. The second: software designed to run smoothly over the Web—something major companies such as Sun Microsystems, Cisco Systems, Oracle, IBM, and Microsoft are pursuing. Indeed, as common applications are made Web-compatible, some analysts envision small companies renting a small but costly program, such as QuarkXPress, for a day or a month from an online business-services store. (Microsoft recently began licensing its programs for distribution by ASPs.) Small businesses told InStat that they would pay a maximum monthly fee of \$35 per user to access applications they now own but use only occasionally.

Meanwhile, companies that did create applications for the Web are distancing themselves from their kin with a new moniker. ASPs now calling themselves IBSS (Internet business services) include Employease for human resources, Managemark for expense reporting, Intacct for accounting, and salesforce.com for customer-relationship management. "They're starting with a clean sheet of paper," says John Menkart, vice-president of WEGO, a hosted-portal service for ASPs in Redwood City, Calif.

Web-ready or not, the newly anointed IBSS haven't stood the test of time, either. So if you decide to take the plunge, ask hard questions about security, data backups, data ownership, reliability, and business stability. Negotiate a tough service-level agreement—preferably one with a short duration.

And have a disaster-recovery plan in place from the outset. While an ASP might be your company's savior, it might also be a similarly named serpent—the one whose bite did in Cleopatra.

—ALAN HALL

New ASPs claim to cater to small business. But they require pricey broadband Net access

John Dillon, CEO of salesforce.com, a San Francisco startup that offers online services for salespeople. "Putting lipstick on a pig doesn't necessarily make it any more attractive."

A new generation of ASPs claims their programs are designed for small companies and run efficiently on the Net. Even so, unless you have broadband Internet access, don't consider an ASP. And if you get broadband to support an ASP, remember to add it to the cost. A super-fast T1 line, available anywhere, runs from \$700 to \$2,000 a month, depending on the quality of the connection. A slower digital-subscriber line (DSL) for business—where it's available—will chew up about \$500 a month. And what happens when the line goes down? You're cooked. "I advise against ASPs for any application you can't live without for a few hours," says Ben Reytblat, president of Quadrix Solutions Inc. in Piscataway, N.J., a Web-hosting company whose clients include small-business ASPs.

Then there's the nagging question of data security. An ASP that assures heavy-duty encryption or a virtual private network—wherein your computer and the ASP communicate using an agreed-upon encryption scheme—is a must for any company that puts its data on an ASP's server.

But hacker attacks aren't the only nasty possibility. Some ASPs use "shared servers." Your list of key customers or salaries could be

Safety First

BEFORE YOU SIGN UP WITH AN APPLICATION SERVICE PROVIDER, BE PREPARED TO ASK PLENTY OF QUESTIONS.

- ◆ **MANAGEMENT** What's the track record of the ASP's owner? Who are its partners?
- ◆ **HARDWARE** Is your data stored on a secure, dedicated server, or is it shared by other customers?
- ◆ **SECURITY** How does the ASP ensure the security of your data—both physically and from hackers?
- ◆ **RELIABILITY** What does the ASP do to prevent downtime? Does it use redundant devices and systems?
- ◆ **QUALITY ASSURANCE** Does the ASP test for compatibility and disaster recovery? How often?
- ◆ **CUSTOMER SERVICE** Does the ASP provide continuous training and a high level of technical support?
- ◆ **RESOURCE INVESTMENT** Will the ASP continue to upgrade its systems and its own employee training?
- ◆ **SCALABILITY** Can the ASP keep up as your company grows, by adding new capabilities?



backup services. "If not, kiss your data goodbye. The only thing between you and a data disaster is control."

So, is ASP technology DOA? Probably not. Market analysts are convinced that the present turmoil is nothing more than industry growing pains. Yankee Group expects spending by small business on



For more advice on dealing with ASPs, click Online Extras at frontier.businessweek.com

Hearing the phrase
"essential resource"
makes most people think of water.

We think of printers.

Color printers to be exact. Clearly we're obsessive, but consider the upside. Who better to buy a printer from than a fanatic.

Case in point: the **magicolor® 2200** desktop color laser printer. It combines color and monochrome printing in one printer, so you no longer need to buy a monochrome printer and an inkjet for color. Plus it's fast. The 2200 can print up to 20 ppm in monochrome or up to 5 ppm in color. We even offer standard network interface for group printing—an extra cost with HP*—because we're not only obsessive, we're nice too.

So whether you consider printers to be the center of your universe or just an indispensable tool, you'll find **MINOLTA-QMS** printers provide all the essentials of imaging. For more information about the complete line of **MINOLTA-QMS** color laser and monochrome printers, call **1-800-49COLOR** or visit us at: **www.minolta-qms.com**



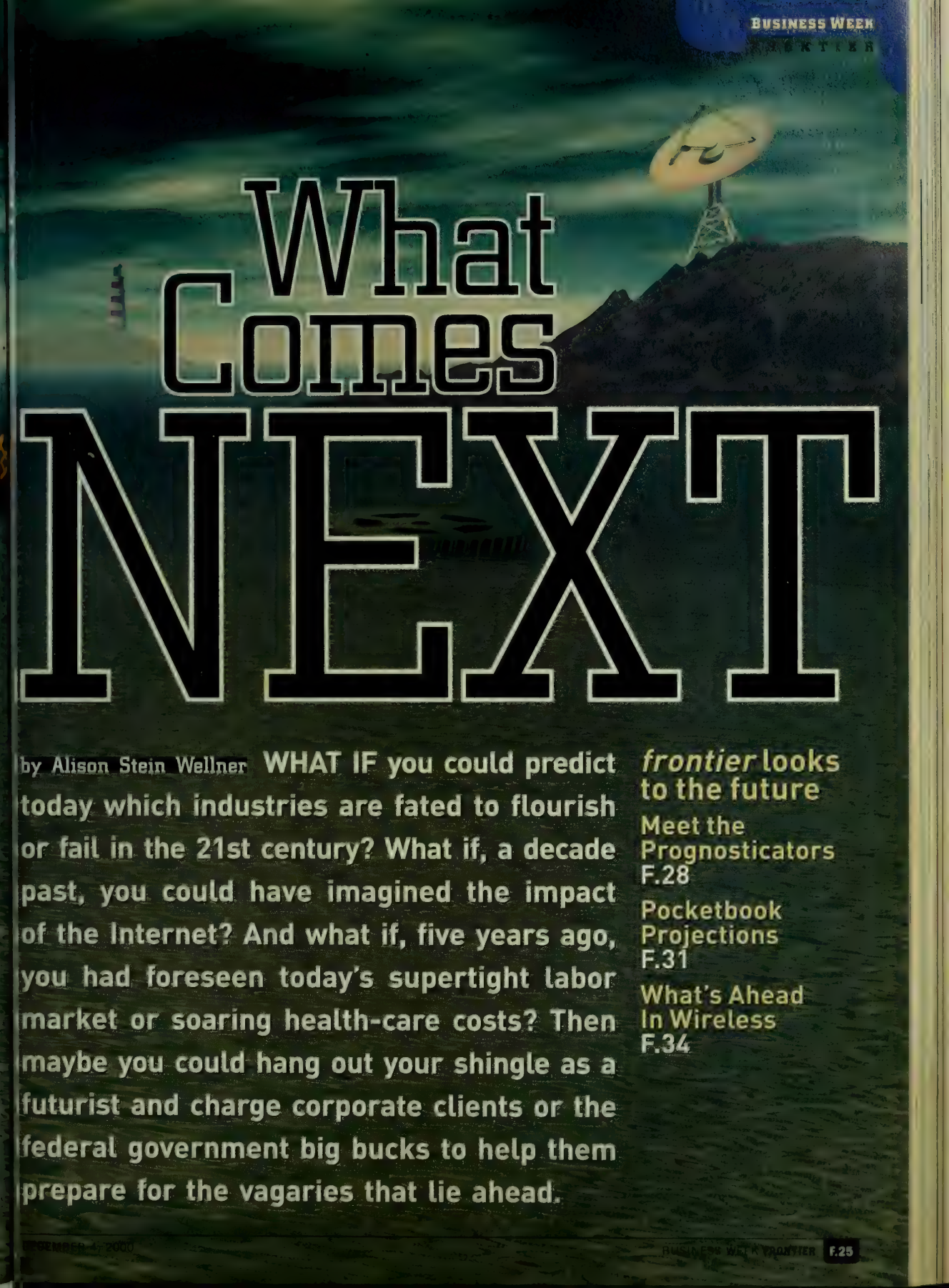
The essentials of imaging

MINOLTA
QMS

© 2000 MINOLTA-QMS, Inc. All rights reserved. The MINOLTA-QMS logo, magicolor, and Crown are trademarks or registered trademarks of MINOLTA-QMS, Inc., Minolta Co., Ltd., Osaka, Japan. All other trademarks are the property of their respective owners. *Comparing magicolor 2200 color laser to HP color LaserJet 4550.



Brother



What Comes NEXT

by Alison Stein Wellner **WHAT IF** you could predict today which industries are fated to flourish or fail in the 21st century? What if, a decade past, you could have imagined the impact of the Internet? And what if, five years ago, you had foreseen today's supertight labor market or soaring health-care costs? Then maybe you could hang out your shingle as a futurist and charge corporate clients or the federal government big bucks to help them prepare for the vagaries that lie ahead.

frontier looks to the future

Meet the Prognosticators
F.28

Pocketbook Projections
F.31

What's Ahead In Wireless
F.34

What's Ahead In Technology

You might find some of these recent predictions from the George Washington University Forecast of Emerging Technologies a bit far-fetched. Then again, you might see a future market for your company. Tours to Mars, anyone?

Fuel-cell cars enter the market



Virtual assistants become common



Genetically modified food widely accepted



The World Future Society, a professional organization in Bethesda, Md., with more than 30,000 members and 100 local chapters, lists more than 1,400 future consultancies in its millennium-edition directory—and it's safe to say you won't find a psychic, astrologer, or tarot card reader among them. These professional consultants use the research techniques of social scientists and journalists, chew on the grist of popular culture, and tap their own fertile imaginations to analyze present and past conditions and imagine what the future may hold. Futurists have predicted everything from the popularity of beepers among teenagers to the boom in fish farming to the success of SUVs and the rise of Martha Stewart.

How can futurists claim to know what's ahead? For one thing, they delight in the information

overload that everyone else scrambles to avoid. They scan hundreds of publications ranging from the general to the obscure, pick up on common themes and trends to help them speculate about the future, and develop strategic plans in response.

For example, in 1997, Kay Johnson, a futurist in Winston Salem, N.C., was tapped to lead her community's economic planning effort. The goal was to turn the city into a biotech capital, and to ready it for the New Economy. Her strategy: She launched a wide-scale investigation into the trends that would make a difference in the city, including health care, demography, legal changes, political shifts, cultural trends, and changes in the local environment. With this nuanced look at the present, the city realized that technology was go-

Tea Leaves, Entrails, and Crystal Balls

Futurists have developed hundreds of **analytical tools** and exercises to help assess trends that could affect their clients' businesses in the future. Here are some of the most popular techniques that might help your company's strategic planning.

DELPHI INTERVIEWS

Develop a list of questions you'd like answered about the future and **track down the best experts** to address each one. Then interview your modern-day oracles. When you get through one round of interviews, take your first set of comments and go back to those same experts and **ask them to respond to each other's comments**. That may spark a whole set of new connections and ideas.

IMPACT WHEEL

Put a big sheet of paper on the wall. In the middle, write down an idea or trend, or a particular decision you need to make. Then think about possible implications and **list five to seven of these "impacts"** as spokes of the center of your diagram. Say you're considering whether to drop a particu-

lar client. The effects of that decision may include a loss of income and a decline in your company's prestige. But it may also include more free time to attend to more lucrative accounts.

Then you take your first list of "impacts" and **track the ripple effects for each one**. For instance, if you have more time to spend with another client, what effect might that have on your bottom line?



ENVIRONMENTAL SCANNING

To find trends, decide on a question you'd like answered about the future. **Identify and list the publications** that might carry anything that even vaguely affects your question. More obscure publications may provide earlier leads. Then have someone in your company **scan those publications for such "hits"** on a regular basis and file the clips to track the trends they suggest.

SCENARIO DEVELOPMENT

Now take the trends found from environmental scanning and use them to **spin alternative scenarios about the future**: a best-case outcome, a worst-case, status quo, and a wild-card scenario where nothing turns out as predicted. Now speculate what each outcome might mean for the future of your business.

2010

mart Robots in
homes and factories



2012

Children can be
genetically
designed



2030

Average lifespan
reaches 100 years



2050

Humans travel to
nearby star system



ing to be key to the city's future success. Today, thanks to the scenario that Johnson helped to create, the whole city is being wired with fiber-optic cable, and it has established a biotech center.

Pricy. Governments may have the resources to bring in futurists, but for most small businesses it's an unaffordable luxury. (Fees can range as high as \$30,000 a day.) So, frontier invited seven futurists, all small-business owners themselves, to identify the trends they think will most affect small companies in the next decade—and beyond. After compiling their nominations, we chose trends with the most consensus.

Sometimes futurists' predictions may seem impractical and even a bit wacky, as in the case of George Washington University's ongoing survey about future technology trends. But most of the predictions that futurists churn out are far tamer. "If you forecast something that's way off the radar screen, you'll be dismissed as a lunatic," acknowledges Gio Gutierrez, a futurist at the Institute for Alternative Futures, a think tank started by Alvin Toffler, author of *Future Shock*. "It's often safer to say things that are middle-of-the-road."

Nor is future vision always 20/20. *Bad Predictions*, by Laura Lee (Elsewhere Press 2000, \$15.95), offers nearly 300 pages crammed with predictions gone wrong: the end of paper by 2000; the end of credit cards by 1990. Did you know that nuclear-powered vacuum cleaners were supposed to be in stores by 1965? It's true, says Stephan E. Roulac, futurist and president of the Roulac Group Inc., that even with the best intentions, futurists do make their share of bad forecasts, particularly when they're blinded by their own optimism. Roulac says he "flirted with Pollyanna" when he predicted the birth of a new ethical era for the real estate securities industry just a few years before the savings and loan debacle.

So what do these small-business owners/futurists see ahead for entrepreneurs when they peek into 2001 and beyond? Some real challenges and some nasty pitfalls. The good news: Thanks to their agility, small businesses will be better positioned than anyone else to handle the changes to come, says Peter Bishop, head of the future studies program at Texas's University of Houston at Clear Lake.



PREDICTION #1

LABOR

FORECAST: If you're waiting for a rising unemployment rate to ease your labor woes, you'll be waiting a long time. Assuming that the economy doesn't take a nosedive, you've got at least eight more years of a tight labor supply, predicts Roger E. Herman, a futurist who looks at the workplace. And don't get your hopes up too high after that, cautions Edie Weiner, president of Weiner, Edrich, Brown Inc. in Manhattan. Entry-level talent will become more plentiful in the next few years with the maturing of Generation Y, but the shortage of senior managers won't let up for years. There are 76 million baby boomers moving through the labor market, but only 44 million Gen-Xers, the first of whom will turn 40 in 2004.

IMPLICATIONS: Recruitment and retention efforts will become more important than ever, particularly with senior managers. "If you don't have a stable workforce, you are at a competitive disadvantage," warns Herman. You might take some comfort in the fact that your rivals will be just as hard-pressed, although that means they'll be gunning for your employees. You'll want to keep your successful strategies close to the vest. Your rivals certainly will.

PREDICTION #2

REAL ESTATE

FORECAST: Small companies will relocate in record numbers during the next decade, as they get squeezed by two powerful forces—a tight labor market and rising rents, according to real estate futurist Roulac. Employees in their twenties and thirties, who will be in short supply over the next five years, move around at twice the rate of older people.

To attract these mobile workers, small companies will be forced to create strong images for themselves and spend more time and money marketing themselves. The right location will be crucial, says Roulac, who conducts an analysis he calls a "geostrategy" of cultural, economic, and other factors that help companies determine the best locale for their business.

IMPLICATIONS: You'll want to choose the kind of hometown base your target employees want, one with a high quality of life, strong education, public transportation, and recreation and entertainment

amenities. "If you're not in a place where people choose to be, you may not be able to attract employees," says Roulac. As more companies seek new homes and demand keeps pushing commercial rents skyward, more companies will seek to buy their own office space. Alternatively, they will scale down their current space and move some employees to less expensive outlying areas accessible by public transportation, says Christopher Ireland, CEO of Cheskin Research, a Redwood Shores (Calif.) forecasting firm. (In fact, she did just that with her own company earlier this year.) That means small companies may lose the classic advantage of having a flexible, cohesive workforce all under one roof. They will increasingly be faced with managing employees in multiple locations. That will require more logistical coordination and technology, so that everyone will stay on the same page. Ireland says she now manages employees at five different locations, making communications and office culture issues more important than ever.

PREDICTION #3

CUSTOMER RELATIONS

FORECAST: The current pace of corporate mergers and acquisitions will continue over the coming decade. So small businesses are in for a rough ride as their trusty major accounts vanish, predicts Jennifer Jarratt, futurist at Coates & Jarratt Inc., based in Washington, D.C. A total of \$520 billion in domestic mergers and acquisitions was announced in the third quarter of 2000 alone. That's the third-highest transaction volume in history, according to *Mergers & Acquisitions Report*. "You just don't have the continuity that you had several years ago," says Weiner.

IMPLICATIONS: To cope with customer churn, more small companies will be forced to step up their marketing and rethink their business strategies. Rather than focus so heavily on big corporate clients, they will pursue more stable small- to midsize ones, predicts Jarratt. Companies will

Small companies will relocate in droves, squeezed by rising rents and tight labor

also attempt to cope by narrowing their focus to serve a more select group of customers and give them superior service. That strategy could potentially help small businesses retain their clients that merge or are acquired.

While some small companies with desirable businesses will undoubtedly get gobbled up as mergers escalate, Weiner doesn't foresee a future without small business. To the contrary, as giant mergers take place, big corporations will abandon some market niches, leaving new opportunities for smaller businesses, she says. "As merged companies try to find efficiencies they create demand for outsourcing, which spurs growth in medium and smaller businesses," says Weiner.



Meet the

Edie Weiner

Principal, Weiner, Edrich, Brown Inc.,
New York

SPECIALTY: Social, economic, political, and technological trends forecasting.

FAVORITE TOOL: Scanning a broad range of publications, looking for "the seeds" of change.

GOOD CALL: In the early 1970s, predicted the shift to a "more fluid, knowledge-based economy."

BAD CALL: In the early 1970s, forecasted that by 2000, at least 10% of the *Fortune* 1000 would have women CEOs.

Jennifer Jarratt

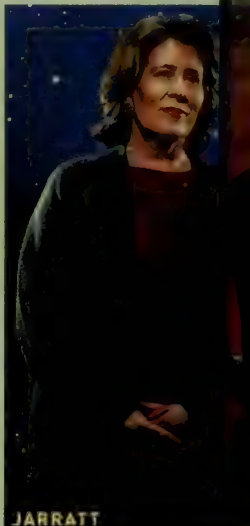
Senior Vice-President, Coates & Jarratt Inc.,
Washington, D.C.

SPECIALTY: Human resources, the future of work.

FAVORITE TOOL: Using "scenario building" to create various visions of the future.

GOOD CALL: In the late 1980s, pre-Internet, predicted that electronic communications would dominate most organizations.

BAD CALL: In 1985, forecasted that people would acquire rights to a particular job and be able to pass them down like property to their children or sell them.



JARRATT

David Smith

Vice-President, Technology Futures Inc.,
Austin, Tex.

SPECIALTY: Technology.

FAVORITE TOOL: A "care-about" analysis to understand what particular concerns people have about a new technology.

GOOD CALL: Over a decade ago, predicted that telephone networks would convert to digital switching. Conventional wisdom held that only 20% would be digital. To the contrary, it's all digital now.

BAD CALL: "I thought we'd be more aggressive in space exploration. I thought we would have more missions back to the moon by now, more missions going toward Mars."

Prognosticators



WEINER



JOHNSON

Kay Johnson

Principal, Johnson-West Associates Inc., Winston-Salem, N.C.

SPECIALTY: Strategic planning.

FAVORITE TOOL: Organizational cultural analysis, which asks where an organization is now and where it wants to go. By conducting interviews, focus groups, and written surveys, she analyzes how people are affected by change.

GOOD CALL: When Jack Canfield's best-seller *Chicken Soup for the Soul* was first rejected by publishers, Johnson told him to persist. She predicted the book would be a hit and "make a million dollars."

BAD CALL: Forecasted the success of a physician's practice that wound up failing because of personality conflicts. "The numbers worked; the two leaders didn't."



HERMAN

Roger E. Herman

CEO, Herman Group, Greensboro, N.C.

SPECIALTY: The future of the workforce.

FAVORITE TOOL: Talking with people who are in the trenches.

GOOD CALL: In 1989, during high unemployment, predicted the mid-'90s labor crunch.

BAD CALL: "We said that other countries would be facing the same kind of labor turnover as in the U.S., but it didn't come as quickly as we expected. Our timing was a bit off on that one."



ROULAC

IRELAND

Stephan E. Roulac

President, Roulac Group Inc., San Rafael, Calif.

SPECIALTY: Real estate.

FAVORITE TOOL: Meditation, as a way to combat information overload and think creatively about a topic.

GOOD CALL: In 1994, predicted Northern California would be at the epicenter of the New Economy.

BAD CALL: In the mid-1980s, predicted that over the next two decades, pension funds would invest heavily in the real estate market. It didn't happen, he says, as more appealing investment vehicles became available.



SMITH

Christopher Ireland

CEO, Cheskin Research, Redwood Shores, Calif.

SPECIALTY: Consumer behavior, particularly when it involves new technology.

FAVORITE TOOLS: A combination of observation, in-depth interviews, and advanced statistical analyses.

GOOD CALL: In 1994, forecasted that the Web would be as important as electricity and women would eventually be the heaviest users.

BAD CALL: In 1998, forecasted that Al Gore would win the Presidency by a large margin.

PREDICTION #4

WEALTH TRANSACTIONS

FORECAST: In what is expected to be one of the largest wealth transfers in history, baby boomers will inherit thousands of family businesses and billions of dollars from their parents over the next two decades, says futurist Johnson.

IMPLICATIONS: Some small businesses will profit from an infusion of new blood and leadership that will help them grow. Others will be acquired, leaving heirs with money to invest in other ventures. Baby boomers, who will begin to face age discrimination in the workplace, will also use their inheritances to start new businesses or buy existing businesses that are coming up for sale, says futurist Weiner.

As small-business growth is spurred, business consulting opportunities will abound to provide these newly minted entrepreneurs with everything from succession planning to financial services, says Weiner. For example, Weiner has studied the trend and sees a future for her own company. She says she is already planning to expand her future consulting services to serve more small companies. Other businesses may want to consider a similar move. A five-year projection done in 1997 by Arthur Andersen/Mass Mutual found that 28% of small family-owned businesses expected their owners to retire by 2002. An additional 14% said their CEO would retire in that period.

Resources for Aspiring Futurists

THE WORLD FUTURE SOCIETY publishes *THE FUTURIST*, a bimonthly magazine that covers forecasts, trends, and the latest thinking about the future, and *FUTURES SURVEY*, which abstracts the latest studies on the future. Both publications come with a \$39 membership in the organization. The Web site (www.wfs.org) also offers a directory to futurist consultants.

GEORGE WASHINGTON UNIVERSITY'S TECH FORECAST PAGE (www.gwforecast.gwu.edu) has far-reaching tech predictions and a carefully selected list of links to futures-focused Web sites.

THE VISIONARY'S HANDBOOK, *Nine Paradoxes that Will Shape the Future of Your Business*, by Watts Wacker

(HarperBusiness, 2000, \$26). "Does a good job of connecting the future with the past and providing a context for forecasts," says futurist Gio Gutierrez at the Institute of Alternative Futures in Washington.

A SUMMER RESIDENTIAL PROGRAM IN FUTURES STUDIES is offered at the University of Houston at Clear Lake. The three-week course costs \$3,000 and is led by Peter Bishop, PhD, whose credits include work for NASA. Navigate to www.cluh.edu/futureweb, or call 281 283-3396.

THE ART OF THE LONG VIEW, by Peter Schwartz (Doubleday, 1996, \$16.95). Walks readers through trend tracking and scenario development. For good measure, he ventures a few visions of life in 2005.



BOLD: Gutierrez says some futurists play it too safe—those who go out on a limb may be dismissed as lunatics

PREDICTION #5

TECHNOLOGY

FORECAST: The next 50 years will see the evolution of what David Smith of Technology Futures Inc. calls the Age of Bio. Biological science will be applied to manufacturing, information processing, and other fields. As computing power surpasses the abilities of the human mind by 2040, artificial intelligence will become a reality.

IMPLICATIONS: The field of "bioinformatics" will explode. Someday, you may trade in your computer monitor for a "retinal display" or use a DNA computer. "Instead of having to dig in the ground for specialty chemicals, we'll be able to grow them," says Smith. These changes will breed new business opportunities.

All this new technology will require more energy resources. But rising prices for oil and diminishing natural resources will trigger the growth of so-called green industries that use alternative energy, says Jarratt.

Running your business could get easier, too. Artificial intelligence might let you turn over to computers an ever-growing array of tasks, says Smith. But since computers still don't have feelings, more consultants will be needed to handle the human issues that arise in the workplace.

One of those issues, of course, is change, which often inspires fear. But Jarratt sees change as an opportunity for small companies with the right attitude—those seeking to "find the customer that we haven't yet met." That's certainly brave talk. If only the rest of us could be so sure.



For more about futurists and their predictions, click Online Extras at frontier.businessweek.com

Pocketbook Projections

Far-out forecasts might help long-range strategic planning, but what will your bottom line look like in 2001? Here's what the experts have to say about the coming year.

Health Insurance

"Get ready to dig deeper into your pocket," says Paul Fronstin, an analyst at the Employee Benefits Research Institute. The cost of providing health coverage for employees will continue its upward trend, thanks to high demand, consolidation of insurers, and skyrocketing prescription drug costs. In 2000, small-company costs rose 10.3%, vs. 7% hikes in 1999, according to the Kaiser Family Foundation. Expect more double-digit increases in 2001. Given the difficulty recruiting employees, you'll probably pay up.

Taxes

Don't hold your breath waiting for big changes next year in the tax code on such thorny issues as estate taxes or pension fund contribution limits (page F.14). Typically, a post-Presidential-election year sees few major new initiatives pass, says Bill Balhoff, of the American Institute of Certified Public Accountants. But one rule change kicks in next year that affects companies with under \$1 million in revenues that carry inventory. You can now use cash-based accounting instead of accrual accounting, which means you'll only have to pay taxes on income once you actually receive it, instead of when you send the bill.

Labor Costs

Only 21% of small companies plan to raise salaries in coming months, says a survey by the National Federation of Independent Business. But even the NFIB's own economist derides it as wishful thinking amid the general rise in compensation. The top-rank small-biz executives will see increases between 20% and 50%, says Susan Bishop, CEO of Bishop Partners, a New York headhunter. More bad news: Small

companies that relied on equity to pad compensation packages will have to pony up real money instead. "Last year, everyone demanded equity, and it never came through," she says. "People want the cash."

Technology

At least something's getting cheaper: Technology costs should continue to drop, as the competitors slug it out for your business (although your over-



all spending may rise as more products achieve must-have status). In particular, expect a decline in the price for Web site design and hosting services, says Stephen Butler, analyst at eMarketer, a New York-based market data aggregator that analyzes and reviews data from all the top technology market research firms.

As more small companies start conducting e-business, they will benefit next year from lower broadband prices. More than one million small companies will have high-speed DSL connections by 2003, up from just 400,000 in 2000, says Butler. The average DSL connection now costs a small company about \$200 a month. The actual price drop depends on where you live and what you order. But Bill Staikos at AMI-Partners in New York says a 10% to 11% decline is likely each year through 2004.

Interest Rates

Rates on small-company loans, up 1.5 percentage points since June, 1999, have leveled off in recent months. They should remain stable in 2001, projects James L. Box, CEO of ebank in Atlanta, which specializes in small business. "The Fed's tightening moves have passed; the damage has been done," he says. Mark Zandi, chief economist at Economy.com in West Chester, Pa., adds that the Fed will probably lower its short-term rates by a half a percent, thanks to a slowing economy. Since small-business loans tend to track Fed benchmarks very closely, that's good news.

Venture Capital

Should you forget about venture capital next year? If you're a dot-com startup, probably yes. But if you're an established business, you have a shot. VC funding will level off next year, predicts Sasha Telbi, research director at VentureOne in San Francisco. But that's still historically very high. Venture capitalists were more cautious during the third quarter of 2000, investing \$16.1 billion, or 6% less than in the second quarter of the year. Telbi blames the decline on cooling interest in dot-coms, not a long-term freeze in VC funds.

Office Rents

Yes, rents will keep rising, but in general you can expect single-digit increases next year instead of the double-digit whoppers of recent memory, says Maria T. Sicola at Cushman and Wakefield in New York. Rents will have the steepest increases in cities with a strong tech presence, such as New York, San Francisco, and Boston, because of continuing high demand. Expect to pay between 8% and 10% more in downtown areas and 5% more in the 'burbs. That's a big improvement over past years, when some areas faced 25% rent hikes. Still, Sicola expects many small companies will be forced to relocate in 2001.



Talking the IT guy into the best-equipped
new computer is easy.



**Especially when you
are the IT guy.**

**And the HR guy, and the
accounting guy, and...**



As the guy running your small business, your IT decisions should make your many jobs easier. That's why choosing new PCs that are preinstalled with Microsoft® Windows® 2000 Professional and Office 2000 is the simple and smart software solution. Running the 2000 generation of software from Microsoft ensures your PCs are powered by the most reliable Windows operating system. And you'll be able to tackle all your tasks with the power of the world's leading productivity suite—complete with tools* specially designed to help smaller companies better manage their finances, serve their customers, and reach new markets. Choose Windows 2000 Professional and Office 2000. It's the easiest executive decision you'll ever make.

To learn more, visit www.microsoft.com/businessdesktop

Where do you want to go today?

Microsoft®

BUSINESS WEEK
FRONTIER

The Wire

A unified phone, fax, and browser? Not yet. But loads of improvements will make your life easier

by Kevin Ferguson



essFuture



INTERNET EXECUTIVE Bryan Thatcher can see it now: It's 2004, and he's waiting to board a plane in New York. Cupping his all-in-one personal digital assistant, he watches as a videoconference with his San Francisco clients begins. Discreetly, he opens a smaller window on the screen and reads a text translation of an urgent voice-mail his assistant has just left him. He's the ultimate road warrior with the ultimate communications weapons.

Dream on, Thatcher. Right now, the CEO of 55-employee Fusebox Inc., a New York Web-development company with a projected \$6.5 million in revenues this year, carries a Web-enabled cell phone, a standard digital cell phone, a two-way pager, and a Web-accessible PDA. Why so many devices? None of them is capable of doing everything Thatcher needs to do. Some are best for e-mail, others for voice mail. And none is terribly good for getting on the Web because of maddeningly slow download speeds. "There's no convergence yet, and because of that we see small businesses acquiring more than one device," says Delly Tamer, president and CEO of LetsTalk.com, a Web retailer of pagers and cell phones.

What's worse, incompatible communications standards mean that devices that work in one

PHOTO-ILLUSTRATION BY
MICHAEL ELINS

place may be useless in another. So while subscribers to AT&T Digital PocketNet service can read restaurant reviews and stock quotes over their Web-enabled cell phones in Raleigh, N.C., they're out of luck in Atlanta, where AT&T lacks cellular coverage and local carriers use different standards.

In short, the great promise of the wireless revolution—seamless Web access from any point on the globe with one integrated mobile device—is still years away from reality. Wireless won't even begin to get interesting until the "signpost year" of 2003, predicts Roy Want, principal engineer at Intel Corp. research labs, when more uniform standards should make your various wireless devices more compatible and functional wherever you travel.

O.K., so all your wireless dreams won't come true next year. Still, 2001 will bring significant innovations in products and services that could help

you and your employees work wirelessly with greater ease. Here's a look at the changes that will matter most.

HERE COMES BLUETOOTH

If you learn any techno-talk this year, one term you ought to get cozy with is an emerging standard called "Bluetooth," which proponents say will unite the telecom and computing industries. (Hence its name, after the Danish king Harald Blåtand, or Bluetooth, who unified Denmark and Norway.) According to Cahners In-Stat Group, by 2005 Bluetooth wireless technology will be a built-in feature in more than 670 million products.

Just beginning to show up in the market now, Bluetooth products, including printers, PCs, PDAs, and cell phones, are equipped with microchip receivers that enable the devices to communicate wirelessly up to 10 meters. They can even operate without a direct line of sight, which means you could have a Bluetooth printer in one room printing out a document from a Bluetooth PC in another—a boon to growing small companies that are forever reconfiguring their offices.

Bluetooth can help you when you're out of the office, too. Instead of carrying around reams of documents, you'll soon be able to log on to the Web with your cell phone or PDA, download a document, and then either forward it to a nearby Bluetooth-enabled fax machine at some airport lounge or print it out on the nearest Bluetooth printer.

Among those now building Bluetooth-enabled products for small business are IBM, Epson America, Toshiba America Information Systems, and Hewlett-Packard. Epson's new Bluetooth printer, called the 777 Stylus Color Inkjet, made its debut at November's COMDEX show. It should start to hit the market just before 2001. The price hasn't been announced yet.

For notebook computers, Bluetooth cards can be inserted to make them compatible with other Bluetooth wireless devices. For example, IBM has a new Bluetooth card, for \$189, which can be inserted into the side of an IBM ThinkPad notebook computer. In 2001, IBM also plans to offer built-in Bluetooth formats for WorkPad PDAs.

IN SYNC

Since you're likely to be juggling multiple devices for some time, you'll benefit from wireless synchronization software. Let's say you want to update your address book or your appointment schedule in your wireless PDA. You'll be able to log on wirelessly to a password-protected Web site, where all your data are stored in the centralized server, and put in the new info. When you log on

One of the best upgrades of 2001: You'll be able to sync all your gizmos online



UNWIRED WORLD:
Thatcher carries a PDA,
pager, Web phone, and
regular cell phone



to that same site later from your other devices, such as your cell phone or PC, you can update them with the new info, too.

In the first quarter of 2001, fusionOne Inc. in San Jose, Calif., plans to release "collaborative synchronization" software that will let a team of mobile workers wirelessly and automatically update shared documents from the fusionOne Web site. So each time a worker calls up the centrally stored document from the road, previous changes made by other team members are already noted. The company expects to launch the collaborative software on the site as part of a suite of subscription-only business services, which will cost about \$40 to \$49 per year.

Another new syncing service from Los Angeles-based SDN Online Inc., due out early in 2001 as part of its ZKey program, will help mobile employees

manage travel expenses on a central server. While on the road, the employee uses a PDA or cell phone to enter in the expense on a template form. The ZKey database keeps a running tally of expenses and can even alert the employees when preset spending limits are exceeded. ZKey services will be free to business users. (Telecom carriers and ISPs are supposed to pick up the tab).

WI-FI, WHY NOT?

By far the most dramatic development for the mobile entrepreneur in 2001 will be the proliferation of a technology that has been trademarked by the industry as Wi-Fi (for wireless fidelity). That's what new services such as Wayport, SoftNet, and MobileStar will use to enable you to step off a plane and immediately hit the Web running. No wires. No

Unplug Your Business

A Sampling of New Wireless Products and Services for 2001



Handspring's VisorPhone

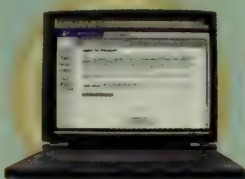
WHAT IT DOES:

Dials directly from address book. Conducts three-way calls. Syncs with desktop computer.

AVAILABLE: December (at www.handspring.com); Jan. 1 in stores.

PRICE: Phone, \$299 when service plan is ordered. Visor PDAs, \$149 and up.

DRAWBACKS: A little pricey for both phone and PDA.



Wayport

WHAT IT DOES:

Accesses the Web at 11 megabits per second—faster than DSL—from an airport terminal or a hotel lobby.

AVAILABLE: Now in Dallas-Fort Worth and Austin airports and in more than 170 hotels.

PRICE: Free trial period ends Dec. 31; starting Jan. 1, ten full-day connections will cost \$35. Other plans to be announced.

DRAWBACKS: Access still spotty as Wayport builds out its network.



3Com's AirConnect Wireless LAN

WHAT IT DOES:

Allows growing businesses to painlessly extend their local-area network. Rather than punch holes in walls and run new cable, offices add wireless hubs to the existing LAN and give AirConnect cards to new employees.

AVAILABLE: Now.

PRICE: \$1,795 for a wireless hub and three modem cards.

DRAWBACKS: Requires some technical knowledge to set up.



Motorola Accompli 009 Personal Communicator

WHAT IT DOES:

Reads WAP-enabled Internet sites on a color screen. Sends e-mail and voice. Synchronizes with desktop personal-information managers.

AVAILABLE: First quarter 2001.

PRICE: Less than \$600.

DRAWBACKS: Not all communications carriers support this device.



Palm V1x from Palm

WHAT IT DOES:

Sends and receives e-mail. Lets you schedule meetings and organize personal records. Can call up news clips from E-trade.com, Fodor's.com, and 400 other sites.

AVAILABLE: Now.

PRICE: \$449 for device, plus \$10-\$45 per month for Palm.net Internet service.

DRAWBACKS: Only small text messages can be sent. Can't freely browse any Internet site.



dial-up. No credit cards. It's just on, and it's fast. Wi-Fi allows laptop users to download Web pages at 11 megabits per second—that's slightly faster than digital subscriber line (DSL) modems and 50 to 200 times as fast as ordinary cellular modems. Although still in the early rollout stage, you can expect to see Wi-Fi services by 2001 in numerous airports, hotels, and even a few convention halls and sports stadiums.

Here's how it works: A notebook computer with either a built-in Wi-Fi modem or an attachable Wi-Fi network modem card sends a wireless signal to receivers scattered around the hotel or airport. Once the signal is received, it's passed to a wired, Ethernet local-area network, the kind used in most offices. To use the service, you'd pay a subscription charge, typically about \$10 per day for unlimited usage, and spend an additional \$150 to \$200 for the insertable Wi-Fi card that goes in the laptop.

Wi-Fi networks should be fairly common by the end of 2001. The only drawback so far: Since different hotels and airports may strike deals with different Wi-Fi providers, you might find yourself needing multiple subscriptions and cards if you travel a lot.

Nevertheless, the players are moving ahead vigorously with their plans. For instance, SoftNet Sys-

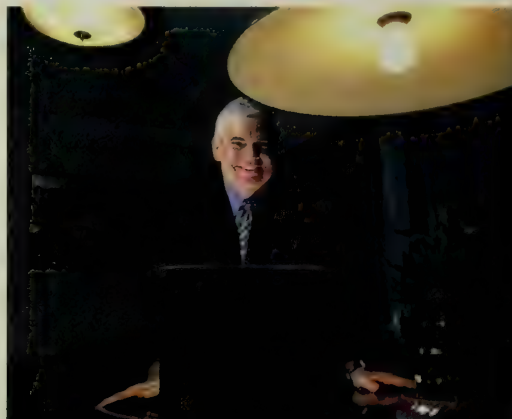
A Wireless Web Wizard

Clarence E. Friend isn't paying lip service to the wireless Web—he's making it a reality. For two years, the founder of AirTrac Inc. in Huntington Beach, Calif., has worked to bring voice-activated Web browsing to the masses. Later this month, he'll watch his dream come true: Cellular One Group will begin offering AirTrac's Wireless Web by Voice service on its Internet site (www.cellularone.com).

Wireless Web by Voice, AirTrac's first product, lets cell-phone users browse the Web—in very limited fashion—by voice. Callers will be able to send and receive e-mail and request stock quotes, sports scores, and other tersely worded items. Technology developed by AirTrac and Conversational Computing Corp., of Redmond, Wash., translates text sent over the Internet to speech—in English or Spanish.

The pact with Cellular One is AirTrac's first big contract and may help the tiny, 25-person developer to be heard above the din of other "voice portal" Internet companies. Scores of technology companies, large and small, have been scrambling to offer voice-activated options. Among them is America Online Inc., which in October launched a service that allows its members to listen to e-mail over the phone. AOL's speech-recognition technology was developed by SpeechWorks International Inc. of Boston, a direct competitor of AirTrac partner Conversational Computing. "It's like the gold rush of 1849," says Friend, a 25-year veteran of the telecom industry. "There is such an opportunity for young, new companies with entrepreneurial spirit."

AirTrac's service has its share of hiccups. Listening to incoming e-mails is easy, but sending them is another matter. Callers can send a voice-mail audio clip attached to an e-mail, or build an e-mail by linking a series of standard phrases, such as "thank you" and "I received your e-mail." Either way, the caller may have to repeat the message several times, until the automated response system processes the answer. As for browsing, most Web sites were built to be seen, not heard; only a handful can be surfed via voice commands. So which voice portals will ultimately succeed? That's anybody's call.



CUSTER: Wayport, offering Web access at hotels and airports, "will be as important as my boarding pass"

tems Inc.'s Aerzone subsidiary in October agreed to deliver wireless Internet services to United Airlines Inc.'s terminals and lounges. Aerzone, which struck a similar deal with Delta Air Lines Inc. in April, expects to be in nearly 30 airports by the end of 2000. A third provider, Wayport Inc., already offers service in 171 hotels and two airports and has ambitious expansion plans. And for its part, MobileStar offers its service in 95 hotels and in American Airlines Inc. facilities in 25 airports. "Once it is located at all major airports, it will be as important as my boarding pass," says Wayport customer Patrick A. Custer, president of TV set-top box maker Uni-View Technologies Corp. in Dallas. For several months, Custer has been testing Wayport's service for his 85-employee, \$9.15 million company.

THE LONG VIEW

Just how soon will Thatcher really get his hands on a multifunctional PDA, one that will let him leave a few other gadgets behind when he travels? Good question. Manufacturers are bullish that the devices will begin to blend. But whether that's in 2004, as Thatcher hopes, they're not sure. "I can see the day when we have streaming audio and video on these devices," predicts Ed Colligan, senior vice-president for sales and marketing and co-founder of PDA maker Handspring Inc. in Mountain View, Calif. "The exact time, I'm not sure about." For now, you'll have to take the future one device at a time.



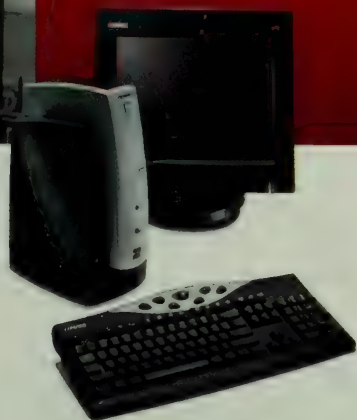
To learn more about wireless technology and emerging standards, click on Online Extras at frontier.businessweek.com

SHOW UP READY TO DO BUSINESS. OR DON'T BOTHER SHOWING UP AT ALL.



If you're looking to be productive right out of the box, there's nothing quite like the Compaq iPAQ™ Desktop pre-installed with Microsoft® Windows® 2000 Professional. It's up to 30% faster than Windows® 98, so your business applications will fly. What's more, the sleek, powerful Compaq iPAQ delivers easy (yes, we mean easy) access to the Internet. And did we mention that you can get it all — with a 2% cash-back lease offer — for just \$679? Hey, give us a call. And get down to business fast with the Compaq iPAQ.*

COMPAQ
Inspiration Technology



iPAQ LEGACY-FREE DESKTOP

\$679*

Lease for: \$19/month†

QuickAccess Code: 591124-15216

Intel® Celeron™ processor 500MHz
Microsoft® Windows® 2000 Professional
64MB/100MHz SDRAM
4.3GB SMART II Ultra ATA hard drive†
Integrated Intel 3D graphics
Integrated AC '97 audio with Premier® Sound™
Integrated Intel® PRO/100+ NIC
Compaq S510 15" (13.8" viewable) monitor
Carbon Internet USB Easy Access keyboard
Carbon 2-button USB scroll mouse

Business-boosting options:

24X Max CD-ROM MultiBay™ drive: \$75
56K USB modem: \$79

Microsoft® Windows® 2000 Professional

- Reliable • Internet ready
- Easy to use and maintain



To buy direct or for your nearest reseller
1-888-489-0481 directplus.compaq.com

Compaq recommends Microsoft® Windows® 2000 Professional for business.

Prices shown are Compaq prices. Reseller and retailer prices may vary. Prices shown are subject to change and do not include applicable state and local sales tax or shipping to recipient's destination. *Compaq Financial Services. Financing available through Compaq Financial Services Corporation (CFSC) to qualified commercial customers in the U.S. Financing is subject to credit approval and execution of standard CFSC documentation. Monthly lease payments are based on a 48-month Fair Market Value lease, and include taxes, fees, or shipping charges. †2% Cash Back or 90-Day Payment Deferral — customers can choose to defer lease payments for 90 days from invoice to be followed by 18, 24, 36, or 48 payments, or customers can enter into a lease with a 30-day billing cycle and receive 2% cash back on the total value of the lease. Other fees and restrictions may apply and CFSC reserves the right to change or cancel this program at any time without notice. ‡For hard drives, GB=billion bytes. †24X Max CD-ROM drive from 150 to 3600 KB/s. ©2000 Compaq Computer Corporation. All rights reserved. Compaq and the Compaq logo are registered trademarks, and iPAQ is a trademark, of Compaq Computer Corporation. Inspiration Technology is a trademark of Compaq Computer Corporation. Microsoft and Windows are registered trademarks of Microsoft Corporation. Other products mentioned herein are trademarks or registered trademarks of their respective companies. Operating system pre-installed on all portable products. Compaq is not liable for editorial, pictorial, or typographical errors in this advertisement. 7/01/711/00

David Friend has four successful companies under his belt. Can he make a run with No. 5?

DIARY OF A STARTUP

by Hilary Rosenberg IT'S A COLD FEBRUARY MORNING when we catch up with David Friend at the Boston offices of eYak Inc., his telecom services startup. At 7:15 a.m., he's padding about in sweats and sneakers after biking from his home in the city's Back Bay section. He looks very much the i-entrepreneur, with one exception: Friend's 52.



Photographs by Porter Gifford



MOVING TARGET:
Friend (from left)
at his Cape Cod
home; jogging to
work; in confer-
ence; in the kitchen
with daughter Lilly,
13; and in typical
business attire

That maturity explains a lot about his serene demeanor, because Friend certainly has plenty to worry about. His nine-month-old company, with 20 employees, has no firm revenue model, no clear marketing plan, and no finished product. The phones aren't working properly, and the week before, someone upstairs moved a radiator that unleashed a flood into eYak's offices.

But Friend, even-keeled and even oddly placid, has been down this road before—four times. He

has been starting and selling companies since graduating from Yale in 1969 with a double major in music and engineering. That year, he started a business making the first mass-market music synthesizers.

Last year, he sold FaxNet

Corp., a fax Internet company, for \$240 million. In 1993, he unloaded Pilot Software Inc., a database management outfit, for \$40 million, and in 1983 he sold Computer Pictures Inc. for \$20 million.

That puts him in an elite class of entrepreneurs—those who are no longer in business to make money. For Friend, starting a company is more like the sports he loves: running up mountains or jumping waves on a sailboard. He's in it for the action. "It's so fascinating to take ideas and talent and money and mix them together and see what emerges," he says. "Seeing people in this amazing state of cranked-uppedness...well, that's fun."

And now comes eYak—his most ambitious project yet, and one that straddles the line between cutting-edge telecommunications and the Internet. Back in February, when frontier began following Friend's progress, the serial entrepreneur had a clear, two-pronged plan. For business customers, eYak would offer cheap, high-quality conference calling that seamlessly blended various technologies. For consumers in Internet communities, the same software would allow groups to have anonymous discussions, or let chat participants call "talk shows" during which their call would be streamed over the Web. "There's endless numbers of cool things we could do," he says.

Unlike less experienced entrepreneurs, however, Friend harbored no illusions about the distance between potential and profit. Launching a company is a messy process, he says, in which a smart entrepreneur will change direction repeatedly and stray far from the initial plan. "I've never made a fortune doing what we said we would do at the beginning," he says. There are too many technical failures and changes in the market. Backers pull out, launch dates

Friend says he starts companies because he loves the action—not for the money

David Friend

BORN: New Rochelle, N.Y., 1948.

EDUCATION: BS in engineering, Yale, 1969. Princeton graduate school of electrical engineering—dropped out in the first year.

CAREER:

Founded and sold three software companies—and one that made musical synthesizers—between 1969 and 1999. Total sales price: \$300 million.

FAMILY: Married; four children, ages 13 to 23.

PERSONAL TIME: Fitness fanatic. Runs, windsurfs, bikes, climbs mountains, canoes.

MUSICAL NOTES: Sings madrigals, plays piano.

LAST BOOKS READ: Richard P. Feynman's *Lectures on Gravitation*; Zachary Karabell's *The Last Campaign: How Harry Truman Won the 1948 Election*.

slip, stock markets plunge. He learned that the hard way. "I wish I'd had a good mentor," Friend says. "That just never happened. So over the years I've made every stupid mistake you can make." But it left him prepared for anything. Failure, he says matter of factly, was not really a possibility.

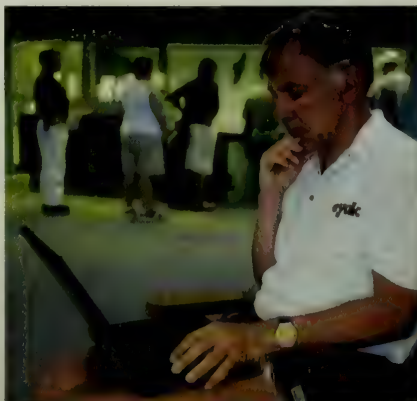
FIRST MOVES

The concept for eYak sprang from one of Friend's pet peeves: During conference calls, it's impossible to tell if everyone is looking at the same thing. What if, using the Web, each participant could put a document on the others' screens with a single mouse click—and talk about it on a low-cost call? That, he figured, would be a great business.

To explore this raw idea, Friend, in early 1999, turned to Jeffry C. Flowers, 46, the technical brains behind all three of Friend's previous software companies. It took Flowers only three months to come up with preliminary software for both shared visuals and for creating conference calls on cheap computers rather than expensive circuit cards.

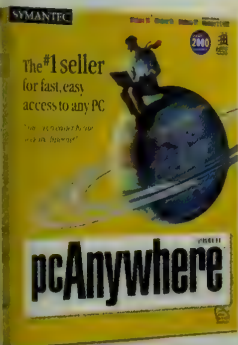
The timing couldn't have been better for raising money: The Internet frenzy had nearly peaked. One Monday in June, 1999, Friend and Flowers made a PowerPoint presentation to Bic Stevens, a former Pilot Software board member who was now a managing director of Zero Stage Capital, a Boston venture-capital firm. By Friday, they had a commitment for \$2 million.

Over the next four months, Flowers and a handful of programmers hacked away at a prototype. It was Oct. 7, 1999, when Flowers called Friend with the mag-





**Helpdesk.
Troubleshoot.
Telecommute.
Anywhere, anytime.**



No matter where you are in the world, here is the #1 seller for fast, easy access to any remote computer. If your job takes you on the road, pcAnywhere lets you retrieve information, transfer files, and run desktop applications—as if you were back in your office. If you're troubleshooting systems and providing helpdesk support for mobile users, it lets you quickly and conveniently resolve user problems and manage mission-critical workstations servers by remote control—without leaving your desk. Helpdesk, troubleshoot, telecommute? There's no better way. pcAnywhere 9.2 now Windows® 2000 certified!

Visit www.symantec.com/pca or see your local retailer for pcAnywhere 9.2.



Symantec, the Symantec logo, and pcAnywhere are U.S. registered trademarks of Symantec Corporation. Microsoft, Windows, Windows NT, the Windows logo are registered trademarks of Microsoft Corporation in the United States and/or other countries. Copyright © 2000 Symantec Corporation. All rights reserved. 9/00 Printed in the U.S.A.

SYMANTEC.

ic words: "Let's put together a conference call." As five voices simultaneously spoke on his computer, a cheer went up. "We felt like Alexander Graham Bell," Friend recalls.

The prototype proved a magnet for money and influence. The next round of financing, \$15 million in total, came from three firms: Zero Stage; the Rockefeller family's New York-based Venrock, another past investor; and Bain & Co., the Boston-based management consultants, which put in its partners' own funds. At a wedding, Friend met

Clayton M. Christensen, a Harvard Business School professor who had written a book on "disruptive technologies." The next week he joined the board. Adding more star power, Friend recruited former Federal Communications Commission Chairman Reed E. Hundt, a former Yale classmate, as both an investor and a member of his advisory board.

By the end of 1999, as eYak's team dreamed up more uses for the technology, revenue projections ballooned and strategy began to shift. Now, Friend thought he would need to raise more than twice the \$25 million to \$30 million he had planned.

IN THE MONEY

Aiming for a May launch, Friend began to concentrate on fund-raising in March. And for the first time, he seemed nervous. He had never raised more than \$25 million at a shot, and he had no experience with Wall Street. It was an awkward relationship for Friend, who preferred taking ideas to investors himself.

But as he trooped from one New York investment house to the next, Friend discovered that the bankers saw "voice enablement of the Web," not teleconferencing, as the Next Big Thing. Friend, with his telecom background, hadn't quite seen

it. Now he did. "There's no substitute for testing a product against the market," he says, in this case the capital market. He and Flowers briefly discussed dropping teleconferencing altogether, but his other financiers—the vcs—insisted eYak had a bright future there. So Friend agreed to proceed on two tracks. The new plan: eYak would provide voice technology for free to Web portals, such as Lycos Inc., and sell audio ads on the sites. He gave the staff a week to come up with revenue estimates.

The idea didn't last even that long. Friend would have to build an ad sales force to make it work. Why do that, his board asked, when Web sites already had relationships with advertisers? Friend again changed his business model. "We need to provide Web sites with a vessel that can carry advertising," an audio ad server, he said. Revenue Model No. 3: Charge Web sites a set fee for the service or have customers pay for chat time.

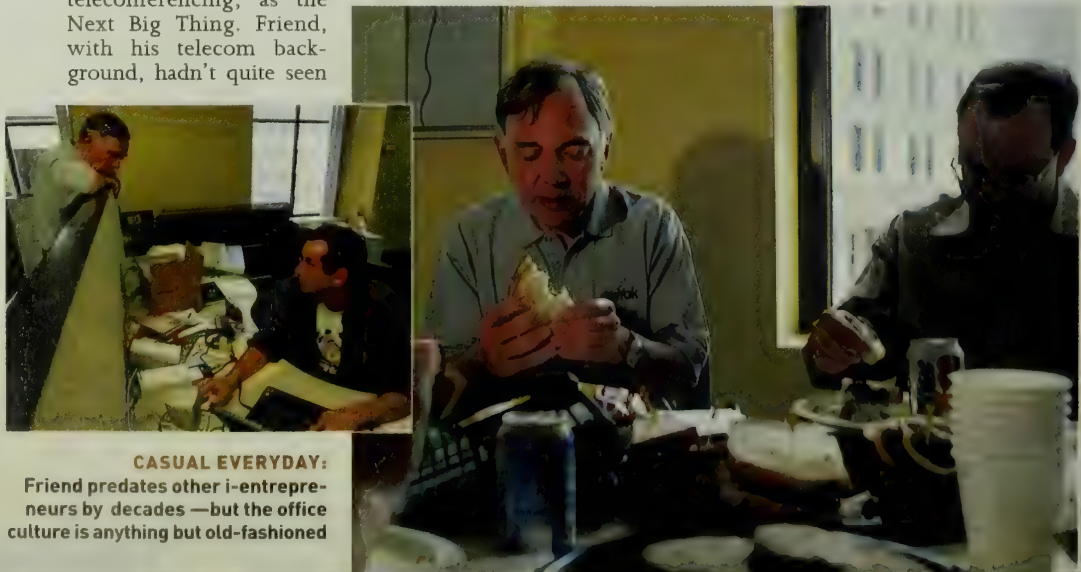
With still more application ideas flowing in, Friend felt "overwhelmed." He mentioned his dilemma to Christopher J. Zook, the head of Bain's e-commerce practice. Before long, Bain launched a five-month, \$750,000 "quantitative analysis" job, aiming to pare a list of 28 possible products to those with the most commercial potential.

HERE WE GO AGAIN

They had just gotten started when a real earthquake hit—the collapse of the Nasdaq in April, which threatened to take down the entire e-business sector. "This has happened to me at least two or three times," Friend says philosophically, recalling that the 1987 crash occurred while he sought financing for Pilot Software. He now worried the slump would cut the amount he could raise. Fortunately, investors still had lots of new cash they had to invest. They might demand more equity than before, but Friend could live with that.

The bigger problem was strategic: While Wall

When the first call went through, "we felt like Alexander Graham Bell"



CASUAL EVERYDAY: Friend predates other i-entrepreneurs by decades—but the office culture is anything but old-fashioned

Log in NOW

www.hp.com/go/business9



You don't need more help.

Just the right help.

The right help starts with a visit to the HP Business Center. Because it can help you spend less time on technology, and more time on your business. It's the one-stop source for companies like yours that need integrated business services and solutions. Hard to believe? Check out HP's Web Wizard—it's the easy way to create a website for your company—complete with e-commerce capabilities. And it only takes 30 minutes, start to finish! HP will provide you with the services of a web hosting consultant, to help you get the most from your website—absolutely free! So, we'll waive the initial set-up fee.

**SAVE
UP TO
\$39.95**

To take advantage of this special offer, or find out more about HP's business services, just visit www.hp.com/go/business9. You can set up e-mail for the whole office. Access professional services like printing, binding and distribution. Host meetings online and more! Some services are free, some have a fee. Just pick what's right for you, and leave the rest to HP.

Register today and create your company website in minutes, and for a limited time only we'll waive the initial set-up fee. Visit www.hp.com/go/business9



Complete HP Web Wizard offer terms and conditions go to www.hp.com/go/business9.

© Hewlett-Packard Company.



FAMILY MAN:
Throughout his career,
Friend has struggled to balance
work and home life



Street bankers liked Model 3, they wanted to see contracts. "I need the marketing guys to come in with some relationships with Web sites that I can wave around," he told *frontier*. In truth, though, he had nothing to show. "Lycos wants a demo in two weeks and we're not ready," he said. Finally, the unflappable Friend, exhausted from the fundraising, seemed truly agitated. The short-staffed engineering group was behind schedule on the ad servers for the Web site voice products—and in June, as several investors came by for a demonstration just before committing, the servers crashed. The engineers, unaware of the guests' appointment, were updating the system that day. "You can imagine my panic," Friend says. "In situations like that, you stay calm in front of the investor, then scream."

That, too, passed. Friend not only got offers to raise the money from Donaldson, Lufkin & Jenrette Inc. and BT Alex Brown Inc., he was able to turn them down. VCs—led by UBS Ventures—came through. On June 30, he gathered the staff, passed out paper cups of champagne, and announced—to

the cheers of the now 80 employees—the completion of the \$62 million financing.

THE MORE THINGS CHANGE

One question remained: Just what were these backers backing? By the end of July, Bain had judged six applications most likely to succeed. Commercial teleconferencing now clearly had the most potential, followed by a new one—distance learning. Other products would include eYak live events (similar to talk radio); Buddy Yak instant messaging; live auctions; and Yak Club Network free teleconferencing with friends and family.

But the question wouldn't die. Management wanted to pursue only conferencing and distance learning, because ad revenue and fees wouldn't cover costs on the others. Bain countered that they needed a mass-market Internet product to impress Wall Street for a future IPO. Friend chose instant messaging—hardly a unique product—as the simplest to execute.

In the buildup to the launch, which staff shortages had pushed back to November, another strategic shift took place. A number of foreign phone companies expressed interest in buying eYak's technology outright rather than its services. Some U.S. telcos had the same idea. Suddenly, it looked like Friend could make old-fashioned deals, complete with big, clearly defined payoffs. Plans are now afoot to build platforms in Europe and Asia next year.

Has Friend finally hit on the right strategy and product? He's still not sure. Getting to that point is always a nerve-racking process, he says, and the last nine months have been par for the course. "The first two or three years of a business, it's just so exciting," he says. "The next few, I fulfill my obligations to investors." And then he's gone. So if eYak ever does get on an even keel, you can be sure Friend won't be on board much longer.

Friendly Advice

After starting five companies, David Friend has firm views on what it takes to succeed—and to stay sane:

Invest in products you would use yourself ...

Don't assume that you can predict the products other people want

Constantly prune the business so that it's easy to understand ...

Don't try to do so many different things that you lose focus

Finance with a small number of big investors ...

Responding to many smaller investors will sap your energy

Raise money when it's available ...

Don't wait until you need it to go looking

Do a great slide show and get face time ...

Don't assume that potential investors will read your business plan

Delegate and find time to get away from work ...

A workaholic is an ineffective leader



Let David Friend answer your questions about starting a business. Send an e-mail to frontier@businessweek.com



NetPost™ Mailing Online

It's like having a print-fold-stuff-stamp-mail
button on your personal computer.

Fly Like an Eagle.™



**Introducing NetPost™
Mailing Online from
the U.S. Postal Service®.**

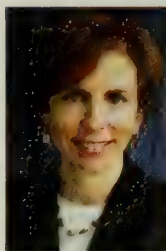
Now you can create a mail piece on your personal computer, load it to our Web site, and our professional print shops will do the rest. We'll print, collate, fold, stuff, address, stamp, sort and have it in the mail in just 24 hours.

Start mailing online today and find out about our free offer at www.usps.com



**UNITED STATES
POSTAL SERVICE**

www.usps.com



Women's Work

In their journey among the world's female artisans, two successful entrepreneurs found much to learn

BY ROBIN D. SCHATZ

PICTURE THE SCENE: A poor Indian village in Gujarat near the Pakistani border. Paola Gianturco, an American marketing consultant, and her colleague Toby Tuttle have come to chronicle the daily lives and business struggles of the renowned mirror embroiderers there. The Muslim women first cover their faces in the Americans' presence. It's not because they're shy; they assume that the two visitors, with cropped hair and trousers, are men.

Considering the vast cultural gulf that separates these entrepreneurs from their Third World counterparts, it's surprising how much they can learn from each other. If you have any doubts, take a good long look at *In Her Hands: Craftswomen Changing the World*, (Monacelli Press, New York) a striking new book photographed and written by Gianturco and Tuttle.

Five years ago, Gianturco, now 61, was teaching leadership skills to high-level executive women at Stanford University and Mills College in Oakland, Calif., and consulting on glass-ceiling issues to major corporations. That's when she was "electrified" by the news from the U.N.'s Fourth World Conference on Women in Beijing: One-fourth of the world's families were supported exclusively by women and one-quarter more primarily by women—mostly on salaries of less than a dollar a day. "It seemed to me if they were successful in educating their next generation, it could change more than their children's futures and family's future. It could alter their countries' futures," Gianturco says.

Compelled by her strong interest in women's business issues and inspired by the recent death of her father, who

had devoted his life to helping people, Gianturco decided to write a book to highlight the struggles of these Third World entrepreneurs. She informed her clients she was taking a yearlong sabbatical from her one-person consul-



"CONNECTION": Tuttle and Gianturco (right) chronicled these Bolivian knitters (above)

tancy, the Gianturco Co. in Mill Valley, Calif. She recruited her former agency buddy Tuttle, now 64, who was just then scaling back the investment banking business she ran with her husband Tim Tuttle. In the fall of 1996, the two women cashed in their frequent-flier miles, and began an 18-month odyssey that would entail six trips to 12 different countries. "I had

collected folk art for about 15 years," says Gianturco, "but my link was really to women and business."

Besides India's mirror embroiderers the book introduces us to a broad array of craftswomen who are slowly grasping the importance of adequate capital and marketing. In Bolivia, we meet the knitters in a credit association who joyfully bless their loan money with confetti and beer. In South Africa, we learn of Zulu basket weavers who sell under a common brand name.

Over and over again, Gianturco and Tuttle were struck by the women's teamwork, something they say U.S. companies would do well to emulate. Consider the Turkish rug weavers, who often take turns on each other's looms during social calls. Not only can one pick up where the other left off because of their "shared knowledge base," they never ask for payment, even though rug weavers are paid by the knot, says Gianturco.

While Gianturco resisted the temptation to give advice during the book project, she's now doing her part to help the women. She chairs The Crafts Center in Washington, D.C., which works with indigenous artisans, and serves as a board member of The Association for Women in Development, also based in D.C. She and Tuttle also plan to donate a percentage of the book's profits to six international non-profit organizations.

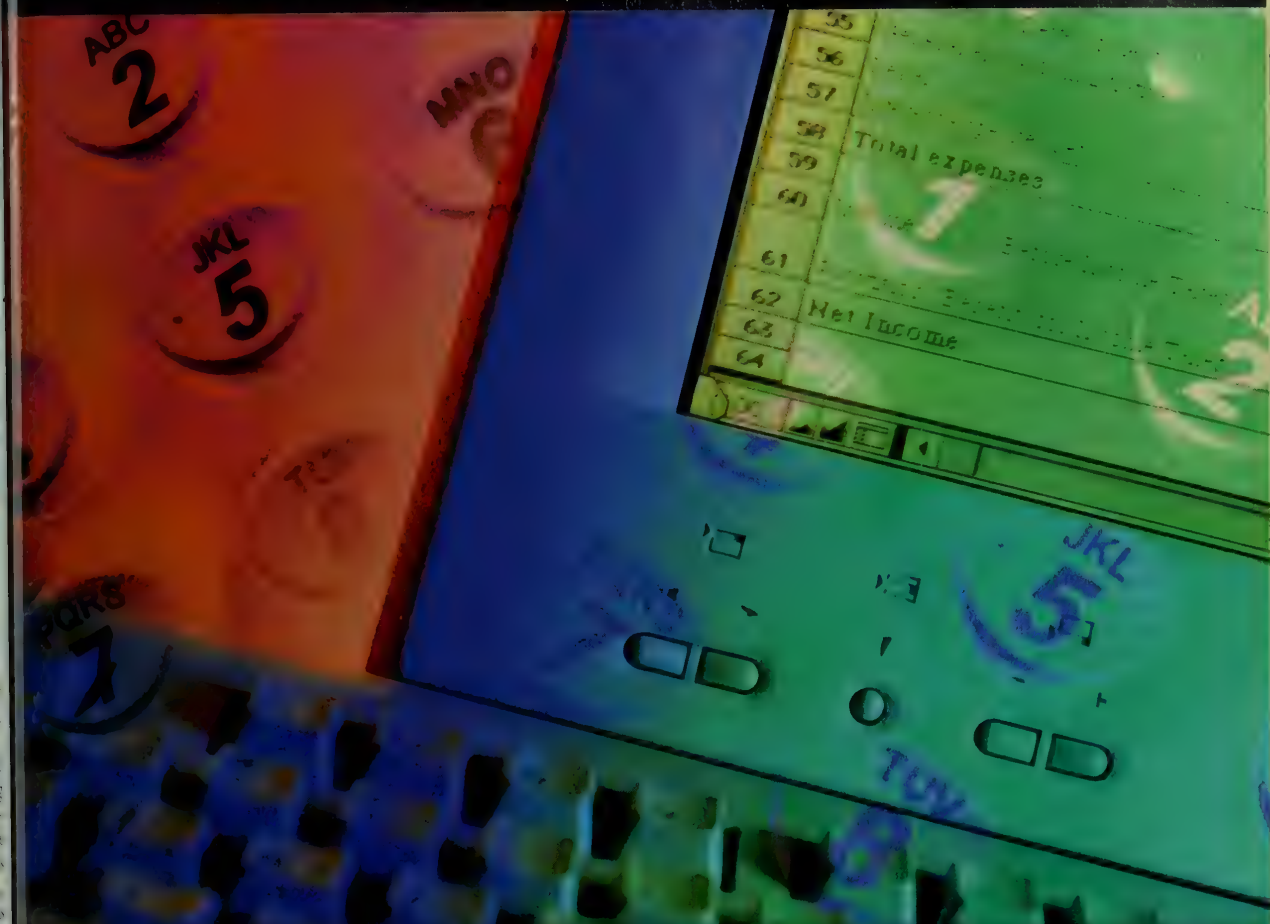
In many respects, the journey that Gianturco began with her sabbatical is not over. She has since resumed consulting on a smaller scale, but her perspective has truly expanded. "I ended up with a profound feeling of connection with people all over the world," she says. Her latest client? An adventure-travel company.



Schatz, a small-business editor, can be reached at frontier.businessweek.com

Same great Lucent equipment.

New ExpanetsTM products & services.



Lucent's Growing and Emerging Markets Division is now Expanets

At Expanets, we're leading a revolution in the way your business communicates, providing solutions to help you stay connected no matter what technology you're using.

That's because we'll unify all of your different communications systems into one seamless network. Make your phone system compatible with your computers. Get your fax machine talking to your website. We even offer local and long distance service for a total communications solution.

Plus, we're the largest distributor of Lucent's mid-market communications technology and strategic partner of giants like Cisco, HP and IBM, so you can take advantage of the best names in the industry without having to manage multiple vendors. *All of which means you'll spend less time keeping up with technology and more time making use of it.*

Ready to learn more? Call us today **1-800-247-7000** Prompt 2
or visit us online at www.expanets.com

Expanets logo is a trademark of Expanets, Inc.

Exp@nets

We Listen. We Connect.TM



The Expanets Emerging Networks Group of
Lucent Technologies



Communications



Networking



e-Solutions

Winning At Cards

J.R. Badian's supermarket postcards come up trumps

ADVERTISERS HAVE LONG targeted youthful consumers by placing racks of free postcards in hip restaurants and nightclubs. In 1998, J.R. Badian hit upon a less hip, though just as promising, venue for postcard marketing—supermarkets. After all, they have heavy foot traffic and lots of moms, a demographic notoriously tough for advertisers to reach. Compared with nightclubs, distribution would be a cinch. "If you sign up Pathmark, you get 130 stores," says Badian. "Supermarkets were too perfect."

Two years later, Badian's company, BrandAid Communications, is sitting on \$3 million in venture capital and running trials with advertisers such as Kellogg's and Hawaiian Punch. Ad agencies pay Badian a monthly fee to print the cards and stock them in racks in supermarkets nationwide. Consumers take them because the artwork is appealing and the ad message subtle. "The results are really phenomenal," says Sara Morgan, an account supervisor for Lifetime Television. "Postcard advertising has really taken off." Supermarkets, which receive a cut of Badian's sales, appear just as enthusiastic. After three months of operation, BrandAid has signed exclusive contracts with Pathmark Stores, Vons, and Dominics, and has grossed some \$80,000.

Now 27, Badian was a strategic planner at News Corp. when the idea for BrandAid hit. He entered Babson College's MBA program in May, 1998. A year later, after five months in Babson's incubator, BrandAid won the school's business-plan competition. Badian began pitching for venture backing. "It was us against the dot-coms," he says. By fall, the company had \$750,000.

In 2000, the 10-employee company hopes to hit sales of \$600,000. Optimistic? Sure. But Badian says that \$45,000—about the cost of a half-page ad in a national magazine—buys 1 million postcards in 1,000 supermarkets. And that's no card trick.

—KIMBERLY WEISUL





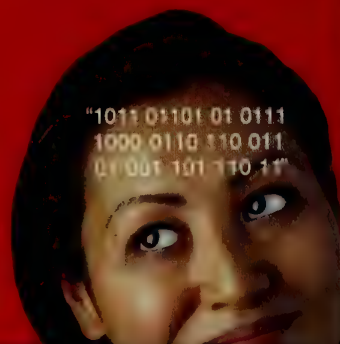
Shake hands with your new insurance partner.

ewausa.com

Small business insurance online from someone you trust.

Get bandwidth as big as your ideas.

(Geniuses included.)



High-speed Internet



Local/Long Distance

For any size company

Now it's easy to get the communications capacity you need to do business today. Teligent SmartWave™ technology gives any size company many of the advantages of a fiber-optic connection all from our small antenna on the roof of your office building. You get Internet access up to 100 times faster than a dial-up connection. Enough power for full-motion videoconferencing. Plus high-quality local and long distance phone service. And our pricing is equally amazing. For local calls and Internet, it's a flat monthly charge that's up to 30% less than you currently pay. And for long distance, your interstate calls are as low as 5.5¢ a minute. Contact us. After all, we know how much you appreciate a good idea. *For more information, visit us at teligent.com.*

Teligent
The Smart Way To Communicate

TURNAROUNDS

HAZY PICTURE AT POLAROID

It still must figure out how to make the transition to digital cameras

Last year, Polaroid Corp. finally broke out of its long stupor. In a brilliant stroke, it developed the \$25 I-Zone instant camera that produces stamp-size sticker prints and became a runaway hit with the teeny-bopper crowd. Kids used the tiny pictures to decorate everything from their lockers to their clothes, and adults discovered uses for the sticky pics that Polaroid never imagined, such as affixing photos of their shoes to shoe-oxes. The I-Zone quickly became the world's best-selling camera, in terms of units, and helped Polaroid nish in the black for the first time in five years.

But it's now clear that Polaroid is going to need a lot more than the I-Zone to deliver on its long-promised turnaround. With the U.S. economy slowing, the Cambridge (Mass.)-based company announced in October that big retailers did not place their usual flood of holiday orders in September. As a result, Polaroid earned \$18 million on sales of \$458 million in the third quarter, a 26% lower profit than the Street had expected. Investors hammered the stock, which has plunged to a 15-year low of less than \$9 a share.

TAGGERING. Even more critical, however, is the question of Polaroid's next step. The company is moving aggressively to meet the exploding demand for digital cameras, but the returns are uncertain—no one has yet figured out how to make much money in this intensely competitive market. At the same time, Polaroid is carrying a staggering debt load of \$830 million, a truly a vestige of the company's struggle to avoid a takeover by Shamrock Holdings Inc. in the late 1980s. Interest payments of \$63 million ate up 58% of operating profits through the first nine months of the year. With \$61 million in

cash on hand as of Sept. 30, the company has little margin for error. "The question is whether they'll be able to carry through with their turnaround, or whether they're dead on the vine," says Brett Barner, manager of the STI Small Cap Growth Fund, one of Polaroid's largest investors.

While readily conceding these are tough days for Polaroid, Chief Executive Gary T. DiCamillo insists that his recovery plan is on track. "Turnarounds take a long time," he says. Having given Polaroid fresh momentum with the I-Zone, he is rolling out cameras that combine digital technology with instant film. That will be followed in a year or two by an all-new print technology he says will be higher quality and cheaper



BIG SHOT

New products such as the hit instant-film camera, I-Zone, are key to CEO DiCamillo's plan

than traditional 35mm prints. "We have as good a chance as anyone" to make it in the digital world, DiCamillo says.

It has been slow going so far. In 1999, Polaroid eked out \$9 million in earnings on \$1.9 billion in sales. The consensus among analysts is for 2000 earnings to climb 17%, to about \$10.5 million, says First Call Corp. Sales are expected to grow slightly, possibly rising to about \$2 billion. The company has been considered takeover bait for several years for companies such as Agfa-Gevaert Group or Sony Corp. But even as its market cap has shriveled to a mere \$375 million—down from \$2.4 billion in August, 1997—hopes for a takeover have faded. The disappointing third quarter didn't help. Sales in that period fell 1%, on accelerated erosion of one of its core businesses—peel-apart

The Corporation



Digital cameras already are eating into instant-film sales

instant film. Sales of the film fell by about 30%, to roughly \$60 million, because the professional photographers who use it are rapidly switching to digital technology, says Ulysses A. Yannas, an analyst at Buckman, Buckman & Reid, a New York brokerage firm.

But DiCamillo insists that the worries about the fall results are misplaced. He says the previously delayed Christmas orders have started to roll in, and digital camera sales are now running ahead of expectations. But he acknowledges that the company's debt load is about \$200 million too high. On Nov. 16, he announced the first step in reducing that debt: Polaroid said it plans to vacate and sell an I.M. Pei-designed factory near Boston that analysts estimate is worth more than \$100 million.

JUMP-START. DiCamillo knows a tough turnaround when he sees one. He took the helm in 1995 after a highly successful stint as CEO of Black & Decker Corp., where he is credited with revitalizing the company's consumer power-tool business by introducing lots of new products. The first outside CEO at Polaroid, DiCamillo says he quickly discovered that the company's problems were worse than he expected. They included a lack of any R&D aimed at improving the company's core product, instant film. He responded with a three-pronged strategy. To cut costs, he slashed the workforce by 27%, from 12,300 to 9,000 workers, and sold unprofitable commercial businesses for more than \$50 million. Then he jump-started the effort to find new products in the company's billion-dollar, instant-film operation, which provides more than 90% of the company's profits. Finally, he began moving Polaroid into the digital age. "Not only do we have to rejuvenate our core business," he says, "we also have to adapt to technological change."

Instant photography had been languishing for so long that it was unfamiliar to two generations of customers. The company had been concentrating

on developing specialty products such as an imaging film designed to replace X-rays, which turned into a costly bomb. DiCamillo abruptly shifted direction to focus more on the consumer market. He hired a new design team, introduced loads of new products, and revitalized marketing.

The company now introduces about 20 to 25 products a year. Another big hit last year besides the I-Zone was the JoyCam, which produces bigger prints. This Christmas, the company is introducing about a dozen products, including more variations on the I-Zone, digital picture frames that display images downloaded from the Internet, and the Webster, a tiny scanner that makes digital images of I-Zone photos. Retailers are enthusiastic. "This brings the fun back into photogra-

phy and introduces it to the younger shutterbug," says Shawn Haynes, director of photography sales at Amazon.com Inc.'s Web site, where eight of his recent top 10 sellers were I-Zone or JoyCam products.

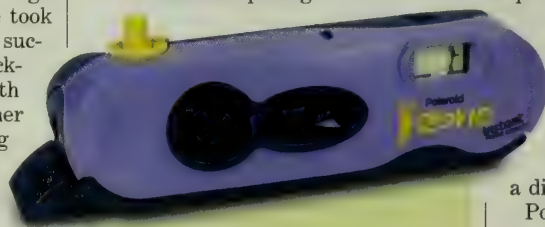
Polaroid's prospects in digital photography are less certain. It's a market leader in low-end digital cameras, with its best-seller costing \$175. And it is one of the few companies making a profit on them. But its 5% to 10% margins on digital cameras are tiny compared with the 60%-plus margins it makes on instant film. And the field is only growing more crowded, with more than 100 companies fighting it out.

Moreover, as digital cameras proliferate, they suck the life out of Polaroid's older instant-film products. It's only a question of how rapidly these products will fall. Already, instant-camera users are making the transition. Tom Alexander, an agent with DeWolfe Real Estate in Boston, says he now rarely uses his Polaroid: "If you want to advertise on the Internet, it's useful to have a digital camera."

Polaroid's best hope next year is for the I-Zone to stay hot and for new hybrid digital/instant cameras to kick in. That's the reasoning behind Wall Street's projections of further profit growth for the company in 2001. Still, investors have pushed the stock to new lows because of the long-term doubts. "The consumer market for hybrid products is not big," says Edward Y. Lee, consultant at Lyra Research in Cambridge, Mass.

Count the Polaroid board among the optimists: Last December, 10 months before DiCamillo's contract was set to expire, the board extended his term to the end of 2002. But if he's going to make it that far, he'll have to start mastering a digital transition that he already claimed such CEOs as Eastman Kodak Co.'s George Fisher. The picture at Polaroid is anything but clear.

By Rochelle Sharpe in Boston, with Geoffrey Smith



A FOCUS ON NEW PRODUCTS INSTANT FILM

Maintain growth of instant-film sales by updating the I-Zone and JoyCam cameras

HYBRID DIGITAL-INSTANT PRODUCTS

Combine digital technology with instant film in a new line of cameras and other products

DIGITAL PRODUCTS

Broaden its reach into the digital market with new cameras and a technology that produces low-price, high-quality prints



BLUE MARTINI
O F T W A R E

THEY COME TO YOUR SITE LOOKING FOR SOMETHING DIFFERENT. GIVE IT TO THEM.

Everybody's different. When you know your customers—what they need, what they like and what may be of interest to them in the future—it's a lot easier to give them what they're looking for. Blue Martini has the power to make it all happen. Our applications analyze customer information then deliver a highly personalized experience based on that analysis. The time spent interacting with your company is more relevant. It's quicker. And it's great for sales. To find out how Blue Martini's e-business solutions can improve your customer's experience, visit www.bluemartini.com/prism.

Intelligence is the

SAN FRANCISCO NEW YORK LONDON

Robertson Stephens, Inc. is a subsidiary of FleetBoston Financial and is an NASD member and a member of all major exchanges

est hedge fund.



COMMENTARY

By Catherine Arnst

EBOLA COULD SOON BE THE WEST'S PROBLEM, TOO

There is a crisis brewing in the world that we ignore at our peril. The Ebola virus is back, and it's spreading.

Until now, major outbreaks of this incurable and highly contagious disease have occurred in the Congo, Sudan, and Gabon, three of Africa's poorest nations. But in mid-October an Ebola epidemic broke out in two regions of relatively well-off Uganda, with deadly results. As of Nov. 17,

officials asked all those who had come in contact with the dead man to confine themselves to their homes. The cause of death turned out to be hepatitis, but if it had been Ebola, everyone the dead man had been in contact with, even after death, could have been infected—including the police and fire teams who raced to the scene. "It got our attention," admits Dane County Public Health Administrator Gareth Johnson.

others—a means of transmission that often wipes out entire families. Patients develop a high fever and within a week suffer massive internal bleeding, shock, and finally, an excruciating death. Some recover, but no one can predict who or explain why.

Significantly, the Uganda outbreak has killed only about one-third of its victims, compared with 90% in prior epidemics. Dr. Patricia Campbell, in Kampala with a team from Doctors Without Borders, attributes the lower mortality rate in part to "the really excellent capabilities of Uganda's health structure." But the survivors give rise to a new concern—the virus may be able to hide in the bodies of recovered patients, who could go on to infect others, or it could mutate. "Our fear is that it will change into something more like measles or influenza, where there is easy airborne transmission," says LeDuc.

NO CURE IN SIGHT. Researchers have recently made some progress in understanding Ebola. In July, a team from the National Institutes of Health identified a protein in the virus that is likely to be responsible for the massive internal bleeding that kills most Ebola victims. And in October, scientists from Mt. Sinai School of Medicine in New York and Philipps-Universität in Marburg, Germany, found a protein that the virus uses to disable the immune system.

But a cure is still a long way off. Near-term, the early-warning and response systems of key African nations must be bolstered, along with their medical storerooms. In Uganda, the disease was quickly contained because its hospitals could afford such simple precautions as soap, clean water, rubber gloves, and face masks—unheard-of luxuries in the Congo.

Africa's many problems may seem intractable, but wealthy nations would be well advised to figure out a solution to this one. We really are a global village when it comes to communicable diseases.

With Janet Ginsburg
in Chicago



UGANDA: The nation's health-care system contained its outbreak quickly

329 people had been stricken with the disease, and 107 had died.

This is, of course, a horrific tragedy, and the West should respond for humanitarian reasons if for no other. But self-interest should kick in as well. Tuberculosis, malaria, and AIDS may be far more widespread, but Ebola will likely not be isolated in Africa forever. It is only a matter of time before an infected person boards a plane and arrives in one of those countries that pays little attention to Africa now. "International travel is always a concern," warns James W. LeDuc, acting director of the Centers for Disease Control & Prevention's viral-disease division.

Case in point: In October, a man returning to Madison, Wis., from a visit to his native Senegal fell ill, complaining of severe headaches, and soon died. Concerned that Ebola may have been the culprit, county health offi-

Ebola is one of the scariest viruses the world has known. Scientists are uncertain of its origin, though monkeys are widely suspected. The disease was first identified in the Congo in 1976 when an outbreak killed 318 people, 88% of those infected. Another epidemic hit the Congo in 1995, killing 315 people, and 97 died in Gabon in 1996. Ebola was accidentally imported to the U.S. in 1989 via a shipment of infected monkeys to quarantine labs in Virginia, but it was successfully contained.

Scientists can't explain why the virus can lay dormant for years or why it breaks out in a new locale. They suspect that an epidemic starts when an animal somehow infects a human. That first victim's blood or secretions infect

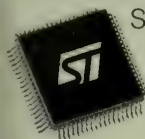
JOB NO. 1

Outside Uganda, soap, clean water, rubber gloves, and face masks are unheard-of luxuries. Supplying them is in everyone's interest

Adapt with more intelligence.



STMicroelectronics is the world leader in secure Smartcard technology. Smartcards... they're so adaptable they could put a chameleon to shame.



Single-function Smartcards are already replacing traditional bankcards and transportation passes. And new Smartcard technology would let a single multi-function card replace all your credit cards, phone cards, ID cards, etc. Even start your car. And the card would be continually updated, wirelessly and securely.

ST now makes the chips for about half the world's Smartcards. And we've committed the resources to maintain this leadership.



We put more intelligence into everything.

STMicroelectronics (formerly SGS-THOMSON) • www.st.com • A world leader in semiconductors for consumer products, automotive, telecommunications, computer peripherals, industrial automation and control systems • For opportunities: <http://jobs.st.com>

STMicroelectronics



THE COMPANY CRISIS TEAM IS ENJOYING AN UNEXPECTEDLY ROMANTIC *SUPPER*.

Word is, a flood caused a fire in a substation.

Relays trip. Lights dim. Hard drives spin down.

Data packets stall like subway cars in a tunnel.

An intern shows up with candles. And matches.

Somebody then appears with take-out dinner.

"So what's the recovery plan for all of the data?"

someone asks. Nobody answers. Who knows?

Storage is on the same network as the servers.

The servers will be back. The data won't.

THAT'S WHEN IT HITS YOU. YOU ARE *SO READY* FOR

IBM



Storage
solutions

Companies spend over \$11 billion a year to recover lost data. An IBM Storage Area Network can ensure that in a disaster, your data will be available where and when it's needed. Find out about storage solutions from IBM at a SAN Solution Center. Call 1 800 426 7777 to learn more and find a center near you.

Storage Solutions from IBM

ibm.com/storage/solutions102

@business infrastructure



BIOTECHNOLOGY

A BLOOD BOOSTER FOR AMGEN?

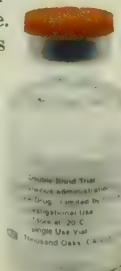
Potential blockbusters are nearing the pipeline's end

For Gloria Gregory, enduring dialysis sessions three times a week isn't the worst aspect of her kidney disease. What really gets her down is the fatigue caused by anemia, the shortage of red blood cells that commonly accompanies kidney disease. While receiving several injections per week of Amgen's anemia-fighting drug Epogen, she felt terrible for weeks at a stretch. It wasn't until Gregory entered a trial of Amgen Inc.'s new longer-lasting drug, Aranesp, that the 51-year-old mother of four was able to return to her normal routine for the first time since she started dialysis in 1995. "I love cooking, but sometimes I was so weak I couldn't stand at the stove," says Gregory, who hasn't required any anemia medication since mid-October. "Now I just go, go, go all day. My whole life has changed."

Aranesp could change Amgen's prospects as well. Riding on the success of blockbusters Epogen and Neu-

pogen—used primarily to fight infections in cancer patients—the 20-year-old biotech giant pulled in \$3 billion in sales and \$1.1 billion in profits last year. But sales of Epogen and Neupogen started sagging in the third quarter. When the Thousand Oaks (Calif.) company lowered its sales targets for the year on Oct 26, its stock dropped 15% the next day.

Clearly, Amgen could use a new



Aranesp, an anemia-fighting drug, holds the most potential for Amgen

GREGORY: "NOW I JUST GO, GO, GO"

hit. And the company is hoping that Aranesp and two other new medicines will fit the bill. In December, 1999, the company filed for Food & Drug Administration approval for Aranesp for kidney patients with anemia. Next year hopes to gain approval for two other biotech drugs: IL-1RA for rheumatoid arthritis and Abarelix for prostate cancer. Together, the three products could open up markets worth more than \$6 billion, Amgen estimates.

STAYING POWER. Aranesp is by far the biggest gun in Amgen's arsenal of new products. Among kidney patients in the U.S. alone, anemia treatment is a \$2 billion market. And Amgen says Aranesp is poised to dominate, thanks to a quality-of-life improvement it offers patients. The drug stays in a patient's bloodstream longer than Epogen and other blood boosters, so it only needs to be injected once a week or less, as opposed to the three times a week now recommended for drugs on the market. And unlike Epogen, whose sales are restricted due to marketing agreements with other drug makers, Aranesp will be marketed without constraints.

Perhaps most important, Amgen should be able to extend the market for Aranesp by gaining FDA approval to use the drug to treat anemia in cancer patients, which could bring in an extra \$1.4 billion. That could happen by 2001, based on announcements made at a November 8 analyst meeting in New York. "We're enthusiastic about the future," says Amgen CEO Kevin W. Shanahan.

Amgen's 2001 Pipeline

DRUG	PLUS	MINUS
ARANESP anemia Market: \$2 billion	As effective as existing three-times-a-week drugs, but kidney patients take it just once weekly	Must overcome physicians' resistance to treating anemia
IL-1RA rheumatoid arthritis \$1.5 billion	Blocks a key pain-causing molecule	It's not as effective as Immunex' Enbrel or Centocor's Remicad
ABARELIX prostate cancer \$1.2 billion	Blocks a hormone that produces testosterone, which causes prostate cancer growth	Must convince doctors that reducing testosterone surges is necessary

THE EPITOME OF PERFORMANCE.



ANNOUNCING HIGH-PERFORMANCE PROGRAM
MANAGEMENT SOFTWARE.

Give us one hour. We'll show you how ActiveProject®, our high-performance Web-based program management software, enables world-class companies to communicate with external partners at extraordinary speed—faster than any traditional method. And we'll demonstrate how it helps you deliver your products to market faster. In return for your time, we'll give you an extraordinary chance to win a high-performance Porsche® 911™ Carrera® worth \$82,290 (MSRP). Visit www.frametech.com/AB or call 888.311.9138 to schedule your private product presentation. You must complete your live demo before January 31, 2001 to enter the sweepstakes. Drawing will be held February 15, 2001. Contact us now—your commute may never be the same again!

ActiveProject



FRAMEWORK
TECHNOLOGIES

MANAGE PROJECTS VIRTUALLY ANYWHERE™

Sweepstakes available only to program managers and above in selected manufacturing companies. You must complete a live presentation/demo by January 31, 2001 to qualify. No purchase necessary. Void in Florida. View complete rules at www.frametech.com/rules. PORSCHE and CARRERA are registered trademarks. 911 is a trademark, and the distinctive shapes of PORSCHE automobiles are trade dress of Dr. Ing. h.c. F. Porsche AG. Used with permission of Porsche Cars North America, Inc. Porsche Cars North America, Inc. and Dr. Ing. h.c. F. Porsche AG are not affiliated or associated with this contest in any way.

©2000 Framework Technologies Corporation. All rights reserved.

AB



BECOME

ARCHITECT

OF

FREEDOM.

The writing's on the wall. Collaboration is the key to profitability in the New Economy. Enterprises must share information and processes with the outside world. It's time to harness the power of your partners, vendors, customers and employees to boost efficiencies, build value and achieve competitive advantage. But to truly collaborate, you need freedom of choice. That's what we offer at J.D. Edwards. We provide the only enterprise-wide foundation that gives you the freedom to choose the best solutions. So you can run with any idea. Connect with any business partner. Plug in any application. And transform enterprise software from a constraining liability into a liberating asset. Isn't freedom amazing? To collaborate and thrive, visit www.jdedwards.com/freedom.

THE FREEDOM TO CHOOSE. THE POWER TO SHARE.™

Science & Technology

er, who took over the reins from longtime chief Gordon M. Binder in May. "The challenge is delivering."

All of Amgen's new drugs will face competition. Abarelix, for example, will be up against several established prostate cancer treatments. As for IL-1RA, studies have shown it to be less effective than existing treatments for rheumatoid arthritis, leading some experts to question its market potential. Even Aranesp won't be an easy win. Among other things, the drug is positioned to help patients before they require dialysis—but because of previous marketing restrictions, this is new territory for Amgen. And competing head-to-head with J&J's well-established Procrit won't be easy. Meanwhile, in Europe, Aranesp will have to duke it out with Hoffmann-LaRoche Inc.'s NeoRecormon.

While battling the competition, Amgen is also being tested in court. A shadow has been cast over Amgen by a patent infringement lawsuit the company filed against Transkaryotic Therapies Inc. (TKT). Analysts and patent experts expect Amgen to prevail, but a loss would come as a real blow to the company, resulting in even more competition in an already cutthroat arena.

Amgen believes Aranesp will make up for any market-share loss Epogen suffers. The company hit on the idea for Aranesp almost by accident, when its scientists discovered that a random mutation occurring during the Epogen production process increased the drug's potency. To replicate that in the lab, the researchers had to change the Epogen molecule chain one link at a time until they came up with a compound that was both potent and safe. "We made several hundred molecules before we came to Aranesp," says Anthony J. Gringeri, vice-president for product development. The company expects FDA approval by mid-2000.

LESS PRICKLY. With two to three times the staying power of existing drugs, Aranesp translates to fewer needle pricks for patients. "When patients get stuck three times a week for anemia medication, plus more sticks for dialysis, they start to feel like pincushions," says Dr. Jill Lindberg, who managed Aranesp trials at the Ochsner Clinic in New Orleans. In the pre-dialysis market—meaning kidney patients who are not yet sick enough to require dialysis and therefore don't have to visit the doctor as often—Aranesp could be in great demand. "We have a

terrible no-show rate with those patients," Lindberg says.

Indeed, the pre-dialysis market may hold the greatest near-term potential for Aranesp. But it may also be the hardest to tap. Only 25% of anemic pre-dialysis patients are treated with currently available remedies. "Because the dosing schedule is so frequent, and the drug is expensive, [medical plan] reimbursement can be an issue," says Camilo Martinez, a former internist who now co-manages Dresdner RCM's biotech fund. Many physicians, he adds, are simply not aware that anemia might be causing their patients' fatigue and that treating it could help delay the onset of total renal failure. "Educating doctors will be a challenge," says Martinez.

The company hopes that the once-weekly dosing required with Aranesp

THE WALL ce woulda, shoulda R

DOW JONES

VOL. CCXXXIII

★★★

It's

It's N



Sharer made a bold prediction at a November analysts' meeting: 20% growth

CEO KEVIN SHARER

easier," says Dr. Edward M. Wolin, a medical oncologist at Cedars-Sinai Comprehensive Cancer Center in Los Angeles.

WAITING ON DECK. Beyond Aranesp, Amgen has high hopes for IL-1RA and Abarelix. IL-1RA combats

rheumatoid arthritis pain by blocking one of the molecules that causes inflammation. But here, Amgen will be up against Immunex Corp., which has a drug called Enbrel that blocks a different pain-causing factor. It is already on the market and has been effective in more than 70% of patients. Prospects are better for the

prostate-cancer drug Abarelix. Developed with Praecis Pharmaceuticals Inc., it appears to have a safety advantage over currently marketed medicines.

Amgen's plans to conquer new markets extend beyond 2001. Drugs for treating breast cancer, Lou Gehrig's disease, obesity, and thyroid disease are moving through the trial process. Sharer is so optimistic about Amgen's prospects that during a November analysts' meeting he predicted the company's sales and earnings would grow at a compound annual rate of 20% over five years. Winning the TKT lawsuit and the FDA's endorsement of Aranesp will be crucial—but it's only a first step. Aranesp is like a Ferrari in the garage, says Mark Kelliher, an analyst at First American Asset Management. "People know you've got it, but they've never seen you drive it." Now it's up to Sharer and his staff to ensure Aranesp can race out of that garage.

By Arlene Weintraub in Los Angeles, with David Shook in New York

BusinessWeek online

For more on Amgen as an investment play, go to the Nov. 20 Daily Briefing at www.businessweek.com/today.htm

e to say coulda, REET JOURNAL.

WSJ.com

....

75 CENTS

dex

Work Week

Solution

e insight. Few regrets. Imagine what The Journal could do for you. **Adventures in Capitalism.**

COURTESY JIMMY STILLING/AMGEN

it's the bad mamma-jamma of wireless computing



SPANworks® software with the Toshiba Bluetooth PC Card allows network and file sharing, presentation sharing, chat and business card data exchange

Bluetooth PC Card delivers up to 20 times the speed of a traditional V.90 modem with a range three times farther than other PC cards: up to 100 feet.

Bluetooth is standards-based, so it works virtually worldwide and with all Bluetooth devices.

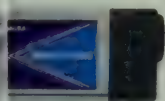


pentium® III

Toshiba recommends Microsoft® Windows® 2000 Professional for business.

¹The Toshiba Bluetooth PC Card is compatible on Microsoft Windows 98 Second Edition and Microsoft Windows Me. ²When products become available. ©2000 Toshiba America Information Systems, Inc. Iteera and SPANworks is a registered trademark of SPANworks, Inc. Intel, the Intel Inside logo and Pentium are registered trademarks and Intel SpeedStep is a trademark of Intel Corporation. All other

roducing the totally new Tecra 8100. The first ever Bluetooth PC solution.



The Toshiba Tecra® 8100 with the Bluetooth™ PC Card¹ is so fine, it's poetry in motion. With the Bluetooth PC Card, you can connect effortlessly with other Bluetooth PCs, handheld devices, LAN and Internet connections — all without

wires or cables.² Bluetooth is the latest mobile computing innovation pioneered by Toshiba through a joint venture with industry leaders. Now you can truly work without being tethered to old technology. So free yourself from the cables and wires that bind. You don't need them anymore.



Bluetooth has 128-bit encryption, which ensures that every connection is secure.

Superfast Mobile Intel® Pentium® III processors up to 850MHz featuring Intel SpeedStep™ technology and configurable from 5.6 lbs. light and 1.5" thin.

Up to 20 billion byte hard drive and a 14.1" diagonal TFT active-matrix color display.

choose freedom™
TOSHIBA

To buy direct, visit bluetooth.toshiba.com or call 1-800-TOSHIBA



Why settle for mere parts when you can have a fully integrated eCRM solution?



In customer relationship management, parts are not parts. Only parts that fit together seamlessly elevate customer service to a work of art.

As new communication channels emerge, every part of your CRM must work together perfectly. Because no matter how a customer contacts you – e-mail, voice, fax – you must respond promptly or face losing a customer.

There's one company who can offer a fully-integrated, fully-proven eCRM solution. It's Quintus.

Quintus' eCRM solution provides a single integrated view of customers across all channels - e-mail management, web-enabled contact centers, Voice over IP, CTI and more. Customers receive the service they've come to expect, in the time frame they've come to demand, in any way they choose to make contact. Period.

More than 500 companies including Mercata.com, United Airlines, Ashford.com and Ticketmaster already use Quintus. Shouldn't you? Contact us at www.quintus.com,

1-877-eContact, or sales@quintus.com.



QUINTUS

Turn the e-generation into loyal customers.

Developments to Watch

EDITED BY OTIS PORT

FROM BATS TO BOATS—WINGS TAKE TO THE WATER

FORE ORVILLE AND WILBUR Wright, many early airplane signs looked like giant birds. Some even had flapping wings. Now, Richard Dryden, a biology lecturer at Glasgow's University of Plymouth, has returned to nature for inspiration—but for a new type of sail. The concept just won a \$70,000 grant from Britain's National Environment for Science, Technology & the Arts. Dryden plans to spend next year

working full-time on his wing sail, which looks more like the wing of a bat than that of a bird.

Dryden believes the batwing sail may prove useful for all manner of watercraft, from sailboards to oil tankers that exploit wind power to reduce fuel consumption. His system's key feature is that the mast and sail automatically adapt to changing winds. The mast has joints, like the bones of a wing. In strong winds, the joints bend to reduce the sail's size. This trimming of the sail lowers its "center of effort"—the area where most of the



COPYING NATURE: *Safer sail*

wind's force is concentrated—to avoid excess pressure at the top, which can shred the sail or capsize the boat. □

KEEPING A CHECK ON FOOT-AND-MOUTH DISEASE

HOW FAST CAN A LITTLE VIRUS TRAVEL? IF it's foot-and-mouth disease (FMD), which can afflict pigs, cattle, and sheep, the answer is devastatingly fast. FMD is more contagious than the flu. The last U.S. outbreak was in 1929, but experts fear that expanded foreign trade could bring FMD back with a vengeance. "I think we've just been lucky," says Joseph F. Antelli, head of emergency programs at the U.S. Agriculture Dept.

Last month, to boost preparedness for FMD, the agriculture departments of

the U.S., Canada, and Mexico staged a mock emergency. The first FMD victims were piglets in Edinburg, Tex., that ate contaminated and undercooked feed from South America. Taken to market, some infected pigs spread the bug to a truckload



CONTAGION: *Renewed danger?*

of Mexican steers destined for a rodeo. From there, it spread to a rodeo in Alberta on cowboys' clothes, while the contaminated truck returned through the U.S. to Mexico.

In the week it took to identify FMD in this drill, the scourge spread thousands of miles. More drills are planned, in order to speed up response time. *Janet Ginsburg*

HOW TO TELL WHEN YOU'RE DONE THE SUN

NEVER KNOW WHEN THE light bulb of inspiration will hit you. University of Alberta physicist Stuart A. Jackson just finished developing light labels that signal when levels of blood have been treated with enough gamma radiation to be safe for transplants. That sparked an idea: Would the same approach produce a sticker for people to ensure exposure to the

sun's UV-B rays—the ultraviolet radiation that can lead to skin cancer? If so, then kids and sun-worshippers could tell when they've gotten enough sun for the day.

The challenge for Jackson, who is also chief scientist for Indico Technologies Corp. in Edmonton, Alberta, was to find a material that responds only to UV-B light. "With a little luck and lot of work," he recalls, Indico found a chemical that sheds hydrogen ions when struck by UV-B. Embedding that chemical in a plastic film, along with a dye

that is affected by the hydrogen ions, yielded a patch that changes from clear to orange when the suggested daily limit has been reached.

Indico sold the technology to startup SunSpots Inc. in Bellevue, Wash., which plans to launch the product next spring. After testing the stickers on family and patients, Yale University School of Medicine skin-cancer expert Dr. David J. Leffell signed on as head adviser to SunSpots. The price of protection? About \$6 for 30 stickers. *John Carey*

CHIP TECHNOLOGY: QUANTUM LEAPS AND TINY STEPS

IT'S IEDM TIME AGAIN. THE international Electron Devices Meeting annually probes what's ahead in chip technology. Among the topics at this year's event, set for Dec. 11-13 at the San Francisco Hilton & Towers, will be developments in such esoteric fields as quantum computing and nanotechnology.

In quantum computing, IBM researcher David DiVincenzo will describe a theoretical model for a computer that processes quantum bits, or "q-bits." These would exploit the quirky laws of quantum physics, where the same bit can represent both zero and one simultaneously. The goal is to solve in just a few hours problems that would take centuries if tackled with today's computers. IBM is now working to translate the model into actual circuits. One candidate would use switches that turn on and off by changing the direction of spin of a single electron.

Single-electron transistors, or SETs, aren't just for quantum computers, though. In fact, researchers from Japan's NTT will unveil a working logic circuit based on such wee switches. SETs are about as "nano" as chip technology can get. But researchers from the University of California at Berkeley will show their own "nano" feat: a key transistor component that's only 20 nanometers wide. That's roughly the size of a string of seven silicon atoms.

Back on more familiar ground, Toshiba will talk about the rosy outlook for large-capacity flash memory chips. And Samsung researchers will show off a teensy flash-memory cell for gigachips that can hold a billion bits of data. More details are at www.ieee.org/conference/iedm. □



It seems everyone's been talking about greener cars these days. But we've done more than just talk. In 1997 we introduced the Toyota Hybrid System. Now it's the power inside the world's first mass-produced gas/electric vehicle, the Prius. As the automotive industry lines up behind us, we have already started developing the next generation of environmental vehicle technology. The lights are green. Let's

www.toyota.com/ecologic 800 GO TOYOTA 4/2000



Did you ever have the feeling
you were being followed?

DDAY TOMORROW **TOYOTA**

CHIPS

INTEL INSIDE OUT

After a year of bloopers, can the chipmaker get its house in order?

Intel Corp. has eaten a pile of crow this year. The \$34 billion chip giant, known for its disciplined management and crisp operations, suffered a nightmarish string of product shortages, delays, and even cancellations that left customers and investors fuming. Case in point: After agreeing to use Intel's latest Pentium III Xeon processor in a new line of servers—and promising deliveries to customers—Compaq Computer Corp. was shocked when the chipmaker couldn't provide enough parts and buyers were left hanging. Turns out Intel had underestimated the growth of the PC market in 2000 and failed to lay on enough new plant capacity. "Intel is a good marketing machine, but they didn't put enough focus on production," gripes a Compaq official.

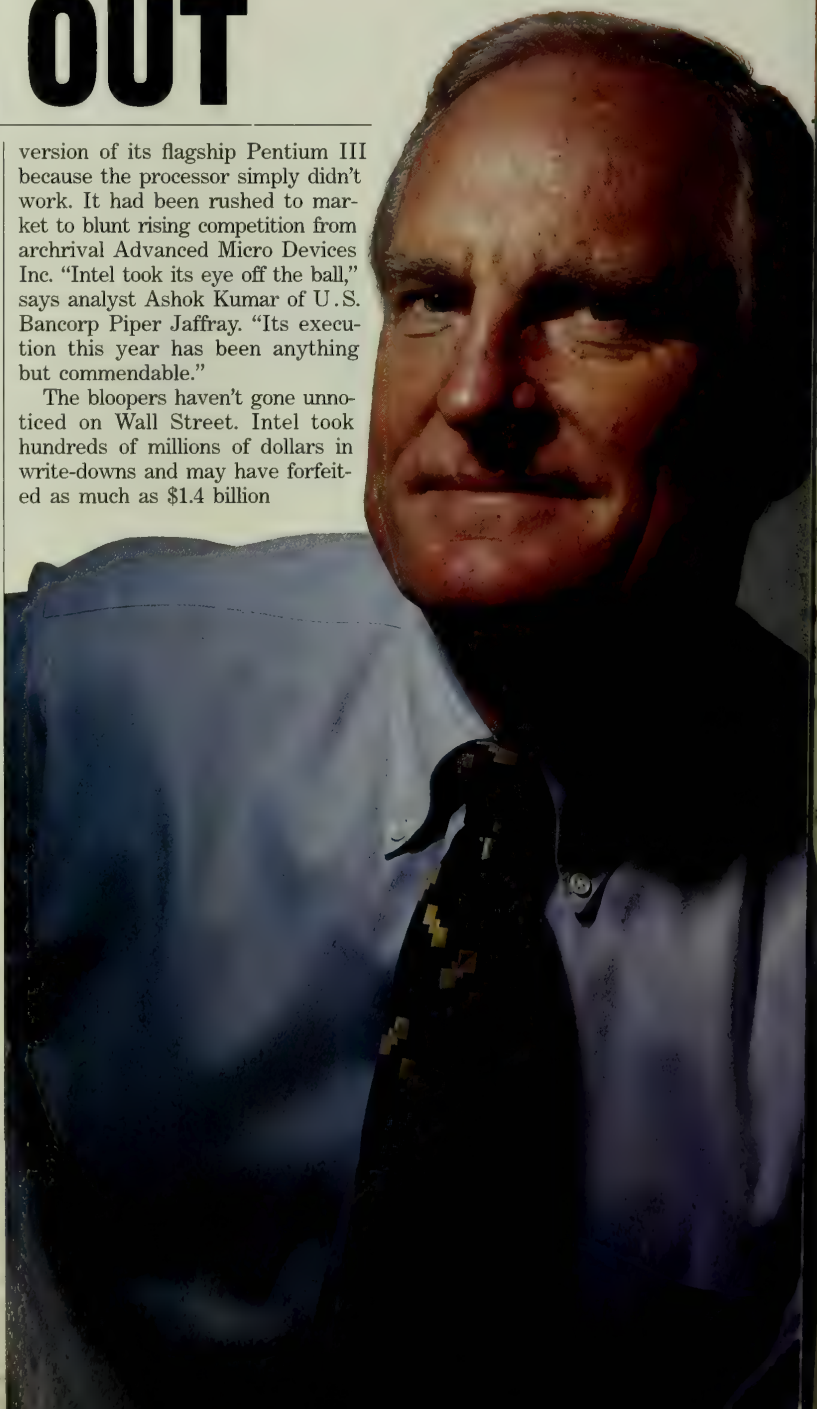
Ouch. Could this be the same Intel whose tight execution, relentless growth, and bountiful profits have made it an icon of techdom? For most of this year, it hasn't looked that way. First, pesky bugs forced it to delay delivery of crucial chipsets—key products needed to connect processors to the rest of a PC. Then it had to recall a million circuit boards because of a bad chip and eventually gave up on fixing the faulty component. Meanwhile, it suffered chronic product shortages through much of the year. And most embarrassing, in August it had to recall the latest

version of its flagship Pentium III because the processor simply didn't work. It had been rushed to market to blunt rising competition from archrival Advanced Micro Devices Inc. "Intel took its eye off the ball," says analyst Ashok Kumar of U.S. Bancorp Piper Jaffray. "Its execution this year has been anything but commendable."

The bloopers haven't gone unnoticed on Wall Street. Intel took hundreds of millions of dollars in write-downs and may have forfeited as much as \$1.4 billion

CEO BARRETT

He's working to reassure investors after "embarrassing" slipups



lost revenues, according to analysts. It has led nervous investors, already shaken by tech-stock weakness, to slice a staggering \$235 billion from Intel's market capitalization since August. It is now valued at \$275 billion, some 45% off its peak. "Investor sentiment is extremely negative on the stock," Kumar says.

WAKY STAGE. The concern isn't just the fiascos of 2000. After all, despite the problems, Intel is still expected to turn in 16% revenue growth and a remarkable 49% profit increase for the year. What worries Wall Street is whether Intel can pull off its ambitious plans for 2001. That's when the company is to switch to a new manufacturing technology, pump out millions of its new Pentium 4 processors introduced on Nov. 1, and roll out the complex, long-awaited Itanium superchip for big-iron corner servers. The pressure is on Chief Executive Officer Craig R. Barrett, whose reputation as a skilled operations manager has been tarnished during his two years at the helm. The bottom line: "If they slip again, they're screwed," says analyst Jonathan J. Joseph of Salomon Smith Barney. Letting a grip on operations isn't the easy challenge. Faced with slowing growth in its core microprocessor busi-

Intel's diversification strategy is straining a culture that grew up selling a single product

ness, Intel is scrambling to find new avenues for expansion. Barrett is pushing into areas such as networking chips and Web hosting, or running Web sites for other companies. These businesses now make up one-fifth of revenues and are growing at 50% per year. But the diversification is straining management and a culture that grew up designing and marketing one major product—the Pentium processor. "Intel is at the gawky adolescent stage," says analyst Nathan Brookwood of researcher Insight 64 in Saratoga, Calif. Even Chairman and former CEO Andrew S. Grove has confided to friends that he's worried about whether Intel can retain sharp enough focus on its cash-cow processors while tackling new and unfamiliar markets. Grove declined to comment.

Barrett is definitely feeling the pain.

Intel's problems have spurred him to an uncharacteristic bout of public contrition. He says he is "embarrassed" by Intel's slipups and admits it took unwise shortcuts. "We dropped the ball," he says. That's especially galling for an executive who paved his 24-year path to Intel's top job by helping turn the company into a manufacturing machine with unmatched quality and 64% gross margins. Intel always has practiced "prudent and intelligent risk-taking," he says, but this year it tried to move too fast and without proper controls.

The steely CEO vows he won't let that happen anymore. Since the Pentium III recall, Barrett has stepped up an aggressive program to get Intel humming again. In biweekly executive staff meetings, he has berated his top lieutenants for sloppiness, insisting they adhere to Intel's rigorous planning methods. After all, he says, when things go wrong, "the enemy is usually us." Now he's tying management bonuses to more specific operational goals, such as hitting certain milestones and timetables. And he has gone to the stump, giving internal back-to-basics speeches and insisting on training throughout the company to reacquaint employees with techniques such as critical path analysis—a method for prioritizing work—that Intel has practiced successfully in the past. "We're getting back to what we know works," Barrett declares.

SHUFFLING. That also means some mid-course corrections. Barrett has pumped up Intel's capital spending this year by 75%, to \$6 billion, to ensure plentiful capacity going forward. To better focus the company's engineering efforts, the CEO in late September canceled a planned low-cost chip, code-named Timna, that had run into technical troubles and delays. And on Oct. 9, he shuffled

top managers to oversee a sudden doubling in the production levels of the Pentium 4. The most prominent casualty: Intel's veteran head of processor design, Albert Y.C. Yu, who was given a new assignment to spearhead Intel's nascent efforts in optical chips. Insiders say the move was long overdue. "Albert hadn't added value in years," says a former Intel exec. Yu couldn't be reached for comment.

Nothing is sacred. Barrett even has begun publicly backing away from a crucial partnership. In 1996, concerned that conventional memory-chip technology was running out of gas, Intel hitched its wagon to startup Rambus Inc., which had developed an unproven alternative that dramatically boosts the connection speed

INTEL'S MISSTEPS

Over the past year, Intel has stumbled several times, costing the tech giant more than a billion in lost sales and adding expenses

THE PROBLEM

Insufficient production capacity in early 2000.

Recall of speedy Pentium III chip in August, 2000.

Motherboard recall in May, 2000.

Delays in chipsets starting in September, 1999.

WHAT HAPPENED

Figuring PC growth would be only 10% in 2000, Intel cut capital spending in 1999 from \$5 billion to \$3.4 billion. Instead, PC growth hit 18%.

Trying to catch up to AMD's Athlon chip, Intel pushed the speed of the aging Pentium III too far. The 1.13-GHz version broke down, and thousands had to be recalled.

To link its newest chips to older style memory, Intel developed a "translation" device. But it didn't work, forcing recall of 1 million PC motherboards.

Intel's chipsets designed to work with Rambus memory have been late, so PC makers have flocked to Taiwanese suppliers.

THE COST

The bad forecast may have cost Intel more than \$800 million in lost sales this year. Rival Advanced Micro Devices, which added capacity, grew its processor share to 18%, from 14% in 1999.

Intel lost millions in sales and got a public relations black eye too. It says it will reissue the faulty Pentium III next spring, and is accelerating production of the faster Pentium 4.

Intel took a \$253 million charge. The translation device couldn't be fixed and was scrapped. PC companies had to delay shipments, costing Intel goodwill.

Delays and bugs cost Intel nearly \$560 million in lost sales this year, as its share of the chipset market dropped to 55% from 68%.



NADIR? The Pentium III recall stung executives

THIS

IS THE POWER OF

© 2000 Bowstreet.com, Inc. Bowstreet is a trademark of Bowstreet.com.



BUSINESS WEBS

They said you were too slow.
Didn't understand the new economy.
But you waited.
Surveyed the scene like a field general.
And waited.
Saw the shakeout.
Maneuvered the troops.
They won't know what hit them.
This is the power of business webs.

www.bowstreet.com

CHA-CHING.



bowstreet

between memory and the processor. Barrett now says Intel made a "bad bet" four years ago by committing to use only Rambus-type memory in all its new PC designs. The technology has proved pricier and more complex than anybody expected. So by next summer, Intel will deliver chipsets for the Pentium 4 that let it work with cheaper conventional memory, which has improved in the intervening years.

How did Intel get into such a mess? Most of its product delays and cancellations stem from difficulties implementing Rambus' technology—and to Intel's lack of a backup plan in case that didn't pan out. The capacity crunch traces to underinvestment in new plant capacity in 1999, when Intel slashed capital spending from a planned \$5 billion to just \$3.4 billion. And the rushed release of the buggy Pentium III—after an engineer neglected to run a crucial test on the part—was undoubtedly spurred by Intel's competitiveness and paranoia about AMD. The rival "is pushing Intel to do things it wouldn't normally do," chides chip-industry analyst Linley Gwennap of The Linley Group. "It's moving too fast and getting careless."

NO TRACTION. That's not to say all of Intel's actions have been cavalier. In 1996, when Intel selected Rambus, analysts forecast that with Intel's backing, Rambus-type chips would command 50% of the memory market by now. That hasn't happened. Intel knew a year ago that Rambus wasn't getting traction, but it was so committed that it couldn't back down. To buy some wiggle room, it devised a "translation" chip that let its Rambus chipsets talk to conventional memory. Problem was, the translator



didn't work, and Intel didn't figure that out until after it had shipped a million of them to computer makers. That forced a recall in May, followed by a \$253 million write-down. Meanwhile, PC makers turned to Taiwanese rivals. The result: Intel's share of the \$4.3 billion chipset business has fallen by up to 13 percentage points since 1999, estimates Mercury Research, costing the company an estimated \$560 million in revenues this year alone.

Intel's capacity constraints cost even more. When planning its 1999 capital spending, Barrett says, Intel misread this year's PC market, predicting 10% unit growth instead of the 18% now expected. Sure, Intel was only one of many companies blindsided by strong demand in early 2000. "Apparently, we were all idiots at the same time," Barrett quips. But Intel also took some added risks. Under enormous financial pressure after a dismal 1998, when profits declined for

NEW COURSE

Otellini says "we were like a deer in the headlights"—but Intel is fighting mad now

the first time in a decade, Barrett and his team banked on a lower cost approach to updating their chip plants. The scheme worked, and the savings were huge, but Intel lost vital capacity just as chip sales surged. "We didn't have enough buffer," admits Michael R. Splinter, executive vice-president for technology and manufacturing. "Not being able to meet demand was unbelievably painful."

Costly, too. Just as Intel ran into its chipset problems and capacity crunch, AMD hit paydirt with a sizzling Pentium III rival called the Athlon. The cheaper chip has helped AMD win business with nine of the top 10 PC makers and gain five points of market share this year, to 18%. Analysts say much of that gain worth at least \$800 million, might otherwise have landed on Intel's top line. AMD also managed this year for the first time to grab the chip-speed crown when it delivered the first PC processor to run at 1 gigahertz, or a billion clock ticks per second. Intel rushed out a riposte six months ahead of schedule and soon after shoved the faulty 1.13-GHz Pentium III out the door.

RADICAL SHIFT. To regain momentum, Barrett is doubling the production ramp up of the Pentium 4. And to bring off that ambitious goal, he's making a radical shift, assigning everybody involved with the product—designers, process engineers, and manufacturing personnel—to report in cross-functional teams to one executive, Splinter. Now, instead of running every decision up the flagpole and back down again, Splinter says, the Pentium 4 launch will be managed by nimble groups. "We have to shorten the decision process," he says.

There's no doubt Barrett & Co. are fired up. Intel has always performed best when it's on a mission, and right now all 82,000 employees want to show the world that Intel hasn't lost its touch. During the worst of the crises, says Executive Vice-President Paul S. Otellini, "we were like a deer in the headlights." But at some point, he adds, people flip from being scared to being mad. Now, he says, "you'll see us bounce back like never before." If not, Barrett vows to have to ready himself for more painful apologies.

By Andy Reinhardt
in Santa Clara, Ca

Barrett's Fix-It Plan

Intel's chief executive is taking action to correct the mistakes that have plagued the company over the past year. Here are some steps:

PROBLEM

SOLUTION

UNDERCAPACITY AND PRODUCT SHORTAGES

Upped capital spending 75% in 2000, to \$6 billion. Will open four new factories this year and double the production rate for its new Pentium 4 from the original plan.

LAGGING PROCESSOR PERFORMANCE

Released Pentium 4 with up to 1.5-gigahertz speed on Nov. 20. Final testing of its 64-bit Itanium superchip in the fourth quarter, with production slated for 2001.

BAD BET ON RAMBUS MEMORY

Quietly backed away from using Rambus last spring and is now openly critical of the company. Intel plans to deliver Pentium 4 chipsets that support other types of memory by next summer.

SLOPPY EXECUTION

Shook up top execs by reassigning several, including the head of processor design. Also tying executive bonuses to operational goals and holding "back to basics" training to beef up procedures.



A box without service is a box.

With hp people, hp superdome becomes a solution instead of a server.

Service is comprehensive and included. We handle site planning, integration services, customized training, and monitoring. It's service made simple. So simple, in fact, that we can adjust your capacity over the phone.

Without, ironically, a service call. hp.com/superdome



STORAGE

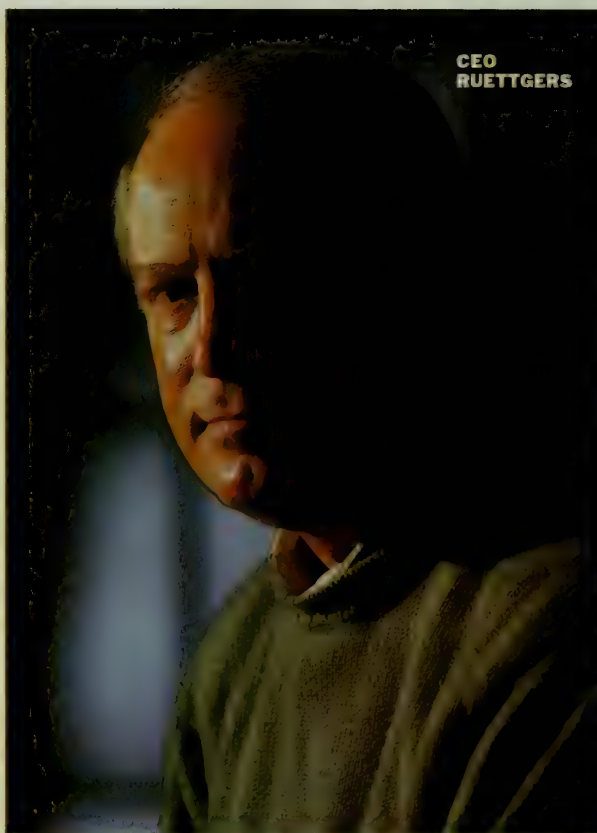
TROUBLE IN STORE FOR DATA-STORAGE KING?

The market leader is facing heat from aggressive rivals

On a gray November day in New England, the mood inside EMC's headquarters in Hopkinton, Mass., is sunny and bright. Executives of the data-storage market leader see no limits to the world's expanding appetite for machines that hold digital versions of everything from CEO speeches to marketing pitches to X-rays. With EMC execs predicting that storage demand will soar fiftyfold by 2003, Chief Executive Officer Michael Ruetters is so confident that he calls EMC recession-proof. "We make the highest-performing stuff," he says.

Having masterfully managed EMC from obscurity to market leadership in eight years, knocking off IBM in one of its core franchises along the way, Ruetters' confidence is understandable. As other tech stocks have been taken to the woodshed and punished for falling demand or squeezed profits, EMC has scarcely been nicked. Its shares today trade at about \$80, 10% over their price in March. The reason? Gross margins of 57% and sales and earnings gains of 30% to 50% in recent years. EMC is the class act in the \$31 billion-a-year storage business, which researcher Dataquest Inc. expects to grow at 19% a year until 2004. The company's storage machines—arrays of hundreds of disk drives that hold millions of documents—dominate corporate data centers.

Sound too good to be true in today's doom-and-gloom tech market? It just might be. The storage giant faces a growing roster of rivals—from reinvigorated old-timers such as IBM to upstarts like Network Appliance Inc.—who say EMC is a vulnerable target



CONFIDENT Ruetters has managed EMC from obscurity to market leadership. "We make the highest-performing stuff," he says

with a shrinking technology edge. They may soon have even more company. Venture capitalists have tripled their investments in the sector, to \$411 million, since 1998, says researcher VentureOne Corp. And customers who have long been willing to pay a premium for EMC machines are tiring of pricing poli-

cies and product strategies that lock them into using expensive software that works only with EMC's hardware.

Take StorageNetworks, which manages data storage for large companies. Last year, StorageNetworks bought virtually all of its gear from EMC. This year, it will spend less than half of its \$96 million budget on EMC machines. StorageNetworks wanted more flexibility than EMC could offer. Storage buyers "are a lot smarter today," says Peter Bell, a former EMC executive who is now CEO at StorageNetworks.

Couple those trends with possible slowdown in overall tech spending, and EMC could be headed for a rougher ride than it has grown accustomed to. While the company is unlikely to be unseated as market leader anytime soon, the combination of restive clients and hungry competitors could slow EMC's stellar growth and pinch its hefty margins. There is some evidence this already has begun. Customers are "holding EMC's feet to the fire" in negotiations, says Joe Webster, an analyst at market researcher Illuminata Inc.

Just ask Gene Deans. He is the database administrator at EchoMail Inc., a Cambridge (Mass.) e-mail management company. When Deans was shopping for a new storage system last spring, EMC

offered one of its big machines for \$900,000. After IBM proposed a comparable unit for \$512,000, Deans says he came back at \$600,000. Deans ended with IBM. Big Blue was still cheap and offered a more economical path to higher-capacity machines down the road. Not long ago, "EMC was the o-



The box is only as good as the thinking outside of it.

hp superdome is more than an enterprise server,
it's an enterprise solution.

It's a team of thoughtful people and smart hardware that adjusts
to a very specific future – yours.

This is the first generation of a new, more complete way of managing your business.
One in which comprehensive service and system integration are parts of the process,
not expensive afterthoughts.

hp superdome is the first step into an internet infrastructure that's always on,
always flexible, always exactly what you need.

Not more. Or less. Just exactly.

Look ahead, at hp.com/superdome



Being number one w Being number one w

A man with short brown hair, smiling broadly, wearing a white dress shirt and a blue tie. He is holding a small globe of the Earth in his hands, which is partially visible in the bottom right corner of the frame. The background is a blurred office setting.

China
Brazil
Canada
USA
France
Thailand
Australia
Mexico
Sweden

Deutsche Post  World Net

MAIL EXPRESS LOGISTICS FINANCE

Worldwide is good. You is better.



When Danzas acquired Air Express International – AEI for short – we became No.1 worldwide in freight. But we're more concerned with being your first choice.

Integrating AEI into Danzas made us the leading global leader in air freight and a leader in ocean freight. Now, we can open up interesting new prospects for your intercontinental business, for example, through our stronger presence in the USA. What's more, you stand to gain from our increased freight capacity, our connections and our space availability.

Another of our strengths lies in our wide variety of services, offering the full range of air and ocean freight, project forwarding and value-added services. And thanks to state-of-the-art information technology, it all happens fast and upfront, leaving nothing to your imagination. Every measure is designed for your special needs, every step of the way. So it's not surprising that as AEI Intercontinental stands for total solutions to all your logistics tasks – all from a single source.

Danzas Group-Logistics. Worldwide.

- Worldwide No. 1 in air freight
- Global leader in ocean freight
- Leading in European overland transport
- Customized supply chain management
- eBusiness partner
- Represented in 150 countries

www.danzas.com

DANZAS

AEI

INTERCONTINENTAL

game in town," Deans says. "Now there's another player." EMC would only say that many customers will pay a premium for reliability.

In fact, there are lots of other players. The growing ranks of storage makers include the likes of Sun, Dell, Compaq, Hewlett-Packard, and Hitachi Data Systems. Hitachi, for example, has bailed out of the mainframe computer business to focus on big storage machines and now expects more than \$1.6 billion in storage sales this year, up from \$900 million in 1999. Dell Computer Corp., the company most responsible for driving margins in PCs to their current razor-thin levels, increased its storage revenues by 73% last quarter and should see more than \$1 billion in sales next year, says Russ Holt, general manager of Dell's Storage Systems Group. "Our goal is to commoditize the low-end to midrange portion of this market," Holt says. In time, he warns, as the smaller machines become more capable, that will put pricing pressure on EMC.

Scores of lesser-known companies are targeting EMC as well. Network Appliance, of Sunnyvale, Calif., has been especially nettlesome. Its machines are smaller than EMC's and can often do the same work more cheaply. Debra Martucci, a vice-president at software maker Synopsys, has two EMC units. When it came time to add capacity this year, though, she chose Network Appliance. She says NetApp offers all the capabilities of EMC's equipment and came in at about a quarter of the cost.

Though EMC remains the gold standard for large centralized storage systems, its advantages, along with its juiciest profits, have come from software. Its programs have long been ahead of competitors' in allowing EMC systems to instantly send backup copies of data to storage machines in remote locations. And EMC's programs have an unparalleled reputation for reliability. Best of all—for EMC, at least—these programs run only on EMC boxes. That

LOCKED IN Some customers resent EMC's strategy of selling software that can run only on its hardware

means any customer who wants to take full advantage of EMC's software is locked in to a double whammy of top-shelf pricing.

Rivals, though, have begun to duplicate EMC's software. Hitachi can now do remote backups. Veritas Software Corp., based in Mountain View, Calif., writes programs that run on server computers instead of the storage devices, avoiding the EMC software-hardware lock-in. And IBM is developing a

program that will manage storage of devices from various vendors—including EMC.

With rivals on the attack, EMC has developed a full arsenal of hardball tactics to protect its storage turf. EMC salespeople won't accept a "no" from client's technology chief and will often go over his or her head to close a sale. When top customers buy a competitor's machines, EMC has been known to buy the device from the customer and in-

stall one of its boxes instead. And to counter the threat from Network Appliance, EMC is readying new, smaller device than many in the industry at dubbing a "NetApp Killer." Ruetters, though, has drawn the line at software. While opening his program to run on rival machines might please customers, it could threaten margins. He likens his systems to high performance cars and sniffs, "You can't always take tires off a race car and put them on motorcycles."

EMC's defensive measures will certainly help maintain its lead in the storage industry. But each step deeper into the fray presents a threat to EMC's precious margins. To remain competitive, EMC will often undercut rivals' prices something it rarely had to do when it was alone at the top of the market. Nonetheless, EMC is confident that can more than hold its own against its rivals. "The competition will set their price under our umbrellas," says EMC's chief operating officer, Joe Tucci. But as many companies have learned, when the competitive winds start swirling the umbrellas can all suddenly collapse—darkening even the sunniest moods.

By Norm Alster in Hingham, Mass., with L. Hawkins in Austin, Tex.

HOW THE STORAGE MARKET STACKS UP: EMC AND ITS RIVALS

MARKET	KEY RIVALS
ENTERPRISE STORAGE Systems costing \$300,000 or more that can store millions of documents in one place MARKET SIZE* \$14.6 billion EMC'S REVENUES* \$5.5 billion	After bailing out of mainframe computers, Hitachi is focusing on storage and expects \$1.6 billion in sales this year. IBM is fixing problems with its storage machines to take revenge on EMC, which has displaced Big Blue as the No. 1 storage player.
MIDRANGE STORAGE Systems costing from \$25,000 to \$125,000 that store data for a department or division MARKET SIZE* \$12.1 billion EMC'S REVENUES* \$600 million	With \$5.7 billion in storage sales last year, Compaq leads in the mid-market. In 1998, PC innovator Dell started a storage division, which expects \$1 billion in revenues this year. It's targeting small and midsize businesses and corporate departments.
STORAGE SOFTWARE Manages storage systems, ensuring disaster recovery and data backups MARKET SIZE* \$8.9 billion EMC'S REVENUES* \$1.3 billion	Veritas sells software that rivals EMC's in data backup and recovery and expects \$1 billion in sales this year. IBM is readying new software that works on devices from various vendors—a potential edge on EMC, whose software works only on its machines.
NETWORK-ATTACHED STORAGE Shared storage machines that can be linked to many computers and users via a network MARKET SIZE* \$1.7 billion EMC'S REVENUES* \$475 million	Network Appliance makes lower-cost systems that appeal to small and midsize customers—a market where EMC is weak. With \$1 billion in revenues this year, the upstart has prompted EMC to develop a new, smaller system that industry insiders call the "NetApp killer."

* 2000 ESTIMATES DATA: EMC, BW

COMMENTARY

By Michael Shari

FREE TRADE IN ASIA: BOGGED DOWN AGAIN

Back in the boom years, the winds of free trade seemed set to blow down tariff walls across Asia. True, the 1997-98 economic crisis "threw a monkey wrench" into regional free trade, as U.S. Trade Representative Charlene Barshefsky puts it. But even then, liberalization seemed inevitable.

Now, however, free traders fret that the process is getting bogged down again. At the Asia Pacific Economic Cooperation forum that just concluded in Brunei, the region's leaders, especially those from Southeast Asia, were noticeably reticent about free trade. That's in large part because much of the region continues to suffer the lingering effects of the crisis. Not only that, imported oil is at a

decade-long high, even as prices for the region's electronics exports are falling. Moreover, foreign direct investment is down an average of 62% across Southeast Asia. No wonder free trade is a low priority in many Asian capitals.

The region's leaders have never been short of reasons to retreat behind tariff barriers. At the Brunei APEC meeting, they acted defensive about the West's technological advantage. "The digital divide is going to be the new excuse to start putting barriers on top of e-commerce," warns Robert G. Lees, secretary-



APEC CONFAB: Asian leaders are acting defensive toward the West

general of the Pacific Basin Economic Council in Honolulu. Indeed, Malaysia already bars foreign banks from selling electronic financial services, keeping out the likes of Citibank, which already markets such products to the rest of the region. Indonesia, for its part, has banned foreign investment in local dot-coms, and it may not be long before other countries do the same, however futile the exercise.

ALL TALK. Meanwhile, some nations have conveniently forgotten prior commitments. Consider the brand-to-brand complementary scheme, which in theory requires a multinational to pay tariffs only once—when it imports components or unprocessed goods into a Southeast Asian nation where it has a factory or assembly line. Such companies should be able to ship goods tariff-free among any of the 10 members of the Association of Southeast Asian Nations.

Yet that isn't happening. Motorola Inc. says it pays a 34% duty to import to

Malaysia the cell phones it makes in Singapore. And Samsung Electronics acknowledges that it pays a duty to import the picture tubes it makes in Singapore to Indonesia, where it assembles TVs for the domestic market. Multinationals would simply rather pay the original duties rather than deal with the years of red tape required to get tariff-free privileges.

Free trade in Southeast Asia has sunk to such a low ebb that Singapore is set to sign a bilateral trade deal with Japan. It was a no-brainer because the two nations don't compete in any important sectors, such as agriculture, which is highly protected in Japan. Such bilateral deals risk making the World Trade Organization and such regional forums as ASEAN irrelevant—and could prompt some Asian governments to hold back their market-opening reforms. "What I fear now is they'll say: 'I'm going to wait until I see what the other guy is doing [on trade],'" says Lees.

Clearly, it will take more than another international conference to break the current impasse. Rather, Asia needs to muster its political will and improve economic conditions. Neither is likely to happen anytime soon.

Shari covers Southeast Asia from Singapore.

THE ROADBLOCKS

- Failure of WTO to get back on track after Seattle
- Rising prices for Asian oil imports
- Falling prices for Asia's electronics exports
- Eroding regional currencies
- Declining foreign direct investment
- Lack of political will among weak leaders

DATA: BUSINESS WEEK

Old stores, new rivals, and changing trends have hammered



BY NANETTE BYRNES

For now, the interior of the building at 44th Street and Broadway in the heart of New York's Times Square is a dusty demolition site. But as John H. Eyer Jr., the latest chief executive of long-troubled Toys 'R' Us Inc., strides through in his hard hat and shirtsleeves, what he sees is a retailing phoenix ready to emerge from the rubble. Or maybe it's going to be more of a peacock.

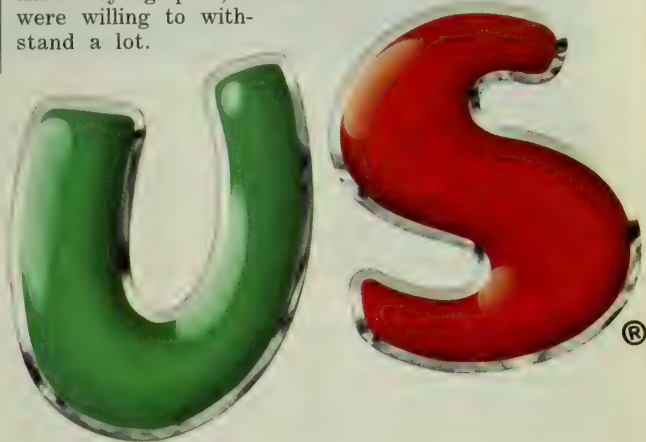
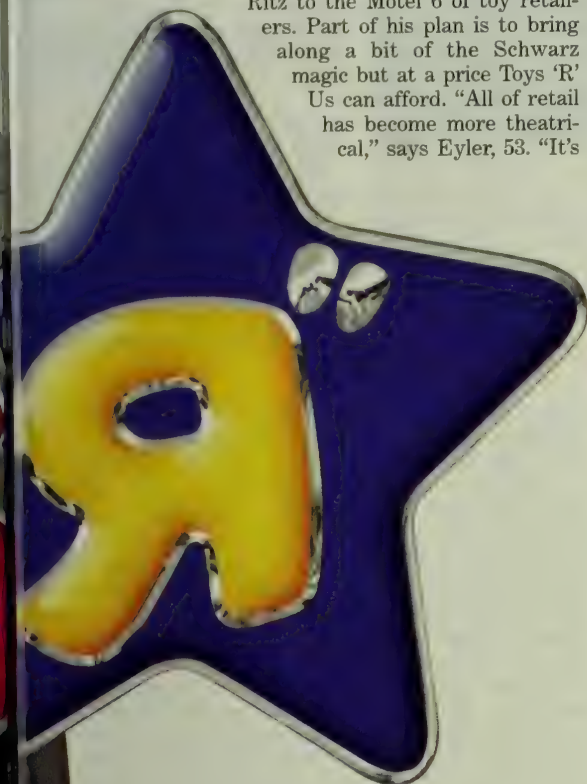
His plans for the site, which will open as the new Toys 'R' Us flagship next fall, are massive. The store's outside attractions will include a 30-foot-tall animatronic dinosaur, a two-story Barbie townhouse with its own elevator, an indoor Ferris wheel able to take 600 people a day for a spin, and a life-size version of the Candy Land board game that doubles as a candy store. Add in personal shoppers and, for VIPs, a

box balcony from which they can survey all this from high. To make sure that none of it is lost on passersby, a foot-tall glass wall facing Broadway will feature scrolling technology that switches it from a window into a billboard in mere seconds flat.

If this doesn't sound like the Toys 'R' Us you remember—a store of unhelpful sales clerks, warehouse-length aisles in dismal gray and blue, and Christmas-eve frustration—that's just how Eyler wants it. Recruited from upscale vendor FAO Schwarz last January, Eyler has gone from the Ritz to the Motel 6 of toy retailers. Part of his plan is to bring along a bit of the Schwarz magic but at a price Toys 'R' Us can afford. "All of retail has become more theatrical," says Eyler, 53. "It's

giant overtook Toys 'R' Us as the No.1 U.S. toy seller.

Eyler is the third Toys 'R' Us CEO to try to stop the onslaught of the discounters since founder Charles Lazarus retired in 1994. And his store overhaul is the company's third since 1996. Toys 'R' Us has found that offering the widest selection 12 months a year just isn't enough to keep customers happy. The chain struggled so hard trying to figure out how to beat the latest challenge—online toy stores—that it finally joined them instead, linking up with Amazon.com Inc. last summer to create a joint Web site. "When I started, if you had good selection and good prices, that was the key," says Lazarus, now 77 and still a member of the board of directors. "There was only our price and a very high price, so customers were willing to withstand a lot."



Can CEO John Eyler fix the chain?

about making it fun. What's fun about going to a warehouse?"

Not much. And that, in a nutshell, is what's behind a string of sales and earnings disappointments and management turmoil at the once high-flying Toys 'R' Us, based in Paramus, N.J. In his first 10 months in command, Eyler has been a whirlwind of activity, mostly focused on revamping the poor customer service and layout of the chain's 707 U.S. toy stores. Don't expect a giant *rex* at your local branch, but Eyler is beefing up staffing and training, greatly increasing the chain's supply of exclusive products, and striving to keep toys in stock and on shelves that people can actually reach. The hope is that by showing shoppers a friendlier, more helpful face and lining shelves with great toys not available elsewhere, Toys 'R' Us can break out of the low-price supermarket approach that hyperefficient Wal-Mart Stores Inc. does much better. Two years ago, the Bentonville (Ark.)

Today, our competition is very good, and we have to be better."

If customers do respond to Eyler's changes and the chain pulls off a respectable holiday season and a strong 2001, he will have gone a long way toward proving that he has figured out how to make a 1980s-style big-box retailer attractive to today's shopper. But he faces stiff headwinds. Retailers have already begun wringing their hands, worried about the gloomy

shadow that a jittery stock market, higher gas prices, and a slowing economy might cast upon consumers. Normally consistent specialty merchants such as Gap Inc. and Home Depot Inc. have recently disappointed Wall Street.

With half of all of toy sales coming in the November-December-January quarter, toy retailers need a merry Christmas more than anyone. But this year, the lack of a must-have

Cover Story



52 YEARS OF TOYS 'R' US

Started in a bike shop, Toys 'R' Us went on to define big-box toy retailing. Then came Wal-Mart.

1948 Returning from a stint in the Army, 25-year-old Charles Lazarus feels too old to start college. So he starts selling baby furniture in his father's Washington (D.C.) bike shop with \$5,000. His idea is to supply families of G.I.'s returning from the war.

1952 Mr. Potato Head becomes the first toy to be nationally advertised on TV. This sparks a multibillion-dollar system of selling toys. Lazarus starts opening toy supermarkets, creating one of the first big-box retailers. Modeled on super-

markets, it has customers pulling goods from shelves packing them in their own bags and boxes.

1957 The store is renamed Toys 'R' Us. Two years later Barbie is born, destined to become the best-selling doll.

1966 Lazarus sells his four stores to Interstate Stores for \$7.5 million and continues to run the toy operation.



Cover Story

toy—Sony Corp.'s PlayStation 2 is trickling into the U.S. so slowly it's unlikely to have much impact until next year—could spell fewer trips to the toy store. Combine that with the Toys 'R' Us history of slow sales growth and disappointing earnings, and it becomes clear just what a steep wall Eyler is up against. The company's total stock returns have fallen 53% since Lazarus retired, compared with a 238% rise for the

Standard & Poor's 500-stock index (chart). "Toys 'R' Us has the incredibly unpleasant

distinction of missing the fourth quarter in 14 out of the last 15 years," says Sanford C. Bernstein & Co. analyst Ursula H. Moran. "The big test for John Eyler is whether he can buck that trend this year."

Still, considering the recent troubles at Toys 'R' Us, many investors figure it can only improve. The stock resisted a general retail slide to rise 61% since Eyler's appointment, and it jumped \$2 a share, to 18%, on Nov. 13, when Eyler announced that third-quarter sales were down only 1% at stores open more than a year. That's considered good news—because the company was up against a very strong quarter last year, when Pokémon Game Boy cartridges sold like mad. **GIANT TEDDIES.** Eyler is betting that smart management of the chain's stronger assets—including Babies 'R' Us, and its international operations—plus an overhaul of its struggling U.S. stores, will spark what he calls "a second growth period." The company grew at a phenomenal 26% annual pace during its heyday in the 1980s. And Eyler's formula has worked before. As CEO at Schwarz, he made his name by greatly expanding things like in-store toy demonstrations and giant Schwarz-only stuffed animals.

But Eyler knew he was making a quantum leap in scale—and problems—when he came to Toys 'R' Us. The chain posted \$11.9 billion in sales last year, 50 times as much as Schwarz, and operates 1,565 stores in 27 countries. And it had just blown 1999, the best toy-selling holiday of the decade. It was caught out of stock in many store items and struggled to deliver online orders. Although the company's sales last year rose 6%, they trailed the 10% increase for the toy industry.

The Toys 'R' Us board was looking for a long-term solution. Chairman Michael Goldstein says the company had been

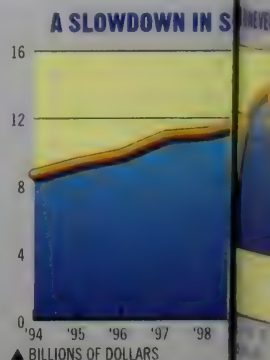
talking with Eyler on and off for more than a decade. In 1993 Goldstein's successor, Robert C. Nakasone, had tried to recruit him to be his No. 2, and even started negotiating to buy Schwarz to get Eyler on board. During a four-month search after Nakasone's departure, Eyler was always on top of the list of candidates. Goldstein relied heavily on the glowing reviews that Eyler got from key suppliers such as Hasbro Inc. CEO Alan G. Hassenfeld and the now-departed Mattel Inc. Chief Exec Jill Barad. "Not one person said anything but 'Mike, get him,'" Goldstein recalls.

Eyler's route to becoming a retail rescuer wasn't obvious direct. He grew up in Seattle with an engineer father who played an important role for Boeing Co. in the Apollo space mission and the Minuteman Missile program. Eyler entered the University of Washington in the 1960s as a finance major, and got his MBA from Harvard University. His interest in retailing was sparked while writing a paper about eliminating middlemen from distribution. Eyler realized that the nascent computer revolution would make it possible to measure the effectiveness of each link in the retail chain and could lead to consolidation. Figuring that would create opportunities for young executives, he took a management-trainee job at May Department Stores upon graduation.

Eyler was right about predicting a period of industry

NO FUN IN THE TOY AISLES

Since its glory days of the 1980s, the toy retailer has struggled with a growing roster of discount competitors and disenchanted customers. Here's a look at the chain's performance since founder Charles Lazarus stepped aside in February, 1994.





1990 Toys 'R' Us sales hit \$4.8 billion, up from \$480 million in 1980. They get a boost from another hot product: Nintendo's handheld **Game Boy**.



1994 Lazarus, 71, retires as CEO but remains chairman. A lucrative consulting package pays him \$8 million in 1995 and more later. Michael Goldstein, an accountant by training, becomes CEO.



1996 Toby Lenk launches an online competitor, eToys.

1998 Wal-mart passes Toys 'R' Us as largest U.S. toy retailer. Goldstein steps down. Toys 'R' Us loses \$132 million.



1999 Market turmoil is reflected in executive suite. Goldstein's replacement, **Robert Nakasone**, leaves after only 18 months. Most retailers have a good Christmas, but Toys 'R' Us

struggles to stock store shelves and deliver goods through its toysrus.com Web site.

2000 John Eyer

takes over as CEO, emphasizing proprietary toys and improved customer service. Toysrus.com and Amazon.com combine toy sites.



nterstate Stores, beset with ns in its discount stores, files kruptcy. It focuses on toys and ts **Lazarus** CEO. Four years later, npany reemerges as Toys 'R' Us.

he video-game craze, launched i, peaks. A year later, Toys 'R' ns its first overseas stores. By there are 477 stores accounting 6 of sales.

nult, and he later found himself right in the thick of it. s major accomplishments include starting a chain of low-priced shops for Federated Department Stores Inc. called inStreet, which Eyer says was on an annual pace of 0 million in sales and on the brink of profitability when it s sold in 1988 to help reduce debt under the new owner, ert Campeau. Next, Eyer ran the retail arm of upscale maker Hartmarx Corp., only to see the stores eventually e down after the market shifted toward casual office ar. "Going through a failure helps you become a much e honest assessor of reality," Eyer says today. Critics point out that Eyer has yet to pull off a turnaround thing like what he faces now. Even at Schwarz, whose s, according to Eyer, grew from \$60 million in 1991 to 5 million in 1999, profits were meager. "John has got a at reputation as a marketing and visual person," says retail executive. "But it would be hard for anyone to say ever posted great numbers."

Eyer's first task upon joining Toys 'R' Us was to conat the mess of Christmas past. His analysis of the disas 1999 season showed that inventories had dropped to gerously low levels, leaving the U.S. stores out of stock on of items—including basics like Monopoly games. Even the ong third quarter that Toys 'R' Us thought it had en-

joyed before Christmas turned out to be not nearly so good as it looked: Pokémon fervor had masked deterioration in other areas. In fact, Toys 'R' Us had lurched from having too many toys in the previous years to too few. The glut had led to painful markdowns, a \$698 million restructuring charge, and a sharp tightening of inventory controls.

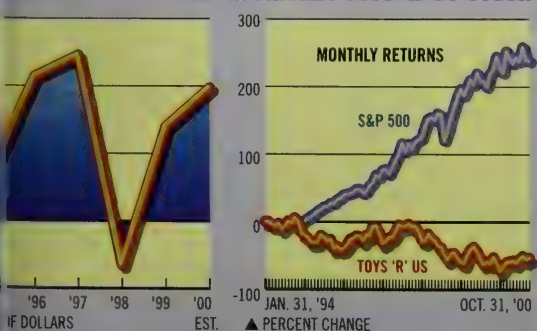
Too tight, it turned out. By the summer of 1999, one former executive remembers, each store manager was limited to ordering 30 rolls of Scotch tape at a time, for instance. That severely restricted promotional opportunities during the holidays, when it is not unusual for the chain to sell 1 million rolls of tape a week—at 50% gross margins—the executive says. "Whole aisles collapsed" because of this merchandise paralysis, he says. Meanwhile, toymakers complained bitterly that in July, 1999, they still had received only partial Christmas orders from Toys 'R' Us. That was a key reason the board moved to oust Nakasone in August.

HUFFY CUSTOMERS. Eyer wanted to get his orders in early this year to steady the business and to begin mending fences with Hasbro, maker of Tonka trucks, and Mattel, home of Barbie. His answer: more systematic stocking of the top 1,500 toys that make up two-thirds of the chain's sales. Toys 'R' Us, like every other retailer, knows it can't be sure it won't run out of the hot toys—the Pokémons and Tickle Me Elmos—the week before Christmas. But it can ensure that standbys such as Monopoly will be in stores 90% of the time. Eyer says that a one-season wonder might make \$75 million in a year—sizeable, but still only 1% of U.S. sales. "We can't make a consistently profitable business on the back of a hot toy," he insists.

So in February, when the toy industry descended on New York's 23rd Street for its annual Toy Fair, Eyer met with all the major suppliers to assure them that he would be ordering early this year. By late April, he had already placed 78% of his Christmas orders, up from less than 40% at that time the year before.

But if suppliers were quickly mollified, customers are going to take a lot longer to bring around. Their animosity goes much deeper than not finding enough of the right toys. A recent Sanford C. Bernstein study of U.S. shoppers' opinions of 15 big retailers found that Toys 'R' Us ranked near the bottom of the list on measures such as service—only Kmart Inc.

UNEVEN EARNINGS... PUNISHES TOYS 'R' US STOCK





“

No other store has this kind of selection,” says Christine McCoy, mother of 4-year-old Justin. “With Wal-Mart or Target, they may have it—or they may not

”

Cover Story

ranked lower—and value for the dollar. Overall, shoppers ranked the chain 10th out of the 15 retailers. Indeed, when Bill Nygren bought Toys ‘R’ Us shares for his Oakmark Select mutual fund, he was shocked by a flood of shareholder complaints. “They’d write in saying, ‘I was at a Toys ‘R’ Us store last year, and the store was dirty, the sales staff was unhelpful, they didn’t have the merchandise I wanted.

How could you be so stupid?’” Nygren marvels.

Just ask Kim J. McGinness, a 33-year-old mother of two who has been shopping in the Woodbridge (Ill.) Toys ‘R’ Us for years. Service at the store has improved of late, McGinness says. But she still gets angry recalling the time last year when she tried to buy an infant bathtub for her goddaughter’s baby shower. After looking high and low for the item, she finally went to the customer-service booth to ask for help. The clerk replied that “if they had it, it was on the floor. If it wasn’t on the floor, I was out of luck,” she remembers. McGinness got her to check a computer and found five bathtubs were in stock. However, McGinness was told she would have to wait several hours until someone could take one down. She left without the bathtub. “I was ready to not go back there,” she says. Only a call to the store manager got her an apology and a tub.

To make parents like McGinness a little happier, Eyler has launched a full-fledged remake of the stores that combines

remodeling, new merchandise, and for the first time, a truly hard focus on customer service. At a cost of \$200,000 to \$800,000 a pop, depending on a store’s condition, Eyler has remodeled 167 stores this year and will do a further 308 next year. In one test, 225 U.S. stores, including those that have been remodeled, increased their customer-service staff and upped their hours by 25% this year. Eyler also has pushed staff training, including training managers on characteristics to look for in a good hire. He has increased wages as well.

FUNNY HATS. The new design, already in place at the Livingston (N.J.) store, does away with long aisles and instead bunches products together in cul-de-sacs and displays determined largely by gender and age: Boys’ action figures are next to building sets. Ball dolls are near the displays of glittering nail polish and ste away from Barbie’s corner. Up front are the customer-service and returns desks—now manned by as many as nine people during peak hours, up from one or two in the past. Spaces a



**JOHN HAMILTON
EYLER JR.**

BORN 1947, Seattle.

EARLY YEARS At 8, he moved to Merchants Island near Seattle, where he played on the high school golf team (left). His father, John Sr., was a Boeing engineer; his mother, Eli Dora, was a nurse and homemaker.

EDUCATION BS, finance, University of Washington, 1969; MBA, Harvard Business School, 1971.

FAVORITE CHILDHOOD TOY Small mechanical plastic pig from his grandmother.

OFFICE BRIC-A-BRAC A wooden stick horse made for him by his uncle hangs on the wall.

FIRST JOB OUT OF HARVARD Management trainee at May Department Stores.

CURRENT JOB CEO, Toys ‘R’ Us, since January.

TOUGHEST JOB Presiding in early 1990s over the decline of retail trade at menswear maker Hartmarx.

HOW HE SPENT RECENT SATURDAY MORNINGS Cooking a pre-practice breakfast with other dads for his youngest son’s high school football team.

FAMILY Married 31 years to wife, Dolores, a journalist. They have three sons.

Using our own E-Business Suite,

Oracle saved \$1 billion in 1 year.

E-Business Kit		E-Business Suite
Microsoft	Database	Oracle
Epiphany	Marketing	Oracle
Siebel	Sales	Oracle
Clarify	Support	Oracle
IBM	Webstore	Oracle
Commerce One	Procurement	Oracle
SAP	Manufacturing	Oracle
i2	Supply Chain Mgmt	Oracle
SAP	Financials	Oracle
PeopleSoft	Human Resources	Oracle

How much will you save?

ORACLE
SOFTWARE POWERS THE INTERNET

www.oracle.com

set up for product demos, and staff wear bright red and the occasional funny hat, a big departure from the old denim shirts that made them indistinguishable from customers.

The feel is very unlike the grab-and-run atmosphere of the old Toys 'R' Us. Shopping in a new store in Selma, Tex., Eugene Perez and his wife, Elizabeth, went to look at a \$225 Barbie jeep for daughters Sophia, 3, and Alexandra, 2, and were pleasantly surprised. "The old stores felt more like

warehouses," he says. "This is really open, and it's a lot easier to find your way

Cover Story

around." That should bring order to the chain's impressive but widely scattered selection of toys. Indeed, the one part of the Sanford Bernstein survey where Toys 'R' Us scored high was in having a wide assortment of products. That's what has kept Christine McCoy shopping for sons Justin, 4, and Doron, 2, at an unremodeled store in San Antonio. "No other store has this kind of selection," she says. "With Wal-Mart or Target, they may have it—or they may not."

Now Eyler just has to get the Toys 'R' Us team on board, too. Many managers and employees have emerged from the past four years with a sense of whiplash. A string of high-level executives departed, from CEO Nakasone to President Bruce Krysiak and U.S. merchandising chief Keith Van Beek. So Eyler these days attends national meetings to talk to store managers of Babies 'R' Us and clothing retailer Kids 'R' Us. He and his team have twice met with Toys 'R' Us store managers and have sat down with or talked with the seven U.S. field managers a dozen times in the past 10 months. At least once a month, Eyler e-mails employees with operations updates. **UPBEAT.** Outsiders have noticed a change. "Go back 12 months before John arrived, and there was really a very dispirited group of people at Toys 'R' Us," says Norman Walker, president of toymaker K'NEX Industries. "Now, they're much more up and positive. They feel they're going in the right direction."

In setting a tone, Eyler has borrowed heavily from his old employer. The year before he started at Schwarz in 1991, 25% of its sales came from proprietary products—that is, toys sold only at Schwarz. When he left, that had risen to 70%. At Toys 'R' Us, he has similarly upped exclusive goods from 5% of last year's assortment to 13% this year. He expects that to hit 20% in 2001.

At the top of Eyler's shopping list is stocking up on plush stuffed toys. Traditionally they haven't been a strong suit for Toys 'R' Us because they require a lot of display attention. Suppliers say clerks used to just throw them into bins and hard-to-reach shelves. As the slow sellers became shopworn, staff would keep jamming more of the stuffed animals onto the shelf, says Lee Schneider, president of Commonwealth

Co., which makes plush stuffed animals for the new Toys 'R' Us label Animal Alley. "It was a mishmash," he says.

In the new stores, the Animal Alley line is displayed in cubby holes close to the entrance, making them more visible, and Schneider hopes, easier to fall in love with. Suppliers say margins on private-label plush toys reach as high as 60%—far above the 10% to 15% that a store might make on a highly promoted television-advertised toy. And stuffed lions, alligators, and other creatures can accomplish something else that would be novel for Toys 'R' Us—giving it a hit that discount competitors such as Wal-Mart can't touch.

But as Eyler expands beyond stuffed animals into other proprietary lines such as animatronic wild animals for its Animal Planet line, he runs the risk of competing with his own suppliers. In late October, he inked a deal to be the master licensor for the re-release of Steven Spielberg's film classic *E.T.* when it hits theaters in 2002. That means kids will be able to get their *E.T.* gizmos only at Toys 'R' Us, but it also usurps a role that traditionally has gone to toymakers such as Hasbro and Mattel. So far, Eyler has avoided any conflict with



“

If they had it, it was on the floor,” says Kim McGinness, with her daughter Kailey, 4, and her son John, 2. “If it wasn’t on the floor, I was out of luck

”

using existing suppliers to make some of the Toys 'R' Us exclusive goods. Hasbro chief Hassenfeld says he's fine as long as Toys 'R' Us does not compete directly with his Monopoly, G.I. Joe, and Tonka lines. "If they went in one of those areas, then I would not be the happiest of children."

Eyler must also manage relations carefully with his old board, which is dominated by two former CEOs, Lazarus and Goldstein (page 138). Goldstein stepped down as CEO in 1999 after a four-year term marked by erratic earnings, but he stayed on as chairman. Former insiders say he clashed with

Charles Schwab

BEFORE YOU BUY EGGS,
DO YOU LOOK INSIDE THE CARTON?



IT'S ONLY SMART TO
BUY MUTUAL FUNDS THE SAME WAY.



IT'S GOOD TO CHECK IF THERE'S A CRACK IN A MUTUAL FUND BEFORE YOU BUY IT. BUY DIRECT THROUGH SCHWAB AND USE SCHWAB ONLINE TOOLS TO COMPARE DIFFERENT FUNDS SIDE BY SIDE.

Schwab tools, like our exclusive Positions Monitor, give you a concise yet detailed rundown of a fund's historical performance. So you know more about what you're buying. And Schwab offers choice. You can buy over 1,000 funds from some of the best fund families direct through Schwab's Mutual Fund OneSource® service, with no load or transaction fees. Better yet, with Schwab you can get a real person to talk to. So give us a call if you have any questions you'd like to shell out at us.

1-800-5-NO-LOAD

schwabwelcome.com

creating a world of smarter investors.™

Schwab's Mutual Fund Select List is a summary of risk-adjusted, historically high-performing funds available through Schwab with no load. Prospectuses containing more complete information, including management fees and expenses, are available from Schwab. Please read the prospectuses carefully before investing. Past performance is not an indication of future results. Each investor needs to review a security transaction for his or her own particular situation. Schwab's short-term redemption fee will be charged on each redemption of funds (except certain Schwab Funds) bought through Schwab's Mutual Fund OneSource service (and certain other funds) with no transaction fee and held for 180 days or less. If you pay a transaction fee to purchase a fund, you will pay a transaction fee when you sell it. Schwab reserves the right to change the funds we make available without transaction fees and reinstate fees on funds.

©2000 Charles Schwab & Co., Inc. All rights reserved. Member SIPC/NYSE. (0010-8384)



Nakasone and led the drive to oust him. Eyler, however, says he has had no problems working with the board. Goldstein did balk, though, when Eyler first suggested the lavish Times Square store. The company will not disclose its total cost, but New York real estate experts estimate that construction of the 105,000-square-foot site could easily hit \$35 million. Annual rent is probably \$9 million-plus a year. Goldstein considered it a sure money-loser—since many flagship stores have a way of not working out.

Cover Story

But Eyler eventually convinced Goldstein that there was a huge public relations benefit to the new store. It helped that his plan got rave reviews from other company executives and toy manufacturers. "If you wanted to set up an ad campaign [to reach the same number of people], you'd spend a fortune," Goldstein now concedes. An estimated 1.5 million people walk through Times Square each day, and Eyler predicts that his store will be profitable in its first year of operation. **ONLINE DEAL.** Eyler has been astute enough to let Goldstein remain involved in the company. Says Goldstein: "If I think something's not a good idea, he thinks about it. He's not just doing it his way. He calls upon me." Eyler encouraged him to continue the spin-off of part of Toys 'R' Us Japan, for instance, which raised \$315 million for the company in April and got the division's sizable debt off his balance sheet.

In August, Goldstein also helped negotiate one of the in-

dustry's boldest deals, a partnership between toysrus.com and Amazon.com, which should make the Toys 'R' Us site profitable more quickly than it would be on its own. Sanford Bernstein's Moran figures toysrus.com has cost the parent company \$300 million in pretax expenses in the past two years. Amazon provides warehousing, order fulfillment, and site design. In exchange, it got warrants to purchase 5% of toysrus.com, as well as upfront cash payments—\$34 million so far—and a share of the site's sales that analysts estimate at about 5%. Eyler thinks this is a fair price to pay, partly because he doesn't expect online toy sales to exceed 10% to 15% of the industry total in the long term, up from 2% to 2.5% today. Overall, retailers this year seem more sanguine about a shift to online sales. After several sites closed down, it now seems less likely that the Internet will be a threat to toy stores that it may be to music- and booksellers. The Amazon deal also frees Eyler to concentrate on stores. He has to show that his shakeup can produce more results than the chain's previous two efforts. Goldstein's 1999 renovation was meant to make the stores more attractive,

“

The old stores felt more like warehouses, says Eugene Perez, shopping with his wife Elizabeth, and his daughter, Sophia, 3. "This is really open

”

FIXING THE STORE

CEO Eyler has moved quickly to remake 167 of Toys 'R' Us's 707 U.S. stores in time for Christmas. The rest will be done by Christmas, 2002. Here is what he is focused on:

HELPING LONG-IGNORED CUSTOMERS

To preach his message of improving store service, Eyler conferred a dozen times face-to-face and by phone with senior field managers who run seven U.S. regions and met twice with every U.S. store manager. By Christmas, 225 Toys 'R' Us stores will have increased the number of people on the floor to help customers.

GETTING TOYS TO THE SHELVES

Last year, Toys 'R' Us stores ran out of core merchandise. This year, it ordered early. Eyler is promising to be 90% in stock through Christmas, up from 64% last year. He's giving a big push to private-label toys, such as Animal Alley stuffed animals, and predicts they will go from 5% of sales last year to as much as 13% this year.

A NEW LOOK The new-store design does away with supermarket-style aisle displays, replacing them with toys clustered by interest in cul-de-sacs and X-shaped areas. The redo isn't cheap—it costs up to \$800,000 per store. But sales are growing faster at the revamped stores. Next up: Eyler is building a lavish showplace store in New York's Times Square.

YOU HAVE NEVER SEEN ANYTHING LIKE THIS!

"SunTone Certification proves trustworthiness to any business that chooses SAP for a comprehensive, fully integrated suite of front and back office solutions."

- **SAP R/3**

"Our cooperative efforts on the SunTone specification ensure a robust, highly available, secure, flexible computing platform for our mutual customers."

- **Oracle8i**

"Achieving SunTone Certification sets us apart as an industry trailblazer and the e-business systems management leader."

- **BMC Software PATROL**

"The SunTone seal means one thing to our customers: maximum service levels for e-business applications."

- **Resonate Commander,
Central Dispatch and Global Dispatch**

"The SunTone Certification Program reinforces our dedication to being a world-class, best-of-breed ASP."

- **NexPrise ipTeam**

"SunTone Certification gives iPlanet Web Server additional credibility as the solution for ultimate Web-site performance and reliability."

- **iPlanet Messaging Server
and Web Server**

"Because we offer carrier-class anti-virus products, we're the ideal partner for service providers. Now we've got the seal to prove it!"

- **Trend Micro InterScan VirusWall**

"Our products have a tradition of technical excellence, so we made SunTone Certification a priority for Open Market Transact, and took the tradition to a new level."

- **Open Market Transact**

"The SunTone seal assures our customers that we're committed to delivering applications with dialtone-quality availability."

- **BizTone.com Enterprise Edition**

"SunTone Certification sends a message to customers: ServicePort is the trusted choice in Web-hosted Professional Services Automation."

- **Portera ServicePort**



suntone certified

TRUST YOUR PARTNER.

WHEN LOOKING TO OUTSOURCE IT SERVICES, LOOK FOR THE SUNTONE SEAL. THESE INDUSTRY LEADERS ARE COMMITTED TO OFFERING DIALTONE-LIKE RELIABILITY - AND THEY'VE GOT THE SEAL TO PROVE IT. OUTSOURCE WITH CONFIDENCE. START BY VISITING WWW.SUN.COM/SUNTONE-NOW.



THE NETWORK IS THE COMPANY. WWW.SUN.COM/SUNTONE-NOW ©2000 SUN MICROSYSTEMS, INC. ALL RIGHTS RESERVED. SUN, SUN MICROSYSTEMS, THE SUN LOGO, THE BUN LOGO, THE SUN LOGO, THE SUNTONE LOGO, SUNTONE, THE NETWORK IS THE COMPANY, WE'RE THE DOT IN .COM ARE TRADEMARKS OR REGISTERED TRADEMARKS OF SUN MICROSYSTEMS, INC. IN THE UNITED STATES AND OTHER COUNTRIES.



We're the dot in .com





A fabulous surprise in every pack.

**Buy the complete version of
Adobe Acrobat and discover
features you never knew existed.**

Sure, Acrobat® Reader™ has solved many of the difficulties you had opening documents. It's definitely a handy tool. But Acrobat Reader is just a small part of an even more powerful program — Adobe Acrobat. With the full version of Adobe Acrobat you too can make your own

Adobe PDF files, creating attachments that will open and print easily. Fonts, colors, graphics — everything you send will appear just as you intended. And its brilliance doesn't end there. With Adobe Acrobat you have the ability to add comments to Adobe PDF files while the originals

remain intact. Additionally you can password protect and add digital signatures to your files. So explore the many facets of Adobe Acrobat and other Adobe ePaper® Solutions at www.adobe.com/fullacrobat.

And prepare to be amazed.



**ADOBE®
ACROBAT®**

ADOBE
ACROBAT
BUSINESS
TOOLS

ADOBE
ACROBAT®
MESSENGER™

ADOBE
PDF
FORMS



Adobe

Inspiration becomes reality.™

it wound up costing too much. Nakasone's version improved the merchandise mix at a lower cost per store. But in last year's Christmas rush, shoppers couldn't find what they needed. That design boosted same-store sales by only 3%.

Cover Story

Eyler's early results have been encouraging: Sales at stores that have been redone for at least three months have risen 7 to 10 percentage points above the gains of unrenovated ones. But this Christmas is the first true test. And next year at this time, Eyler will finally be able to start advertising the new look, when stores in all of the top 23 media markets will be remodeled. He'll also have the Times Square store to generate excitement. Rival retailers are withholding judgment but say that Eyler has identified the right problems. "He seems to understand that what Toys 'R' Us should focus on is more service and creating a unique shop-

ping environment," says one competitor. "We're assuming he'll make Toys 'R' Us look as much like FAO Schwarz as he can. Time will tell whether it's smart or not."

With stiff competition from Wal-Mart, Target Corp., and others, there's little room for mistakes. "What Toys 'R' Us has lost is their uniqueness, and that they will not be able to recapture," says retail consultant Kurt Barnard. Eyler's out to prove the naysayers wrong. But with Christmas right around the corner, he has no time to play around.

With Ann Therese Palmer in Chicago and Lori Hawkins in San Antonio

BusinessWeek online

For an interview with Toys 'R' Us CEO John Eyler, go to the Dec. 4 issue online at www.businessweek.com.

CLUBBY BOARDROOMS 'R' US

Last year, when then-CEO Robert Nakasone was shown the door, many investors became concerned that the primary problem at Toys 'R' Us Inc. might not have been operational woes but a personality conflict. At issue, say former executives and investors, was that Michael Goldstein, chairman of the board and Nakasone's predecessor, didn't like the way the new guy was shaking things up. Today, with John Eyler settled in the corner office, some observers still worry that the board may be too heavily influenced by Goldstein and company founder Charles Lazarus and that Eyler may not have the freedom to make much-needed changes.

Goldstein firmly denies that he exercises undue influence. He blames Nakasone's departure on a difference of opinion with the board and poor company performance. But Goldstein maintains that Eyler is in charge now. As proof, he points to his own plans to step down as chairman by June, with Eyler taking his place—a condition that Eyler set before accepting the CEO job. Eyler insists the board has been only helpful since he arrived. **DIVIDED LOYALTY.** But the presence of two ex-CEOs on the board leaves some critics shaking their heads. John M. Nash, president of the Center for Board Leadership, says a CEO should step down from a board once

he leaves day-to-day management to avoid divided loyalties among board members. The danger, says Nash, is "always having the old CEO second-guessing the new." And it doesn't help that there are no chief executives from other large companies on the Toys 'R' Us board to balance the company's former CEOs.

Compounding the question of

ping environment," says one competitor. "We're assuming he'll make Toys 'R' Us look as much like FAO Schwarz as he can. Time will tell whether it's smart or not."

Lately, the board has made some progress toward establishing more independence. Howard W. Moore, who

had been Lazarus' general merchandising manager in the 1980s and who runs a consulting firm whose clients have included major Toys 'R' Us suppliers, stepped down this year. Such close ties to a company can compromise a director's independence and are important to disclose in proxies, board experts say. But recently, Toys 'R' Us didn't disclose them. Also missing from filings until this year was the fact that long-term board member Robert A. Bernhard, who also recently stepped down, owns 25% of a company that has rented space



GOLDSTEIN: One of two former CEOs who remain directors

who's running Toys 'R' Us are the hefty paychecks that both Lazarus and Goldstein have drawn from the company. Lazarus has received more than \$35 million since stepping down as CEO in 1994 under a consulting deal outlined in the company's Securities & Exchange Commission filings. Goldstein is being paid \$300,000 a year as a consultant to Toys 'R' Us, documents show, and for the five months last year when he was interim CEO, his salary rose to an annual-

to a Babies 'R' Us store in Tulsa for \$334,000 a year since 1996.

Goldstein and Eyler are now searching for three new outside board members to add to the ranks—at least one of whom, Eyler says, is likely to be a CEO of another company. He says one of them could be named before the end of this year, the other two in early 2001. Maybe then the Toys 'R' Us board will look less like a private playhouse.

By Nanette Byrnes in New York

AOL All-New Version 6.0!

**The Easiest
Just Got Even Easier!**



- New look, design and features make it even easier to get started
- Free 24-hour customer service means help is just a phone call away
- Your security and privacy are always protected on AOL
- Parental controls to help safeguard your kids
- There's never been a better time to join



So easy to use,
no wonder it's #1

**Call 1-800-4-ONLINE
NOW To Sign Up Today!**

©2000 America Online, Inc. America Online is a registered trademark of America Online, Inc. All rights reserved. Availability may vary, especially during peak times.



switched places

WHAT A GREAT LOCATION



Introducing the e-marketplace alliance: IBM, i2 and Ariba. Three

OR AN E-MARKETPLACE.



names in e-business working together to help make your business
efficiently — whether you buy or sell ships, sleds or seafood. It's b2b×3.

ibm
i2
ariba

www.ibm-i2-ariba.com or call 877 426 2676; priority code: emarket1

SOMMER'S CRUNCH

Can he fix Deutsche Telekom?

He was missing when the telecommunications giants of Europe gathered last month in Rome to bid on licenses to build Italy's mobile Internet. And he will be a no-show when Switzerland invites those telecom giants to a similar bake-off early next year.

Where is Ron? That's the question rival telecom execs have been asking about Deutsche Telekom Chief Executive Ron Sommer. A few months ago the Israeli-born CEO was ubiquitous, lunging at any asset that might spread DT's global reach. In 18 months, he wagered some \$80 billion on such properties as British mobile carrier One2One and U.S.-based mobile operator VoiceStream Wireless Corp. He spent \$13 billion on mobile licenses in Britain and Germany. But things have suddenly gone quiet at Deutsche Telekom's Bonn headquarters. No big bids. No bold moves to expand territory.

Deutsche Telekom is entering a new phase in its tortuous journey from government ministry to high-tech powerhouse. Now, Sommer must prove he can forge Telekom's far-flung holdings into a company capable of holding off the likes of Vodafone Group PLC. "It's going to be a never-ending story," Sommer warns. Big acquisitions are no longer the top priority. "We need to demonstrate to the markets that we can expand the businesses we've acquired," says Jeffrey A. Hedberg, an American in charge of DT's international business.

The markets want that proof. Since he took over Telekom in 1995, Sommer has had a bruising ride. A bid to merge with Telecom Italia last year collapsed.

Vodafone, the world's biggest mobile-phone company, jumped into Sommer's home territory by acquiring Mannesmann. Because of big writedowns of goodwill, operating profit is heading into the red.

Sommer's plight calls to mind the woes of another high-profile telecom executive, C. Michael Armstrong of AT&T. Armstrong wanted to remake his company, too. But now he's ordering a dramatic split of AT&T into separate companies.

NIFTY SCENARIO. Sommer denies he will go AT&T's route. That's not how you create Europe's biggest and best telecom. The vision goes like this: A German businesswoman goes on a trip to New York via London. Her Deutsche Telekom mobile phone switches automatically from the company's D1 service in Germany to One2One in London to VoiceStream when she lands at JFK. En route, she reads her office e-mail over a Palm computer using software supplied by debis Systemhaus, which is controlled by Deutsche Telekom. She even gets in some Christmas shopping via T-Motion, a mobile portal from—you guessed it—Deutsche Telekom.

A nifty high-tech scenario—and Sommer has almost 90 million customers to make it come alive. But it comes down



UNDER PRESSURE

With his acquisition spree on hold, the CEO must now create a world-class company

to one nagging question: Can Sommer execute? Lately there have been positive signs. Thanks to relentless price cutting and advertising, Deutsche Telekom is retaking share of the German mobile market from

Mannesmann's D2 service. In long tance, price declines have pushed stock providers to the wall. And even a downgrade by rating agencies, Deutsche Telekom is still among the most creditworthy telecom companies in the world. Estimated cash flow of \$11 billion this year, sales of \$34 billion, will be down so

BusinessWeek online

For interviews with Ron Sommer and other executives, go to the Dec. 4 issue online at www.businessweek.com.



THE \$80 BILLION SHOPPING CART

Deutsche Telekom's 1999-2000 acquisition spree

ONE2ONE

Britain

Mobile-phone services. \$9.8 billion

- Gives DT's cell-phone network a fast-growing presence in Britain

DEBIS SYSTEMHAUS

Germany

50.1% IT services. \$4.5 billion

- Adds to DT's base in systems software and consulting

YA.COM

Spain

Internet portal. \$470 million

- Expands strategy started in Germany with T-Online

CLUB INTERNET

France

Portal. Seller LaGardere received 6.5% stake in T-Online currently worth \$607 million

- France is a key market for Internet expansion

VOICESTREAM

U.S.

Mobile-phone services. \$50.7 billion

- The biggest deal—a GSM network in the world's biggest market

POWERTEL

U.S.

Mobile-phone services. \$5.9 billion

- Complements the VoiceStream deal

DATA: DEUTSCHE TELEKOM

through attrition and buyouts. And the 51-year-old boss shows no sign of easing back on his incredible schedule, which calls for 16-hour days and an ability to remain impervious to the gut-wrenching tension of huge deals. "I sleep well at night," he boasts.

A pause in the acquisition race would give Telekom time to shore up its balance sheet. The danger is that the acquisition wars could heat up again. "In this business, a month is like a year," acknowledges Chief Financial Officer Karl-Gerhard Eick.

And Deutsche Telekom still has gaps to fill. VoiceStream doesn't give DT the data infrastructure it needs to serve corporate customers in the U.S. In Western Europe's biggest economies, outside its home market Telekom is strong only in Britain. So the company may still need to make some big moves—even another run at Telecom Italia. "I think it would make sense," says international chief Hedberg.

The assets Sommer has acquired or built from scratch are attractive. Take T-Motion, a mobile Internet portal that is designed to capture a big piece of future revenues from data traffic over mobile phones. "This will be a profitable business for those who understand that technology will make everything mobile," says T-Mobil Chief Executive CEO Kai-Uwe Ricke.

CULTURE CLASH. So far, though, Sommer is having trouble getting all the units to cooperate. In the summer, management of T-Online, the company's Internet service, fell to bickering with the parent about how much independence it should have. Now, almost the entire management board of T-Online has left, including CEO Wolfgang Keuntje. The episode led to accusations that Sommer is a control freak. Former colleagues say the charge is unfair. Still, the turmoil showed the perils of having it both ways—startup spirit inside a corporate giant.

Decision-making can be deadly slow. The company took more than two years to agree on a plan to create four semi-autonomous units. Indirectly, Sommer concedes he's still fighting Deutsche Telekom's legacy as an arm of the government: "If somebody tries to bring this bureaucratic culture back, that's when I really go ballistic." But remnants of the old attitude remain. One industry source was surprised recently to hear a DT engineer refer casually to a "monopoly socket," a 1980s term used to describe the phone jack found in every German home. The term summarized Telekom's complete dominance. Indeed, Deutsche

from 1999. But the signs point to an upward swing.

Of course, Sommer is hardly home. If Deutsche Telekom shares fall below \$28, the stock-and-cash VoiceStream deal, which still has not closed, could be in danger—leaving Sommer's national strategy in tatters. DT shares have been trading at around \$33, exactly a comfortable margin. "If VoiceStream doesn't work, his job could be in danger," says Josef Scarfone, a manager at Frankfurt Trust in Frankfurt, which owns more than 1% of Deutsche Telekom shares.

The question is, could anybody have

done a better job? Even today, 40% of DT's employees are civil servants who can't be fired. Worker representatives hold half the seats on the Deutsche Telekom supervisory board. Along with two seats held by a sympathetic government, they control Sommer's fate. "This is very different from American companies," says Peter Glotz, an ex-member of the supervisory board.

Yet Sommer has still managed to tackle the company's huge staffing costs. He has spent lavishly to improve customer service, upping sales per employee by 34%. In the meantime, he cut the workforce by 20% since 1995, to 172,000,

Certified Diamonds Below Wholesale



Guaranteed!

Laboratory Graded
and Certified

◆
\$35 Million Inventory

◆
Plus...FREE
14K Gold Mounting!

sapeck.com



S.A. Peck & Co.

Diamond Importers and
Fine Jewelry Manufacturers
Since 1921

55 E. Washington St.
5th Floor
Chicago, IL 60602

1.800.922.0090
312.977.0300

Management

Telekom still has a near-monopoly on residential connections—and an alarming amount of revenue depends on this business.

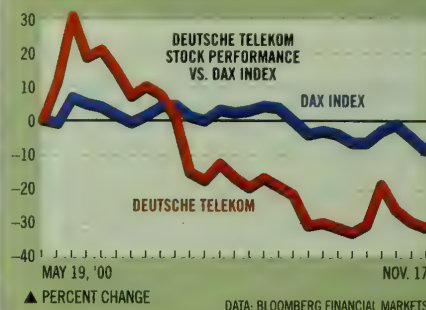
To boost the uniqueness of his new offerings and generate fresh sources of profit, Sommer is banking on the acquisition of VoiceStream, which will probably be completed early next year. VoiceStream's digital network can adapt more cheaply and more quickly than analog-based rivals as the Internet migrates to mobile phones. "The opportunity that VoiceStream provides is one-of-a-kind," asserts VoiceStream CEO John W. Stanton.

VoiceStream will also give Telekom a unique, transatlantic network based on the digital global system for mobile telecommunications (GSM) standard. Yet do customers care whether their mobile phone works in Frankfurt as well as in New York? "The number of people who actually use their phones around the world is relatively small," admits Stanton. "But they're very influential people"—people who control corporate buying decisions. Analysts say that won't ensure VoiceStream's success.

These big bets will weigh on the stock for some time. At \$32.45, the stock is up 9% since hitting a low in October, but way off the March peak of \$88.40. All the telecoms have been hit, but that's small comfort.

There's no sign of a shareholder uprising, though. Sommer also gets more slack because Germans wonder if anybody

DEUTSCHE TELEKOM'S HARD YEAR



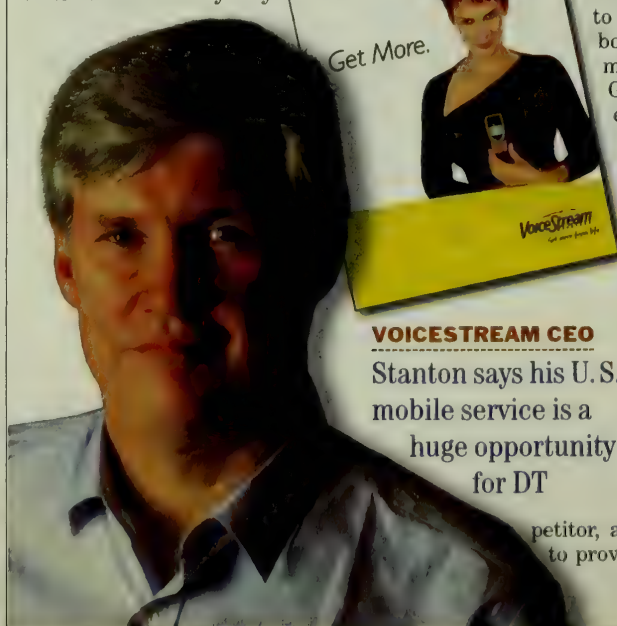
else would want the job. In fact, Deutsche Telekom's supervisory board hoped to hire a manager with great international stature when it went hunting for a new CEO in 1995. But several better-known candidates figured the job wasn't worth the grief, especially with a salary estimated at somewhat less than \$1 million. It's thought to be barely double that now.

MAKING ENEMIES. Sommer, then chief of Sony Corp.'s German operations, impressed the board with his vision of the future of telecoms. As the new chief, his first challenge was to persuade investors to buy shares in Telekom's initial offering in 1996. "Some people said to me, 'We don't you, instead of bringing Telekom public, do virtually the same thing and jump out the window,'" Sommer recalls. But with clever marketing, Sommer

raised \$10 billion in stock to German households.

Sommer has not tried to endear himself, though, to Germany's other top bosses. He has even made enemies among Germany's corporate elite by defending the few remaining monopoly privileges. One example: using dominance of German residential phone network to give customers of T-Mobile special deals. Sommer shrugs off the heated comments his move provoked. "If you can take the criticism, you'd better not [this] job," he says. Sommer is a competitor, all right. Now, he wants to prove he's a winner.

By Jack E. ...
in Frankfurt



VOICESTREAM CEO

Stanton says his U.S. mobile service is a huge opportunity for DT

Do you have powerful partners in your corner?



In ten minutes, you will.

LeadersOnline was created by Heidrick & Struggles, the world's leading executive search firm, to find the next generation of premier executives. Together, Heidrick & Struggles and LeadersOnline make an amazingly powerful team dedicated to finding opportunities that best fit your talents, and help take your career to the next level. Just 10 minutes to register online, and suddenly you have powerful partners in your corner.

 **LeadersOnline**
A HEIDRICK & STRUGGLES COMPANY

www.leadersonline.com

Finding the next generation of premier executives.

BANKS

FEELING A CREDIT SQUEEZE

Banks are tightening up—and they'll only get tougher. That could turn the soft landing into a thud

A year ago, companies were practically fighting off the lenders waving cash at them. But all that has changed since the spring. First, the initial public offering market dried up, making it hard for companies to raise cash by issuing equities. Then the junk-bond market took a hit. Now, banks are cutting back on syndicated lending—big loans that are parceled into chunks and sold off to other banks and investors such as insurance companies. Just \$23 billion of these loans were made in the first three weeks of November, vs. \$62 billion in the same period in 1998.

No end is in sight to what's starting to look like a slow-motion credit crunch. More than 40% of domestic banks have tightened standards on loans to large and middle-market businesses in the past three months, vs. 25% in May, according to the Federal Reserve's survey

of senior bank loan officers, released on Nov. 17. Consequently, bank loans outstanding to commercial and industrial companies not only stopped growing but actually fell 1% in the same period (chart). "This represents a sharp squeeze on corporations, and it happened much faster than we expected," says Ian Shepherdson, chief U.S. economist at High Frequency Economics Ltd., a Valhalla (N.Y.) consultancy.

PROBLEM LOANS. The squeeze is likely to get even tighter. Over half the domestic banks surveyed expect to tighten their standards in the next year, according to the Fed. Worries about problem loans are at the heart of the matter—they've doubled since 1998. "Credit quality is deteriorating quarter by quarter," Bank One Corp. CEO James Dimon told the Economic Club of Chicago on Nov. 15.

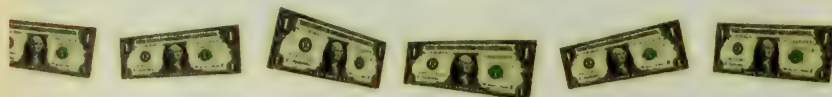
If the trend continues to accelerate, it could ultimately force a far harder landing than Fed Chairman Alan Greenspan hopes to orchestrate. Real growth is expected to slow to 3% next year, from an estimated 5.2% this year. But if business confidence takes a severe knock, the slowdown could become more

brutal. Already, credit tightening is pushing troubled companies to the wall. On Nov. 15, for example, Regal Cinema said it is considering filing for bankruptcy because it is violating terms of its loans and is not sure it will be able to renegotiate.

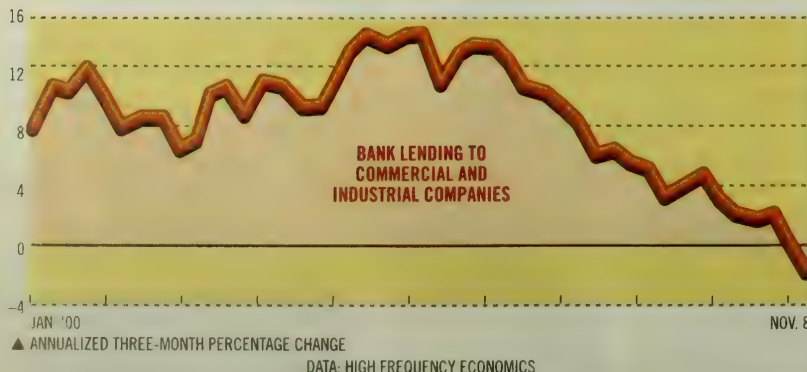
Bankers are unapologetic about tightening their purse strings. To them, it simply makes good business sense. "Markets want to back winners," says Peter Gleysteen, recently named chief credit officer at soon-to-be-merged J.P. Morgan Chase & Co., and former head of global syndications at Chase.

The banks' new muscular approach could come back and bite them. The current crackdown is forcing some companies that can't get new loans to rely on previously arranged lines of credit—the corporate equivalent of living day-to-day on a credit card. The volume of these off-balance-sheet credit lines has nearly doubled since just before the last recession of the early '90s, to about 30% of all bank loans, according to bank analyst Michael Mayo.

Such credit lines are usually offered with a loan when times are good. The banks earn fees for the arrangement from 0.25% to 2% of the loan a year, but don't generally expect companies to use them. But cash-poor businesses are drawing on them to make ends meet. Xerox Inc., for example, got



THE LOAN WINDOW SLAMS SHUT



million credit line in October, 1997, in real led by First Chicago, Chase Manhattan, and J.P. Morgan. The trou-Stamford (Conn.) copier compa-which gave earnings warnings in 4ne past 5 quarters—said in a Nov. EC filing that it is unable to access capital markets or get a bank loan. t has drawn \$5.3 billion of the line e October.

ffectively, banks are forced to make untary commercial loans when com-es draw big amounts in short peri-As a result, the banks have to use ious capital to back the loans or e costly loan-loss provisions if they the borrower may have difficulty ying on time. The fact that Xerox is

still drawing down its credit, despite its questionable financial strength, is leading some to wonder whether banks handed out these lines too liberally in the good times. The rules governing when a company can use such lines, so-called covenants, may be too lax, Mayo says. Some bankers agree that standards were eased in the late 1990s. "Certainly, in some segments there was covenant weakening over the years," says David A. Hoyt, head of wholesale banking at Wells Fargo & Co., though he adds the weakening was "sporadic."

DISASTER MOVIES. Whether or not bankers were tough-minded enough in the conditions they attached to the credit lines may be open to debate. But why they made them in the first place isn't: The lines were a by-product of the battle to dominate the lucrative syndicated loan market. Chase Manhattan Corp. and Bank of America Corp. have dominated in recent years, and the rivalry between the companies' loan teams is legendary. Handing companies hefty credit lines was a way of getting them to sign up for lucrative loan business.

Companies that arranged credit lines before the sum-

mer can count themselves lucky. Already, weaker companies without such lines are getting whacked. "A major reason companies are filing bankruptcy now as opposed to six months ago, when their condition was just as shaky, is that they're going back to their banks for money and the banks are saying no," says Martin S. Fridson, Merrill Lynch Global Securities chief high-yield strategist.

Movie theater chains, for example, are reeling because the business is suffering from severe overcapacity, much of it financed by hefty leverage. On Aug. 1, Carmike Cinemas Inc., one of the nation's largest chains, said that its lead banker, Wachovia Corp., would not allow it to make interest payments to its senior bondholders, since Carmike had violated some of the provisions in its loan agreement with Wachovia. A week later, it filed for Chapter 11 bankruptcy. Then, on Sept. 5, United Artists Pictures Inc. filed for Chapter 11.

Companies that want to delay payments or restructure loans are finding their bankers less sympathetic, too. Take AMF Bowling Inc., the world's largest operator of bowling alleys. Its customers have dwindled, and cash flow has decreased 30% over the past two years. AMF did not make a Sept. 15 interest payment due on its bonds and started working with Citigroup to restructure its debt. Negotiations haven't gone well—on Nov. 14 the company said it was considering filing for bankruptcy.

Bankers are loath to characterize what has been happening as a credit crunch. The rise in credit problems and subsequent credit tightening is coming off years of excellent results, they say. Indeed, some worry that the attention now being given to credit quality, plus

Banks' caution may backfire as companies fall back on old credit lines

the banks' swing to more conservative lending, may choke off liquidity too much. "When we're talking about fundamentally healthy markets, we don't want credit concerns to become disproportional," says Chase's Gleysteen. Judging by banks' actions, though, it may already be too late.

By Heather Timmons, with Debra Sparks, in New York, and bureau reports



EQUITIES

THE RABBI OF DAY TRADING

How Mayer Offman has made \$23 million so far this year

On a good day, day trader Mayer Offman makes most of his money in the first hour after the stock market's opening bell. By 10:30 a.m. one recent morning—his shirt-sleeves rolled up and his fingers flying across several computer keyboards, like a pianist—Offman, along with his assistant, had already executed 250 trades, or about one every 15 seconds. His seven computer screens track his positions: \$16 million in shares he bets will go up, and \$16.7 million pegged to head south. “The morning’s over,” he says at 11 a.m. “The easy money has been made.” A computer screen flashes his net for the hour: \$440,000.

This was no fluke. The 15-year veteran Offman is an old-school trader, one of about 5,000 such professionals nationwide. With as much as \$55 million at stake at any given time on about 100 stocks, Offman is risk-averse and generally market-neutral, though this year he’s been more bearish. He won’t bottom-fish in illiquid stocks, and he never, ever tries to outwit the market. “Trading is not a major thought-out process; it’s reaction and instantaneous reaction,” says Offman, nicknamed “Eyes” by co-workers who say he has a photographic memory of a stock’s trading history.

Offman, 49, is also a rabbi. Maybe it helped, but thousands of novice traders haven’t had a prayer against an unmerciful market this year. The drubbing in the tech-rich Nasdaq—where 15% of the average daily volume is generated by day traders—has undone the undercapitalized greenhorn.

Those aren’t the traders you’ll find in “Mayer’s Room,” the most coveted of trading rooms at Carlin Equities Corp. in Manhattan, a firm he co-founded in 1992. Besides the money made and lost there, the 800-square-foot room is unre-



OFFMAN AND STAFF: No gamblers, just people interested in “wealth-building.”

markable: The walls are bare, and there are six long rows of desks on which computers are stacked ten-deep and two-high. The 12th-floor office is above the landmark Radio City Music Hall, though no one would know it from the inside because the shades are drawn. There are about 30 men and women who trade here and a few television sets, but hardly a sound is heard except

for the occasional “Oh my Almighty,” and the pounding of fist desktops. “For the first and last time there’s no talking, no joking,” says Schwerd, a trader who sits near man. “We do this for a living.”

By the market’s close, Offman made \$60,000 more, ending his \$500,000 in the black. His best trade was shorting 5,000 shares of Gold Sachs & Co., netting \$23,000 in 40 minutes. His worst: He lost \$11,000 an hour by shorting 700 shares of Broadcom Corp. It’s days like this that man says have earned him \$23 million in 2000, after making \$22 million in 1999.

Offman’s big returns are the kind of numbers that appeal to day-trading wannabes. But “only one in 200,000 has the genetic capability of being successful,” says Robert P. Deel, president of Duarte (Calif.)-based Tradingschool. Sucked in by the long-running bull market and low-cost online trades, almost everyone thought that day trading was easy money. Not true: The Elect Traders Assn. says 90% of traders are unsuccessful and leave the business. They lose the \$50,000 they generate with, plus whatever they’ve borrowed on margin.

Surviving the odds has nothing to do with researching companies’ balance sheets or price-earnings ratios. Because they have a long-term view, investors need a bull market to make money. Day traders do not. Short-term investors exploit the supply and demand in

MAYER'S TIPS FOR TRADERS

1 No matter how smart you are, the market does its own thing. Don’t try to come up with PhD theses of what it should be doing.

2 “Trading is not a major thought-out process; it’s reaction and instantaneous reaction.”

3 If all the trends—short, medium, long-term—are in same direction, that’s where you should take your maximum position. If \$5,000 is your limit, that’s your trade.

4 Pay attention to after-hours trading; the market will continue the trend of the previous night at the next day’s opening. Even if you’re wrong for a while, the trend will reassert itself.

5 Get used to making a lot of mistakes a day without letting it affect your whole psychological makeup. If you make mistakes, try to make them in the morning; you’ll have a lot more time to get out.

DATA: BUSINESS WEEK



You can handle any competitor. Unless it's your broker.

When you take huge positions in global securities markets, you don't want your broker taking positions opposite yours.

That's why you turn to Instinet. We have no portfolio, so we never compete with you.

We give you electronic access to one of the broadest, deepest, most liquid trading opportunities anywhere.

And since we are truly neutral, our research is as objective as it is insightful.

Our only goal is to help you get the fastest trade at the best price — to add that much more to your total performance.

If you want to learn more about us, call toll free 1-877-INSTINET or visit www.instinet.com



Instinet

A REUTERS Company

*Nothing comes between you
and the best price.™*

Agency broker, Instinet does not come between its clients and the best price. We do not commit capital, make markets or make profits on securities. © 2000 Instinet Corporation, all rights reserved. INSTINET and the INSTINET mark are registered service marks in the United States and other countries throughout the world. Instinet Corporation is member NASD/SIPC, and Instinet UK Limited is regulated in the U.K. by the SFA.

ances that occur second-by-second throughout the day, and they usually close out positions by the time the market closes. Offman goes with the market trend; there's no cheap or expensive stock. Experts also have an edge over beginners, who have a hard time shorting stocks. Shorts must be made when a battered stock reverses direction, a counterintuitive move for the inexperienced. "It's more challenging for new traders to profit in down moves," says Marc Friedfert of Broadway Trading.

Offman has shorted the market almost all year, getting his cues from after-hours trading. If a stock slumps in after-hours trading, he says, it will be down in the morning, too. "Once the market goes up the next day, we short immediately after that," he says. "Even if you're immediately wrong, the trend will reassert itself."

Many traders in the firm like to do their own thing and don't listen to his advice, says Offman, who makes a daily 11:30 a.m. broadcast call to 40 of Carlin's offices nationwide with his "intuition" about the direction of the market and individual stocks. Offman, who attended New York's Yeshiva University in the mid-1970s, and business school at night, partnered with Ronald H. Shear, a former market maker on the American Stock Exchange, to launch Carlin, where thresholds to join up are higher than most. Some traders aren't allowed to execute options trades; others need a minimum of \$100,000 in their account to do so. Applicants are grilled on strategies and are asked to provide statements from prior trading. "We want people interested in wealth-building, not gamblers," Shear says. What about commissions? On trades of up to 1,000 shares, the firm charges its 1,300 retail customers \$19.95 per trade for the first 149 trades made within a month, and \$14.95 for each additional trade. As traders mature, they graduate to a special cadre who trade Carlin's capital and usually split the profits 50/50.

At that level, explains Robin Dayne, a national day-trading coach, "These guys trade from their intelligence. If emotion comes into the equation, then they're not realistically dealing with the market." To be sure, Offman's most valuable asset may be his ability to remain detached about his job. And that's where his religion likely comes in. Although he's not a practicing rabbi, the Torah's teachings, he says, allow him to find a peace outside work. "You've got no shot at being a trader," he says, "if you've got chaos in your outside life."

By Mara Der Hovanesian
in New York

INVESTMENT BANKS

BARINGS MAY BE HEADED FOR THE HISTORY BOOKS

With ING giving up, the royal banker is damaged goods

When ING Group, the Dutch banking and insurance behemoth, bought London's Barings investment bank five years ago for one British pound, it thought it was getting a great deal. Barings, banker to the British monarchy, including Queen Elizabeth II, had been nearly bankrupted by a rogue trader in its Singapore office named Nick Leeson. ING wanted to use Barings' extensive international network to expand its own investment-banking business.

Yet on Nov. 19, ING admitted that the entire enterprise was effectively a disaster. ING bosses announced they were "exploring options" for selling off or closing down the U.S. operations of ING Barings, as its global investment bank is now known.

ING's decision to give up on its investment banking venture, which includes the U.S. brokerage firm Furman Selz, surprised some analysts because it comes just as Barings seemed to have turned a corner. Under Chief Executive David Robins, ING Barings earned \$286 million in 1999 and will do better this year.

"**BETRAYAL.**" Still, its return on capital for the first nine months of this year was a paltry 5%—vs. 40% for ING's asset management activities. And improving profits and market share promise to be hard, given the fierce competition from big investment banks in the U.S. and Europe. Plus, Barings' Amsterdam bosses were appalled at the ever-spiraling salaries and bonuses required to attract and keep top talent.

Finding a buyer for the U.S. business, which employs around 2,000 people, won't be easy. Most European

banks with global ambitions have already made big U.S. acquisitions. Switzerland's Credit Suisse Group bought Donaldson, Lufkin & Jenrette Inc., while another Swiss bank, UBS, acquired PaineWebber Inc. The investment-banking arm of Germany's Dresdner Bank just bought Wasserstein Perella & Co.

In London, ING Barings' staff is moralized. "There's a great sense of betrayal here," says one ING Barings senior executive.

Robins argues that the London office has a future.

Barings staffers point out that without distribution power in the U.S., the European branch has few prospects.

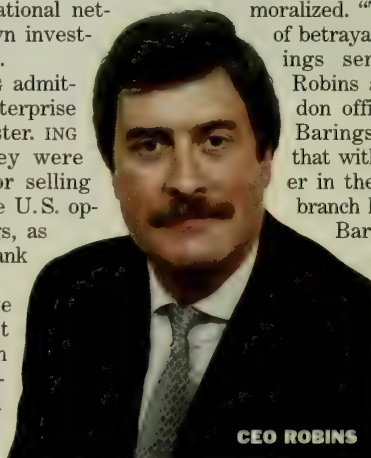
Barings sells much of its high-yield debt, for instance, through Furman Selz. "That's not that's on block it's hard to believe our high-yield business will survive," says one executive.

Goldman, Sachs & Co. has been reluctant to find a buyer for the U.S. operations. Though it has started shopping them around to potential buyers such as Bear Stearns & Co., Lehman Brothers Inc., Goldman finds it tough

to clinch a deal. Barings is very much a third-tier operation. According to Thomson Financial Securities Data, Barings ranks 17th in mergers and acquisitions and 36th among equities and bond underwriters.

What will happen if Goldman can't find a U.S. buyer? The joke among pressed Barings staffers is that it might sell it for a dollar—and even that might not be much of a bargain.

By David Fairclamb in Frankfurt



CEO ROBINS

ING BARINGS IN THE U.S:

- 2,000 staff, including brokerage Furman Selz
- 7 offices
- Ranks 17th in global M&A, 36th in equities and bond underwriting

DATA: ING GROUP, THOMSON FINANCIAL
SECURITIES DATA

**What if you could deliver training
of a complex ERP system to
0,000 new users on 6 continents...
simultaneously?**



**Nicole Gardner, Partner
PricewaterhouseCoopers' Center for Performance Improvement**

**That's what we do
for our clients with Centra.**

**We are PricewaterhouseCoopers' Center for
Performance Improvement,** a global practice within the world's largest profes-
sional services organization. We train end users of complex software solutions at Fortune 500 companies to achieve
dramatic business results through advanced learning solutions.

We needed a faster, more affordable, and more powerful way to deliver customized hands-on training to
our clients' employees around the world ... using software that anyone can use and understand.

We expect the best Internet solution available. One that rivals in-person training, without compromising
our high standards. And we need a responsive software partner who is accustomed to serving the demands of
large global organizations.

We got a live, interactive eLearning system that is highly effective, easy to use, and drastically reduces the
cost of training. Bottom line – Centra delivers for us, so we can deliver for our clients.

We chose Centra as a solution.

**Solutions for live eLearning and
Internet business collaboration.**



Centra®

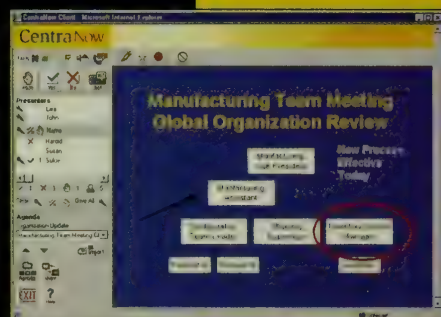
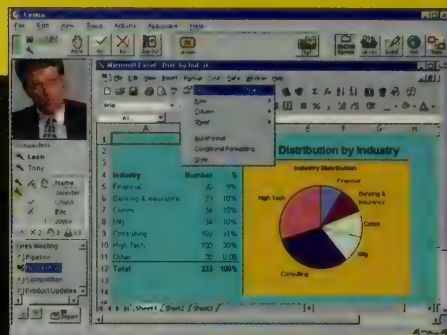
Solutions for live eLearning and Internet business collaboration.

At Centra, we believe that live eLearning is more than education. It's a way to connect business people online using a Web browser to interact in realtime, delivering information and skills more efficiently and with better results than ever before. And without the time, delays, and expense of business travel.

Only Centra offers a complementary suite of enterprise software and Internet services that enable the delivery and exchange of integrated voice, video, presentations, and applications for secure virtual classrooms, online presentations and Web meetings. With Centra, your workforce is more knowledgeable, your customers are more loyal, and your products and services get to market more quickly.

For more information, visit **www.centra.com**, or call 1-888-547-6300.

And deliver some big results of your own.



Centra meets every business need with software products and Web services for interactive virtual classrooms, online presentations and Web meetings.

Microsoft Certified
Solution Provider



COMMENTARY

By Debra Sparks

BUSINESS WON'T HEDGE THE EURO AWAY

The euro was not kind to large U.S. multinationals this year. As the currency plummeted from 1.04 last January to a low of about 2¢ in October, many companies watched helplessly as the dollar value of their European earnings headed south. McDonald's Corp., for instance, reported that the euro's fall could slash its full-year earnings by as much as 7¢ a share, or about 5%.

Such damage wasn't preordained. Coca-Cola Co., with 20% of its sales coming from Europe, didn't lose a penny. Reason: It hedged its foreign earnings by buying options that have guaranteed currency-exchange rate. Many other companies, though, were not so smart—or lucky. Should investors take them to task for failing to hedge successfully?

The short answer is no. Hedging is an expensive, inexact science—far more complex than it might appear at first glance. A company that spends large sums on hedging—by buying forward contracts, swaps, or options to get fixed rates—is essentially betting on a currency's move. The euro's 20% plunge this year is an unusual large move, and most companies didn't foresee a need to hedge against it. Moreover, exchange rates also go up. It clearly couldn't make sense to criticize a company that benefited from a windfall 20% gain because a currency went up.

NIGHTMARE. Each quarter, U.S. corporations must tally their foreign revenues and earnings and then translate them into dollars. So if a company earns 1 million euros, but the euro's value drops from \$1 per euro to 90¢, they would be worth only \$900,000, not \$1 million. An option to sell euros at \$1 each would avert the loss. But hedging isn't cheap. According to Goldman, Sachs & Co., hedging \$500 million worth of earnings costs about \$26 million.

Peter C. Gerhardt, managing director and global head of foreign exchange at Goldman Sachs, figures only 30% of U.S. companies buy options to hedge earnings. "There isn't a company on earth that has a 100%

hedging program," says Allan Kessler, J.P. Morgan & Co.'s vice-president of foreign exchange.

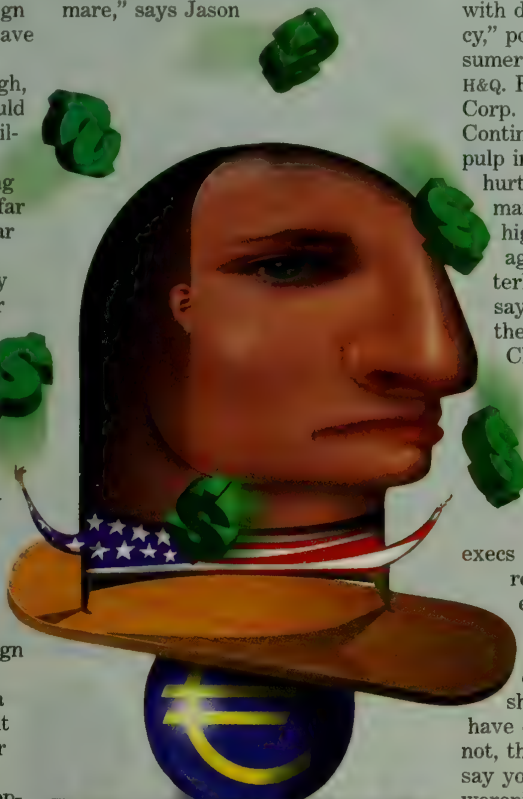
Adding to the uncertainty, the Financial Accounting Standards Board this year began phasing in new, more stringent accounting standards for options, forwards, and swaps. Called FAS 133, the new rule requires companies to value hedging instruments at market value each quarter—what's called "marking to market"—instead of amortizing them over the option's or swap's life. "It's a nightmare," says Jason

Wilson, treasury manager at Honeywell International Inc. "The statement is so complex that many companies are having trouble understanding it."

One way to avoid messy accounting and the expense of buying hedges is to use natural hedging. That entails matching revenues and costs in the same currency—by manufacturing and buying supplies locally. "Some companies suffer much more than others because they are forced to buy crucial raw materials with dollars rather than local currency," points out Amanda Tepper, consumer products analyst at Chase & Co. For example, Kimberly-Clark Corp. manufactures diapers on the Continent—but has to pay for wood pulp in ever-rising dollars. So it gets hurt twice. "They lose as their margins are eroded by paying a high price for pulp, and they lose again when they translate quarterly results back into dollars," says Tepper. In the third quarter, the euro's fall cut Kimberly-Clark's net income by 2¢ a share.

TURNABOUT. Some companies, such as Dow Chemical Co., use both natural and financial hedges. Half of Dow's sales are made outside the U.S. but in public, company executives neither blame nor praise currencies for deflating or inflating earnings in any particular quarter. "If the euro turns the other way and starts to strengthen, and profits get better, should you say you shouldn't have earned as much as you did? If not, then it's a bit duplicitous if you say you would have earned more if it weren't for currencies," says Kathleen C. Fothergill, who heads Dow's investor relations.

No matter how well a company hedges, its earnings will sometimes get hit. But investors who buy shares of multinationals shouldn't complain. They would be smarter to learn to hedge their own bets.



The Euro Takes Its Toll

COMPANY	OPERATING INCOME* MILLIONS	REDUCTION** BECAUSE OF EURO
GOODYEAR	\$68	30%
CATERPILLAR	294	12
MCDONALD'S	910	5
KIMBERLY-CLARK	667	2.5

*Third quarter 2000

**Analysts' estimates

DATA: COMPANY REPORTS, BUSINESS WEEK

Sparks covers corporate finance from New York.

BROKERS

BROKERS ARE FROM MARS, WOMEN ARE FROM VENUS

But Schwab aims to get the two in sync

The idea took shape at dinner two years ago. Charles Schwab, founder of the eponymous San Francisco firm that pioneered discount brokerage, told his daughter, Carrie Schwab Pomerantz, about a family friend who called to ask what she should do with a large divorce settlement. "Dad," Pomerantz responded, "how many women can ask you personally for investment advice?"

That's when they both realized, Pomerantz recalls, that the firm was neglecting women—especially those intimidated by financial topics. "We had prided ourselves on being gender-neutral," she says. But "women feel differently and learn differently about investing," Pomerantz, 40, who was assistant branch manager in Atlanta at the time, subsequently took charge of developing special marketing for women. Her efforts are now bearing fruit. Late in September, Charles Schwab & Co. launched its first investment seminars designed specifically for women and taught by women.

It's astounding that Schwab didn't discover the women's market sooner. Full-service financial firms have been marketing to women for most of the past decade—and have no doubt swiped some of Schwab's female customers. But now, Schwab, once a no-frills broker, is turning itself into a full-service firm—and, naturally, is looking for full-service clients. Says Pomerantz: "The women's effort falls nicely into that."

In fact, the firm has a chance to seize a major opportunity. Wall Street's focus has been chiefly on wealthy women with assets of \$500,000 and up. Schwab is targeting a broader audience: Even women with less than \$100,000 can sign up. The firm has a whiz-bang marketing record: Its invention of the mutual-fund



FISHING FOR WOMEN INVESTORS

Major brokerage firms are:

- Hosting women-only financial seminars taught by female instructors
- Tailoring marketing brochures and education materials to women
- Pitching TV and print ads to women

DATA: BUSINESS WEEK

supermarket in the 1980s transformed fund investing, and in the 1990s, it swiftly made itself the top online broker. Now, going after mainstream and lower-income women, Schwab "will have an impact," says Christopher Hayes, director of the National Center for Women & Retirement Research in Southampton, N.Y.

Women certainly have loads of money. The Securities Industry Assn. estimates that some 222,000 women now head households with incomes of more than \$100,000—and that the

INCLUSIVE
Being "gender neutral" isn't enough, says Schwab's Pomerantz

number of such women will double by 2010, when they'll control more than \$1 trillion of assets. Meanwhile, women members of the National Association of Investors Corp., a nonprofit education group in Madison Heights, Mich., have jumped sixfold, to 330,000, in the past decade.

NO JARGON. Pomerantz is taking a notably intimate approach. Rivals' women-only seminars typically have 100 or more participants, but Schwab is keeping

its groups down to 40. There's plenty of time for attendees to get to know each other, sometimes over coffee and snacks. The seminars avoid jargon and tie financial planning to real-life situations, such as getting divorced or having a child. "We're trying to speak to women in terms relevant to their lives and in language that's appealing to them," Pomerantz says. Other firms take similar tactics. One recent Salomon Smith Barney seminar discussed companies that research hormone-replacement therapy techniques to conceal varicose veins, says Michael Ross, a senior market vice-president at Salomon.

Schwab's seminars are too new to show results yet. But other firms report marked success. At Penheimer Funds, women have some 1.2 million accounts, up from 270,000 in 1993, when the fund manager first started targeting women. At Morgan Stanley Dean Witter, about two-thirds of participants in its women's seminars make appointments with advisers after a session. About a fifth of attendees at other seminars, says Rosalie Clough, a senior vice-president for marketing.

Schwab's Pomerantz isn't ignoring the fact that women are the biggest users of the Internet either. The firm's new Web site includes articles on such topics as "How Not to Leave Money to Your Kids." Morgan Stanley, too, plans to launch a site for women next year. If Schwab is to make its mark with women, it will have to stand up to increased competition.

By Louise Lee in San Mateo, Calif.



increase
productivity

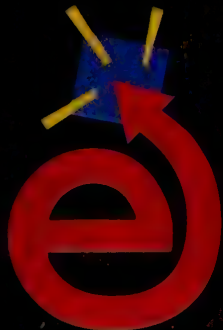
enhance
customer
service

reduce
supplier
costs

build
better
relationships

empower
employees

create
a connected,
collaborative
environment



ebusiness

conference and expo

December 12-14, 2000

Jacob K. Javits Convention Center, NYC

Innovation in the Customer Economy

The future of E-business is all about the value TO THE BUSINESS. Discover today's E-business best practices for enhancing your customer relationships, increasing your efficiency, and supercharging your productivity.

- Enlightening Keynotes from IBM, buy.com and BroadVision
- 3 General Sessions from experts who've already made E-business and E-commerce work for them
- 25 Expert Sessions focusing on E-business Benefits, Technology Solutions and Mobile Commerce
- 19 Enterprise-Class Case Studies – practical techniques and solutions to your E-business challenges
- Mobile Commerce Conference and Expo with solutions for your wireless future
- Over 250 exhibitors – potential partners to drive your company's e-transformation
- And more...much more!

Register NOW to get Early Bird Conference Prices and your FREE Exhibit Pass www.ebusinessexpo.com • 800 652-2578

CONFERENCE PRODUCED BY

BusinessWeek

AND

CMP

INFORMATIONWEEK

ALSO FEATURING

**mobile
commerce**
Conference and Expo

www.mccexpo.com

**Angel
SOCIETY**

Forums & Events

www.angelsociety.com

ARIBA
Making the net work for B2B

IBM

Microsoft

AserA

MicroStrategy

PHOBOS

ARTHURANDERSEN

iPlanet
e-commerce solutions

Sprint
The point of contact

EMC²
where information lives

MIMECOM

Rational
the e-development company

JOEDWARDS

**STERLING
COMMERCE**

haht
SOFTWARE

NUASIS

SAVVION SPACEWORKS

firehunter

SMARTpen
Self-Administered Authentication System

STORAGETEK
INTEGRATED BY AGIL FORETELL

Informix
SOFTWARE

PEOPLE'S

hp

invent

MERANT

xpedior

intel

Peregrine

UNISYS

ORIENT

Get now to
Early Bird
Conference Prices
and your
FREE Exhibit
Pass

Now Schedule

Monday, December 11

Workshops 9:30am - 3:30pm

Tuesday, December 12

Keynote 9:00am - 10:15am

Exhibits 10:00am - 5:00pm

Conference 10:30am - 5:00pm

Wednesday, December 13

Keynote 9:00am - 10:15am

Exhibits 10:00am - 5:00pm

Conference 10:30am - 5:00pm

Thursday, December 14

Keynote 9:00am - 10:15am

Exhibits 10:00am - 4:00pm

Conference 10:30am - 5:00pm

CAMERAS THAT
PRINT AND ZOOM,
HANDCRAFTED
FOODS

BusinessWeek Lifestyle



Digital Cameras Are Coming Into Focus

Prices have fallen, and there's more variety

BY LARRY ARMSTRONG

I've always found the whole notion of digital cameras exhilarating. It's as if you had received a lifetime's worth of film and processing for free. You can shoot as much as you want, see each shot immediately—and erase any instantly if you

don't like them. Creativity counts even after a picture has been snapped. The cameras come with software that allows you to fiddle with special effects, crop for tight portraits, or stitch together panoramas. You can even fix mistakes, grabbing faces from different snapshots to make sure that everybody has their eyes open and a winning smile in the finished print.

These days, digital cameras are more affordable than ever, with prices about a third of what they were three years ago.

More often than not, the price is determined by the number of pixels, or picture elements, that the camera's image sensor can record. Pixels are the tiny dots that form an image—look at a newspaper photograph with a magnifying glass and you'll see them.

Just a few years ago, a camera with a resolution of 640 x 480 pixels, or about 300,000 pixels—good for e-mailing snapshots to grandparents—would set you back \$500. Today, for under \$300, you can buy a camera that can shoot with resolution of at least 1 million pixels (1 megapixel). That's powerful enough to produce good-looking 4x6-inch snapshots, and even

acceptable 5x7 enlargements. Good choices in this price range include the Fuji FinePix 1300 (\$250), the Kodak DC215 Zoom (\$300), or the Olympus Camedia D-360L (\$300).

Even better are the 2-megapixel cameras, which can turn out great 8x10s. These cameras, from such makers as Nikon and Olympus, start around \$500. The top of the line are the 3-megapixel models in the \$800-\$1,000 range. Their big advantage? You can crop and print only part of an image and still have enough resolution left to produce a satisfying photo.

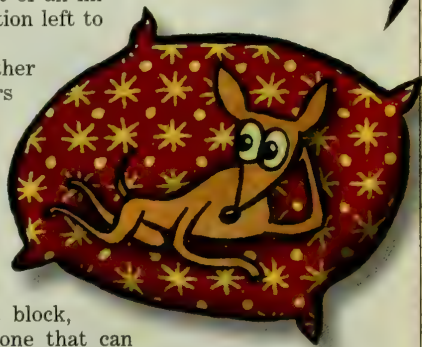
Besides cheaper prices, the other good news is that camera makers are now segmenting the market. That means you'll be able to get the features you want without paying for the stuff you'll never use. Manufacturers are developing new cameras for buyers with very specific needs. You may simply prefer to have the smallest, coolest camera on the block, or you may want to have the one that can click off the fastest series of shots, capturing the split-second your kid tips in the basketball to win the game.

I've sorted through this year's crop to find the best of some unusual features that can make a difference in your photos. I also checked out a nifty way to get in at the bottom of the market.

For \$129, you can snap Kodak's PalmPix onto your Palm organizer. The screen is abysmal as a viewfinder, and the snapshots are low-resolution, but

it's a clever toy that'll let you play around with digital photography without dropping a bundle.

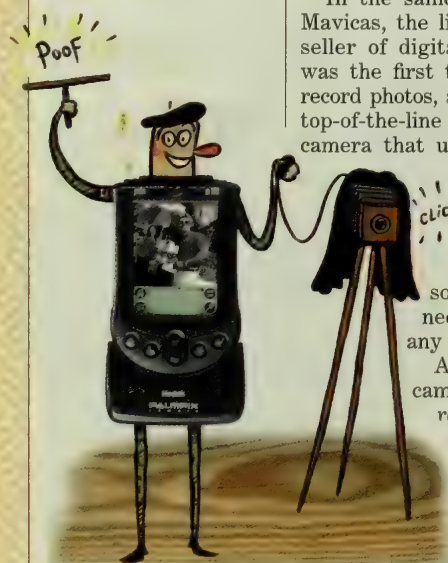
This year's coolest camera has to be the Canon PowerShot s100, or Digital Elph. This tiny, precision-made stainless-steel box is the size of a pack of cigarettes, and only slightly thicker. At \$499, this fully-featured 2.1-megapixel camera, complete with an optical zoom lens, is one of



HOLIDAY
gifts

ILLUSTRATIONS
AND DIGITAL
IMAGING BY
DAVID GOLDIN

Coolpix 880 is designed for amateurs who do more than point-and-shoot but don't want to fuss with the intricacies of a manual camera



the cheapest and by far the most compact digital camera in its class.

My personal favorite is the slightly larger \$699 Coolpix 880 from Nikon. It's a stripped-down version of Nikon's top-of-the-line 3.3 megapixel Coolpix 990, but sells for \$200 less. It's designed for amateurs who are beyond the point-and-shoot stage but who don't want to deal with the intricacies of a fully or even partially manual camera. I loved the dozen or so "scene" modes that set the camera up to handle automatically those difficult shooting situations that I always blow, such as sunsets, fireworks, parties at night, and beach and snow scenes.

At the other end of the hefty scale are a couple of cameras whose size and weight—about two pounds, vs. a half-pound for Canon's Elph—might not be worth it but for the single unique feature that sets them apart from their smaller siblings. One simple-to-use camera is the Camedia C-211 from Olympus. It's a full digital camera with a Polaroid camera inside. When you take a snapshot you like, press the button and a baseball-card-size instant print pops out.

In the same league are some of the Sony Mavicas, the line that has made Sony the top seller of digital cameras in the U.S. Mavica was the first to use everyday floppy disks to record photos, and this year Sony augmented its top-of-the-line MVC-FD95 with the MVC-CD1000, a camera that uses a built-in writeable CD-ROM drive. Besides being a cheap way to store pictures—each \$4 CD disk will hold 160—it makes viewing them on a computer a cinch. There is no software to load or cables to connect; you simply pop the disk into any CD-ROM drive.

A big problem with many digital cameras is the lag time between recording one picture and getting ready for the next one—a range from two or three seconds to more than 10 seconds in cheap-

er cameras. Olympus has solved that with new Camedia E-100 Rapid Shot model. It's priced at \$1,499, but it's faster than most film cameras shooting off 15 high-resolution frames a second. What's more, it will grab up to five shots even before you fully depress the shutter, ensuring that you always get the one that got away.

Whatever camera you end up buying, I have a few tips to keep in mind. The first is zoom. Optical zoom lenses are among the most used features of cameras, allowing you

HOLIDAY gifts

compose a shot without much jockeying for the best place to shoot from. Most of the best digital cameras have a two- to three-times zoom lens, and so do the more expensive ones, such as the Sony Cyber-shot or the Olympus Rapid Shot, have a 10X zoom that can bring distant objects breathtakingly close. Some cheaper cameras advertise "digital zoom," which is nothing more than enlarging the center of the picture—what used to be called cropping. Use them and you'll lose as much as half the resolution of the image, resulting in blurry prints. If the ability to zoom matters to you, buy one with an optical zoom lens.

The real power hogs of digital cameras, also their biggest lure, are the tiny color displays that allow you to view photos immediately. If you're not careful, you can spend on batteries what you save on film and processing. Unfortunately, camera makers and dealers see adapters and battery chargers as a profit center, so they're increasingly leaving them out of the box. If they're not included, it will cost you an extra \$50 or so to buy them separately.

Finally, don't be afraid to buy more camera than you think you can handle. All digital cameras are fully automatic and easy to use right out of the box. You can learn the more advanced features as you go. And remember, with digital cameras the "film" is free, so all a photo costs is a little time. As for the mistakes you'll make, erase them on the spot. There's no more need to tuck them to a shoebox on the closet shelf.

For Digital Pictures with a Difference

CAMERA	800-NUMBER	STREET PRICE	RESOLUTION (MEGAPIXELS)	COMMENTS
CANON POWERSHOT S100 DIGITAL ELPH	652-2666	\$499	2.1	Ultra-compact, no-compromise design, with 2X zoom and flash, gives this high-resolution digital camera the biggest wow factor.
NIKON COOLPIX 880	645-6689	\$699	3.3	Step-down version of Nikon's popular Coolpix 990 is geared for consumers, with settings for special shots, including fireworks and sunsets.
OLYMPUS C-211 ZOOM DIGITAL PRINTING CAMERA	622-6372	\$799	2.1	Bulky but innovative digital camera turns any picture into a Polaroid print at the touch of a button.
SONY MAVICA MVC-CD1000	222-7669	\$1,299	2.1	Built-in recordable CD-ROM drive allows cheap storage for plenty of shots, and the CDs can be played in any computer.
OLYMPUS CAMEDIA E-100 RAPID SHOT	622-6372	\$1,499	1.5	Aimed at the professional photographer, or any sports enthusiast, this model is the fastest, firing off up to 15 shots a second.



Capitalizing On the Yearend Dash

As tax-savvy investors race to dump dogs, here's how to cash in

BY MARA DER HOVANESIAN

Wall Street is in the throes of the tax-loss season, when investors dump shares to create losses that will help them shave their tax bills next spring. With the market in negative territory and thousands of issues in the red, there are plenty of stocks to deep-six—depressing prices further.

This selling can, however, create some great opportunities, especially in the little-known market for closed-end funds. For a number of reasons, these funds often tend to trade at a price that's a discount to the value of their holdings. At this point in the year, such discounts are usually at their widest, and renewed buying in the new year traditionally narrows that gap. The whole cycle, says Thomas Herzfeld, whose Miami investment company specializes in closed-end funds, "is as predictable as Christmas." Savvy investors like Herzfeld look to pick off some plums ripe for rebound.

Good bets abound in many sorts of closed-end equity funds, from bread-and-butter large-cap equity portfolios to those that zoom in on foreign markets like Korea or Eastern Europe, or industry sectors such as health care or high technology (table). There are discounts to be

had in closed-end bond funds, too, but they're not as compelling. That's because the fixed-income markets have done well over the past year, except for the credit-sensitive high-yield bond and emerging-markets bond funds.

First, a few basics. Like mutual funds, closed-ends hold securities whose prices fluctuate with the market. So does their net asset values (NAV). Closed-ends differ from mutual funds in that they have a fixed number of shares, and those shares trade on the stock exchanges (a few on Nasdaq). These markets are not that efficient, and the price of a share on the Big Board is usually different from the NAV of the fund. If the market price is above the

NAV, the fund is said to trade at a premium. If it's below, the fund is at a discount.

Buy a fund that sells at a 20% discount to NAV, and you get \$1 worth of stocks for 80¢. You also get two ways to make money: One, the value of the underlying investment goes up, and two, the discount narrows or even closes. Best yet is to choose funds that have a chance of doing both. Want to make a bet on the beat-up Internet sector? The LCM Internet Growth Fund, for example, which has a \$7 market price, trades at a 22% discount to NAV. The stocks in a regular Internet mutual fund are

Closed-End Funds

just as beaten up, but you pay 100¢ on the dollar.

Plain-vanilla equity funds offer some good investment plays today. Kevin McNally, a Salomon Smith Barney analyst, notes that 43 of 46 closed-end domestic equity funds have outperformed the Standard & Poor's 500-stock index (through Nov. 10), when measured by market price or NAV gains. Still, the funds now sell at an average 9% discount, though some are as wide as 35%.

Among such funds are Adams Express, a U.S. equity fund, with a 7.4% discount, recommended by George Cole Scott, president of Closed-End Fund Advisors in Richmond, Va. Adams Express, which has been around since 1929, owns a passel of large-cap stocks like Corning, General Electric, and Cisco Systems. The other attraction is the rock-bottom expense ratio of 0.34%. Royce Value Trust, another general equity fund, sports a discount of 13%, even though its NAV return so far this year has been an impressive 10.4%. Manager Charles Royce's specialty is small-cap value stocks.

In the red-hot health-care sector, take a look at H&Q Healthcare Investors, selling at 30, a discount of nearly 25%. That's an especially large break considering the fund's stellar record. The portfolio gained 66% so far this year, and the share price, 61%. Another star is INVESCO Global

Health Sciences Fund, up 48% this year, trading at an 11.4% discount.

The discounts also afford you a chance to invest with the same portfolio or in the same investment program as a well-regarded mutual fund at a considerable savings. John Schroer, who runs VESCO Global Health, also manages a similar mutual fund, INVESCO Health Sciences, which is just 23% and charges investors 0.64% more expenses. John Hancock Bank & Thrift Opportunity Fund, at an 18% discount, is similar to John Hancock Regional Bank, an open-end fund. In

addition, the cost of buying a closed-end fund through a brokerage commission. The Hancock mutual fund carries sales charges as high as 5%.

The closed-end format can work well with bonds. When a bond fund trades at a discount, the yield is amplified. Take Franklin Multicome Trust, which sports an annual dividend of 67¢. That's a 6.75% yield on the fund's \$9.92 NAV. But the fund trades at a 17.5% discount, so the yield is 8.1%.

Other windfall gains could accrue to closed-end investors. When the discount persists, some fund-management companies buy back shares. That reduces the share count, which usually narrows the discount. For example, Motor Income Fund, which invests in mortgage-backed securities and corporate bonds, adopted a provision in October for a tender offer of 20% of its shares. The discount, as high as 22% earlier this year, is now less than 9%. The discount on Dresdner RCM Global Strategic Income Fund, near 20% earlier this year, narrowed to 4% in October after Phillip Goldstein, president of RCBall and Winthrop, a Pleasantville (N.Y.) investment firm, petitioned management to convert to a conventional mutual fund. When a closed-end becomes a mutual fund, the discount disappears because investors can redeem the shares directly from the fund company; they don't have to sell them on the open market.

A large discount can make a closed-end fund alluring, but buying just for the discount is hardly. Funds that have had a large discount for a long period of time could be problematic. That's why fund investor Scott avoids such deeply discounted funds as Equus II, in which the average discount for this year is 37%. And sometimes discounts persist just because the closed-end market is not that efficient. Gregg Wolper, senior analyst at Morningstar, points to the Irish Investment Fund. It's one of the few for closed-ends with positive NAV returns this year, yet the discount has not been less than 10%. "It's hard to know why," says Wolper. One theory: Closed-end funds now have competition from new sorts of exchange-traded funds such as iShares. Because of a different legal structure, these newer funds trade at or near their NAV. So some analysts think investors are optimistic about iShares since they'll always be able to sell at or near NAV. Still, in a skittish market, buying a fund worth of assets for 80¢ is not a bad deal.



Bargain Hunting

FUND (SYMBOL)	PREMIUM(+)/DISCOUNT(-) DURING 2000 HIGH - LOW		DISCOUNT/ PREMIUM*	SHARE PRICE*
U.S. EQUITY				
JOHN HANCOCK BANK & THRIFT OPPORTUNITY (BTO)	-6.8%	-20.3%	-18.0%	7.50
LCM INTERNET GROWTH (FND)	-1.2	-28.4	-17.1**	7.13**
INVESCO GLOBAL HEALTH SCI. (GHS)	-7.7	-23.5	-11.37	20.44
ADAMS EXPRESS CO. (ADX)	-6.4	-19.0	-7.4	22.38
GABELLI EQUITY TRUST (GAB)	+1.0	-11.4	0**	11.38**
ROYCE VALUE TRUST (RVT)	-10.5	-17.6	-13.0	14.19
FOREIGN EQUITY				
JAPAN OTC EQUITY (JOF)	-16.7	-33.4	-29.0**	7.63**
KOREAN INVESTMENT (KIF)	-24.5	-35.1	-31.5	4.88
MSDW ASIA PACIFIC (APF)	-21.7	-31.7	-27.0	8.75
TAXABLE BOND				
CURRENT INCOME SHARES (CUR)	-11.8	-18.4	-12.2**	10.69**
DEBT STRATEGIES (DSU)	-2.8	-20.2	-15.8	6.31
FRANKLIN MULTI-INCOME TRUST (FMI)	-13.6	-23.5	-17.5	8.19
SCUDDER GLOBAL HIGH INCOME (LBF)	-15.3	-24.4	18.9	5.00
MUNICIPAL BOND				
BLACKROCK INVESTMENT QUALITY MUNICIPAL TRUST (BKN)	-5.4	-16.0	-15.4	12.06
DUFF & PHELPS UTILITIES TAX FREE INCOME (DTF)	-7.5	-18.3	-17.9	12.60
INVESTMENT GRADE MUNICIPAL INCOME (PPM)	-10.8	-18.5	-15.5	13.44

* NOV. 16

** NOV. 10

SOURCE: THOMAS J. HERZFELD ADVISORS, WEISENBERGER, BUSINESS WEEK

The path to e-business success is easy to follow.

BusinessWeek online



BusinessWeek
e.biz

**Get on the fast-track with BusinessWeek e.biz, our resource
for everything you need to know about e-business.**

ebiz.businessweek.com

Business moves at lightning speed. To stay ahead of it,
I need e.biz at businessweek.com. The channel that's
unparalleled at offering timely information, analysis, and tools
can use every day. BusinessWeek e.biz's in-depth coverage
archives let you look into the future and learn from the
past. Our award winning editorial staff makes sure you know
what's important on a daily basis. And best of all, it's all free

to BusinessWeek subscribers. One click and you're armed
with the power only BusinessWeek Online can offer to help
make your e-business ventures successful. And make you a
leader worth following. Activate your free subscription today.

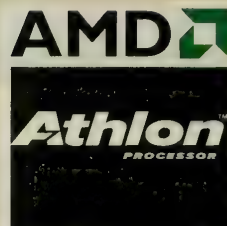


**2000 National Magazine Award Winner
General Excellence in New Media**

Keyword: BusinessWeek
Internet Keyword: BusinessWeek ebiz

A Division of The McGraw-Hill Companies





YOU'D SMILE TOO IF YOU'D JUST BEEN NAMED



The editors of PC World magazine judged hundreds of products based on performance, consistency, innovation and value. Their verdict? "AMD's Athlon Processor is a superstar in all four" and "Athlon-based PCs sprinted to the top of our corporate and home PC charts." That's just a few of the reasons that they chose the AMD Athlon™ processor as "Product of the Year." You'd think



PC WORLD MAGAZINE'S PRODUCT OF THE YEAR.

...this by now. After all, AMD Athlon processors have already won more than 65 awards worldwide. But
...hear things like "record-breaking performance," "architecturally superior to Intel Pentium III" and "the
...it a clock speed of 1 gigahertz, beating Intel at its own game," we still can't help but grin. You will too
...see what an AMD Athlon processor can do for your productivity. Log on to www.amd.com/pcworld.

Advanced Micro Devices, Inc. AMD, the AMD logo, AMD Athlon and combinations thereof are trademarks of Advanced Micro Devices, Inc. Pentium is a registered trademark of Intel Corporation. See July 2000 issue of PC World for complete article.

AMAZON: CHEAPER— BUT CHEAP ENOUGH?



BY ROBERT BARKER

Despite its mounting losses, investors are tempted by the online giant's low stock price. Its investments, meanwhile, are a horror show

Here it is, the holiday shopping season again, and investors once more are as focused on Amazon.com as kids are on their wish lists. The difference this year is that it's harder to make a bearish case against the leading online retailer. Amazon in the last year has doubled its customer base and widened its gross margin. At the same time, its stock plunged right along with its Internet peers (chart). Buying into CEO Jeff Bezos's dream now is a lot cheaper than last year. But at \$28 a share, is it cheap?

A close look at Amazon's most recent quarterly report tells me no. And it's not because the report betrays hints of slower retail sales or red flags about how efficiently Amazon can ship a gazillion Razor scooters. It doesn't. It's because the report details how Amazon has utterly failed to invest wisely on behalf of its shareholders.

Amazon's astounding net losses—its accumulated deficit since 1994 is \$1.75 billion—are well known. So are its towering load of debt, \$2.1 billion; its \$487 million negative net worth; and its voracious appetite for cash: Through Sept. 30, operations ate \$378 million, more than triple the cash used last year even though sales grew less than half as fast.

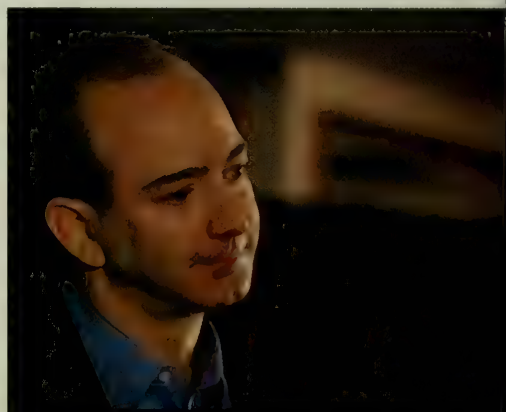
All that unpleasantness is routinely dismissed by Amazon boosters as the necessary pain investors must bear as Amazon makes itself into the world's biggest, most profitable retailer. What I can't blink past are the results of Amazon's attempts over the past year to build its business by investing in other e-tailers, such as living.com.

POOF! Only last February, Amazon gave living.com, a privately held online furniture and housewares retailer, \$10 million in cash in return for preferred stock. It also picked up an additional \$21 million in preferred stock in return for promoting living.com at Amazon.com. In the next seven months, as a big investor in living.com, Amazon had to record \$16.9 million in red ink, its share of living.com's losses.

Now, here's what Amazon got for its trouble: Visitors to www.living.com today don't find links to sofas and towels but a long list of bankruptcy filings, statements, and schedules. Like many other of the bubble-added among us, Amazon bought into living.com at the peak of Internet insanity, only to see its investment go poof! into Chapter 11.

Something very similar, only more costly, is happening now with Pets.com. Amazon last year put nearly \$58 million into the online pet store for a 30% stake. On Nov. 7, Pets.com decided to liquidate, noting despite its adviser Merrill Lynch's best efforts "no party was prepared to provide capital to acquire the company. In fact, out of the more than 50 prospects contacted, fewer than 10 were even prepared to visit with the company. With Pets.com shares now near 30¢, Amazon's stake is worth under \$3 million.

MISSING GROCERIES. Those weren't the only feats. Yet more dismaying is how what looked like a victory is now a loss, too. On September 11, when online grocery store Webvan Group sued stock to buy Amazon partner Home Depot.com, Amazon was able to post a \$40 million gain on a \$44 million investment. But by September 30, \$15 million of that gain disappeared.



BET ON BEZOS? Some partner sites have failed

Webvan's shares sank. By Nov. 15, with Webvan's stock off another 55%, Amazon's gain on its bet on the future of e-grocery shopping turned into an unrealized loss I estimate at \$15 million.

Bulls think the \$384 million Amazon spent this year and last on fixed assets, such as new distribution centers in the U.S. and Canada, will eventually pay off big. Perhaps Amazon this year and last also put more than \$400 million in other businesses, investments that are on Amazon's September balance sheet at \$262 million. Their true market values are very likely a lot less. "We made what we believed were appropriate investment decisions," an Amazon spokesman told me. "Hindsight is 20-20." Maybe Amazon plowed cash into its operations more wisely. Then again, maybe that's just a holiday season wish.

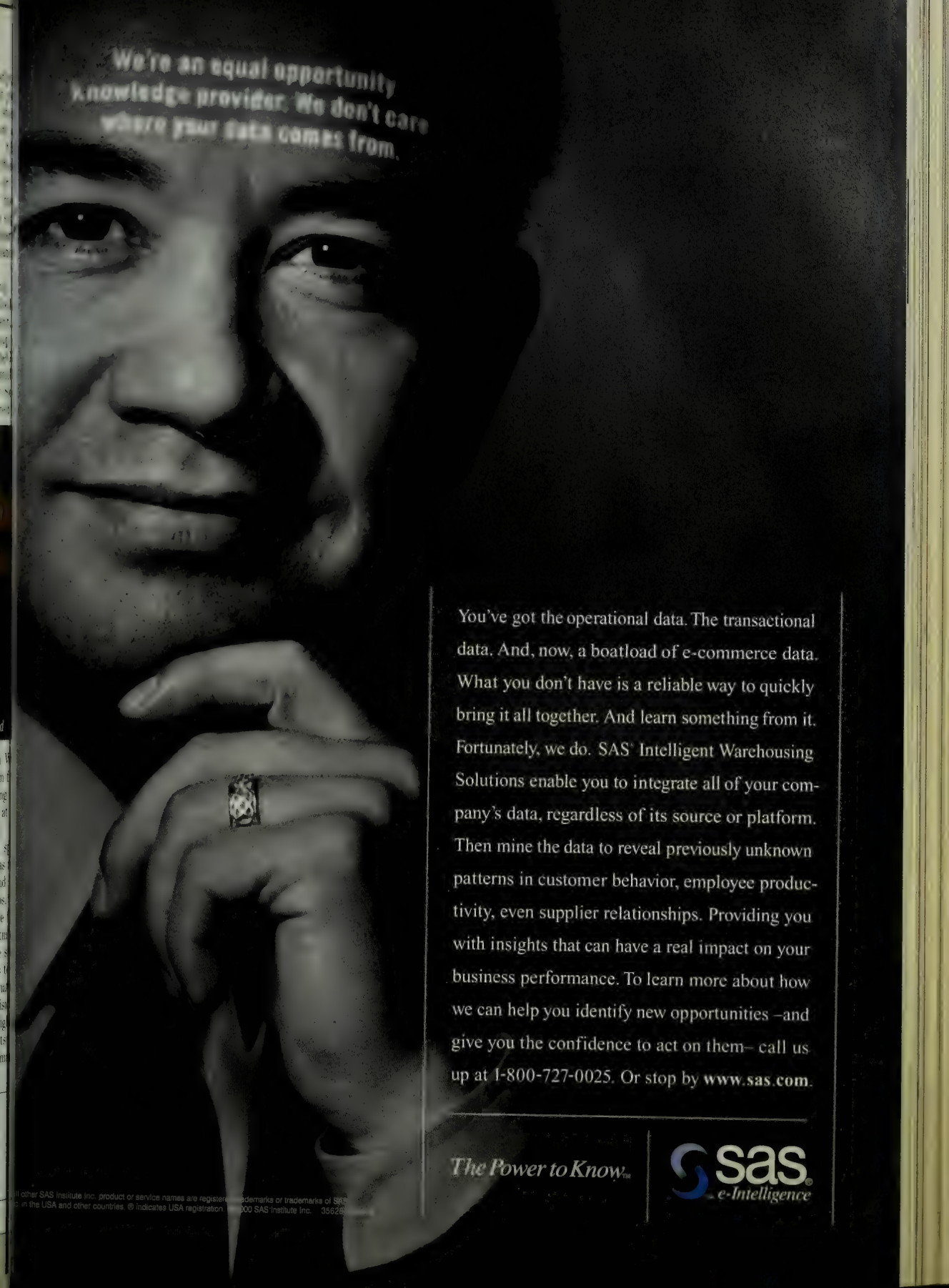
An E-Tailer's Slide



BusinessWeek online

For barker.online, go to
www.businessweek.com/investor/
or AOL keyword: BW Daily

QUESTIONS? COMMENTS? E-mail barkerportfolio@businessweek.com or fax (321) 728-1711



We're an equal opportunity
knowledge provider. We don't care
where your data comes from.

You've got the operational data. The transactional data. And, now, a boatload of e-commerce data. What you don't have is a reliable way to quickly bring it all together. And learn something from it. Fortunately, we do. SAS® Intelligent Warehousing Solutions enable you to integrate all of your company's data, regardless of its source or platform. Then mine the data to reveal previously unknown patterns in customer behavior, employee productivity, even supplier relationships. Providing you with insights that can have a real impact on your business performance. To learn more about how we can help you identify new opportunities—and give you the confidence to act on them—call us up at 1-800-727-0025. Or stop by www.sas.com.

The Power to Know.™

 **sas**
e-Intelligence

All other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration. © 2000 SAS Institute Inc. 35629

Who cares about size when you've got power

Imagine if small companies

suddenly had strength far

beyond their dimensions

If efficiency increased so

radically, you couldn't tell

had ten employees or ten

thousand. What if the ability

to grow was as limitless

as your ambition. Meet

NetLedger. We leverage

power of the Internet to

your accounting system

an e-business rocket. Visit

at NetLedger.com or

call 1-800-NETLEDGER.

Then stand back and watch

the capability of the small

get very, very large.

NetLedger

Small business powered by

ORACLE™

NEWPARK GUSHER?



GENE G. MARCIAL

big drillers
buy oil-patch
Newpark. A
it could perk
bedraggled
urant chain.
Wilsons the
er Experts is
ding fast

What happens to all the waste spewed out by oil and gas drilling? In spite of new technologies that have sharpened drilling efficiency, analysts expect oil field detritus to hit the peak levels last reached in 1997. Such a concern, however, is a bonanza to Newpark Resources (NR), a Big Board-listed provider of environmental services to oil-and-gas explorers. Newpark processes and disposes of exploration and production refuse, including that contaminated with radioactive material.

That's reason enough for some to snap up Newpark shares. But there is another angle: The likes of Halliburton or Baker Hughes, both major oil drillers, could end up buying Newpark.

One investment banker says Halliburton talked to Newpark last year—but no deal. Now, an investor close to Newpark says Halliburton has “returned for another approach and a new offer.” Halliburton and Baker Hughes declined comment as a matter of policy. Newpark also won't comment.

Shares of Newpark, trading at 10¢ in August, have fallen to 7 1/4¢, even though Newpark's business—mainly in Louisiana and Texas—has picked up. It recently added on-site processing of wastes to its services. “It is rapidly expanding its capacity,” says Robert Trace of Hibernia South-coast Capital, who rates the stock a strong buy, with a 12-month target of 20.

Newpark is receiving 5 million barrels of waste a day, says Trace. New Environmental Protection Agency rules calling for reduced discharges into federal waters will boost the demand for Newpark's services, he says. That, plus the rise in rig operations, should allow Newpark to boost prices. The analyst figures the company will earn 17¢ a share in 2000 and 50¢ in 2001, vs. 1999's 21¢ loss.

STOP THE WILTING AT GARDEN FRESH

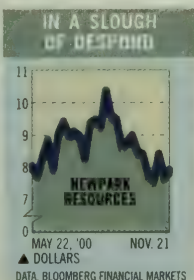
Garden Fresh Restaurant (LTUS), which operates a chain of 84 salad buffet restaurants in 14 states, has seen its stock fall from 14 to 8 in just four months, because of earnings disappointments. So a big stakeholder is pressing management to do something to boost the stock—or else. David Nierenberg, who heads D3 Family Fund and owns 14.3% of Garden's stock, says: “Something substantial and different must be done to maximize

shareholder value.” He notes that the stock is way under its initial public offering price of five years ago and 39% below book value.

The betting is that a buyout group will seek Nierenberg's help to acquire Garden. One money manager figures the stock is worth 18, based in part on 30 restaurant properties it owns.

In a 13D Securities & Exchange Commission filing on Nov. 14, Nierenberg said he wanted to be a “positive catalyst” to push the board and management into closing the gap between the stock's depressed price and the company's intrinsic value. He noted that in an industry where companies are acquired at roughly 6 1/2 times cash flow, Garden was trading at just 4 times—suggesting Garden might just as well be sold.

George Lusch of Banc of America Securities expects Garden to earn \$1.02 a share in the year ended Sept. 30, 2000, and \$1.15 in 2001, compared with 1999's \$1.18. Garden didn't return calls.



WILSONS: SET TO GO HELL FOR LEATHER

With Christmas just around the corner, are retail stocks set for a lift? Maybe not, considering the slowing economy and the sharp sell-off in stocks. But Daniel Schwarzwalder of Buckingham Capital Management—whose fund, mainly in retail and apparel, is up 35% this year—bets big on one specialty retailer. He thinks Wilsons the Leather Experts (WLSN) will score. Why? He calls leather the “sweet spot” in fashion today, and he's impressed with Wilsons' “very focused” management. Schwarzwalder says it has created “a good brand, whose sales have been growing at 20% a year.” Wilsons operates 529 retail stores in 44 states, Canada, and Britain. “The stock, down from 21 in August, to 14¢, is cheap,” he says. He sees it doubling in 12 months.

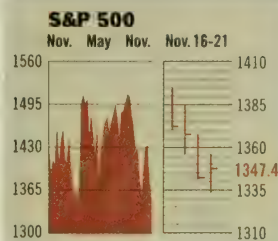
John Rouleau of Gruntal says shares of Wilsons have yet to reflect its acquisition of El Portal, a retailer of luggage and travel accessories. Its 38 stores—in five states and Guam, selling such brands as Coach, Bally, Hartmann, and Kenneth Cole—could swell to 300 stores under Wilsons, he says. El Portal, adds Rouleau, will make Wilsons profitable all-year round, because its business is less seasonal. Most retailers make their money in the fourth quarter. In 2002, Rouleau figures El Portal will add \$75 million in sales and will up earnings by share by 20¢. He sees Wilsons earning \$2.33 in the year ending Jan. 31, 2001, and \$2.83 in 2002.



BusinessWeek online

Watch for Gene Marcial's Inside Wall Street Online column every Tuesday afternoon at www.businessweek.com/today.htm

STOCKS



COMMENTARY

It was a turkey of a week in the stock market. Earnings woes coupled with the continuing Presidential pandemonium were the culprits. The Nasdaq, hit particularly hard by earnings downgrades and price target cuts in high-tech companies like eBay, Juniper Networks, and Cisco Systems, finished down 9.3%. The Dow was off 2.0% and the S&P 500 was down 3.1%.

Data: Bloomberg Financial Markets
Bridge Information Systems, Inc.

U.S. MARKETS

	Nov. 21	Week	Year to date	Last 12 months
S&P 500	1347.4	-3.1	-8.3	-5.3
Dow Jones Industrials	10,494.5	-2.0	-8.7	-4.6
Nasdaq Composite	2871.5	-9.3	-29.4	-14.8
S&P MidCap 400	494.1	-3.8	11.1	14.4
S&P SmallCap 600	205.9	-4.4	4.1	10.5
Wilshire 5000	12,361.4	-4.4	-10.5	-5.8

SECTORS

	Nov. 21	Week	Year to date	Last 12 months
Business Week 50*	1057.0	-4.3	-18.8	-10.1
Business Week Info Tech 100**	706.2	-7.6	NA	NA
S&P/BARRA Growth	749.2	-4.0	-15.6	-10.4
S&P/BARRA Value	610.7	-2.1	0.0	-0.3
S&P Energy	942.7	1.1	13.0	8.4
S&P Financials	148.1	-3.5	11.3	3.3
S&P REIT	81.9	0.2	11.2	11.6
S&P Transportation	700.0	0.4	17.3	12.7
S&P Utilities	330.0	2.1	45.2	40.9
GSTI Internet	235.5	-21.3	-66.9	-58.8
PSE Technology	883.0	-6.9	-9.2	13.2

*Mar. 19, 1999=1000 **Feb. 7, 2000=1000

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Pollution Control	40.8	Defense Electronics 139.6
Conglomerates	23.8	Natural Gas 63.2
Airlines	20.8	HMOs 61.6
Restaurants	20.7	Pollution Control 59.0
Homebuilding	19.7	Hospital Management 55.5

EQUITY FUND CATEGORIES

4-week total return	%	52-week total return	%
Leaders		Leaders	
Latin America	3.8	Health	54.8
Miscellaneous	3.3	Natural Resources	20.9
Mid-cap Value	2.1	Real Estate	20.2
Financial	1.5	Small-cap Value	13.7
Laggards		Laggards	
Technology	-19.8	Japan	-27.2
Communications	-15.7	Precious Metals	-23.9
Small-cap Growth	-12.2	Diversified Pacific/Asia	-21.7
Mid-cap Growth	-11.7	Communications	-15.0

EQUITY FUNDS

4-week total return	%	52-week total return	%
Leaders		Leaders	
ProfFunds UltraShort OTC	38.5	Schroder Cap. Micro Cap	156.3
Potomac OTC Short	18.2	Munder Fram. Hlthcare. B	138.6
AmSouth Sel. Eq. Trust	11.1	Dresdner RCM Biotech. N	137.6
Rydex Transportation Inv.	10.8	Franklin Biotech. Disc. A	99.3
Laggards		Laggards	
Turner Technology	-37.3	Apex Mid Cap Growth	-67.4
PBHG Tech. & Comms.	-36.8	Credit Suisse Inst. Jap. Gr.	-59.6
ProfFunds UltraOTC Inv.	-35.9	Warburg Pinc. Jap. Sm. Co.	-52.8
Merrill Lynch Focus 20 B	-34.5	Warburg Pincus Japan Gr.	-50.6

THE WEEK AHEAD

EXISTING HOME SALES Monday, Nov. 27, 10 a.m. EST ► Existing homes probably sold at an annual rate of 5.1 million in October, down from 5.14 million sold in September, says the median forecast of economists surveyed by Standard & Poor's MMS, a division of The McGraw-Hill Companies.

DURABLE GOODS ORDERS Tuesday, Nov. 28, 8:30 a.m. EST ► New orders for durable goods likely fell 0.2% in October, after increasing 1.8% in September.

CONSUMER CONFIDENCE Tuesday, Nov. 28, 10 a.m. EST ► The Conference Board's index of consumer confidence probably dipped to 134.8 in November, from 135.2 in October. A decline is more likely to reflect jitters about the stock market, rather than any effect from the election soap opera.

PERSONAL INCOME Thursday, Nov. 30, 8:30 a.m. EST ► Personal income likely rose 0.3% in October, says the S&P MMS survey, on top of a 1.1% jump in September.

ber. Consumer spending probably increased 0.3% after an 0.8% gain in September.

PURCHASING MANAGERS' INDEX Friday, Nov. 30, 10 a.m. EST ► The National Association of Purchasing Management's index stood at 48.2% in November, down from 48.3% in October.

CONSTRUCTION SPENDING Friday, Nov. 30, 10 a.m. EST ► Building outlays edged up 0.3% in October, after increasing 2.4% in September.

GLOBAL MARKETS

	Nov. 21	Week
S&P Euro Plus (U.S. Dollar)	1312.4	-4.0
London (FT-SE 100)	6382.1	-0.8
Paris (CAC 40)	6081.0	-3.5
Frankfurt (DAX)	6678.1	-4.1
Tokyo (NIKKEI 225)	14,408.5	-2.6
Hong Kong (Hang Seng)	15,188.3	0.4
Toronto (TSE 300)	9013.9	-1.9
Mexico City (IPC)	6135.5	-0.3

FUNDAMENTALS

	Nov. 20	Week
S&P 500 Dividend Yield	1.19%	1.19%
S&P 500 P/E Ratio (Trailing 12 mos.)	25.9	26.0
S&P 500 P/E Ratio (Next 12 mos.)*	21.8	22.0
First Call Earnings Revision*	-2.77%	-3.2%

*First Call Corp.

TECHNICAL INDICATORS

	Nov. 20	Week
S&P 500 200-day average	1440.4	1441.1
Stocks above 200-day average	50.0%	51.1%
Options: Put/call ratio	0.76	0.77
Insiders: Vickers Sell/buy ratio	NA	1.9

WORST-PERFORMING GROUPS

	Last month %	Last 12 months %
Long-Dist. Telecoms.	-31.1	Metal & Glass Containers 26.5
Metal & Glass Containers	-26.5	Long-Dist. Telecoms 26.5
Communications Equip.	-21.6	Office Equip. & Supplies 17.6
Computer Systems	-17.6	Furnishings & Appliances 15.8
Broadcasting	-15.8	Steel 15.8

INTEREST RATES

KEY RATES

	Nov. 21	Week
MONEY MARKET FUNDS	6.14%	6.14%
90-DAY TREASURY BILLS	6.35	6.36
1-YEAR TREASURY BILLS	6.15	6.15
10-YEAR TREASURY NOTES	5.65	5.71
30-YEAR TREASURY BONDS	5.73	5.77
30-YEAR FIXED MORTGAGE†	7.76	7.76

†BanxQuote, Inc.

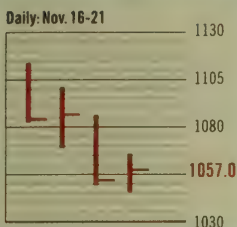
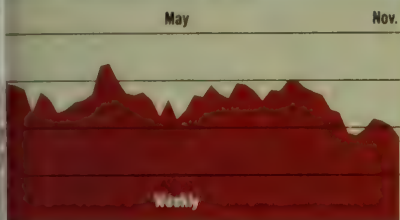
BLOOMBERG MUNI YIELD EQUIVALENT

Taxable equivalent yields on AAA-rated, tax-exempt bonds, assuming a 31% federal tax rate.

	10-yr. bond
GENERAL OBLIGATIONS	4.77%
TAXABLE EQUIVALENT	6.91
INSURED REVENUE BONDS	4.92
TAXABLE EQUIVALENT	7.13

BUSINESS WEEK FIFTY

THE
BUSINESS
WEEK **50**



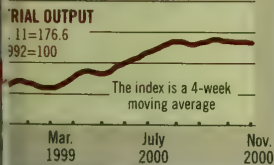
only good thing that could be said for the BW 50 this week was that it did only half as poorly as the Nasdaq Composite index. A big loser was Xilinx, down 21.3% after news that the company will seek to have a patent ruling favoring Xilinx reversed. Lucent was also hit hard after announcing fourth-quarter profit due to an auditing discovery.

COMPANY PERFORMANCE

any	% change		Rank	Company	% change	
	Week	Since 3/1/00			Week	Since 3/1/00
any	-3.3	-25.4	26	Intel	2.7	-26.4
nor	-13.9	-24.0	27	Tribune	-1.9	-0.2
tems	0.2	-18.5	28	Xilinx	-21.3	-26.4
	-17.3	-33.2	29	Enron	0.0	16.5
	-7.6	39.1	30	Lexmark International	0.6	-62.3
tems	3.2	-73.1	31	Omnicom Group	-3.2	-16.8
lanley Dean Witter	-6.3	-12.9	32	America Online	-13.0	-24.6
	-5.5	-50.9	33	Guidant	-1.1	-23.9
chnologies	-20.8	-72.7	34	MBNA	-8.5	51.9
Technology	-17.4	-7.1	35	Pfizer	1.0	36.5
systems	-9.4	-13.1	36	Soletron	-3.5	-3.4
	-3.7	-50.0	37	Gateway	-16.8	-50.4
chwab	-10.3	-8.5	38	Wells Fargo	0.6	29.7
ot	-3.5	-31.2	39	General Dynamics	2.1	76.4
uter	-6.2	-45.1	40	Texas Instruments	-12.6	-49.0
	-0.7	7.4	41	Capital One Financial	-12.9	32.0
pliance	-19.9	-35.8	42	General Electric	-3.3	15.9
	-7.4	4.1	43	Kansas City Southern Industries	-7.3	89.2
	-4.1	-0.7	44	Wal-Mart Stores	-3.8	-3.8
e	-5.2	-60.3	45	Paccar	-0.7	1.5
aterials	-1.0	-54.2	46	PE Biosystems Group	-21.4	-21.7
national	2.2	49.8	47	Merck	0.4	53.3
Associates	-5.9	-56.4	48	Adobe Systems	-1.5	59.4
	-2.5	-41.9	49	Reliant Energy	0.6	96.0
	3.9	-37.1	50	Citigroup	-2.1	26.9

PRODUCTION INDEX

Change from last week: -0.2%
Change from last year: 12.8%



index slipped in the latest week. Before the four-week moving average, the index fell 5.9, from 176.3. Seasonally adjusted and trucks bounced back sharply after recent weeks because of inventory overhang. That gain, however, was more than offset by the production of steel, electric power and rail-freight traffic. Crude-oil refining was flat.

For more information on the index components is at www.businessweek.com.
Production index Copyright 2000 by The McGraw-Hill

ONLINE RESOURCES

BW50 Track the index and the companies in it all day long. Plus: our exclusive Info Tech 100 index.

S&P PERSONAL WEALTH Real-time market coverage, industry analysis, and personalized retirement advice.

MUTUAL FUNDS Search for funds, view BW ratings, and read Q&A's with fund managers.

COLUMNS Hot stocks, takeover plays, and the latest strategies for managing your money.

BusinessWeek online

For more investment data and the components of the production index, visit www.businessweek.com.

WHICH DO YOU WANT MOST?

a. infinite capacity
b. infinite availability
c. infinite trust

How about all of the above?

www.comdisco.com

COMDISCO

Announcing...

The Tenth Annual Forum Chief Financial Officers

February 28-March 2, 2001

The Breakers, Palm Beach, FL

The Premier Corporate Finance Event

CFO as e.biz Architect

F

rom February 28-March 2, 2001, BusinessWeek will gather together America's top Chief Financial Officers in Palm Beach, Florida for the year's most prestigious corporate finance event. ■ This private, invitation-only forum at The Breakers will focus on the ways in which CFOs can take "e.biz" to the next level, guiding their companies toward utilizing the Net's full potential for speed, efficiency and innovation.

Conducted in a retreat-like setting, the forum encourages collegial interaction so that participants may gain the well-founded knowledge that is only derived from exchanging ideas, sharing experiences, and engaging in compelling discussions. ■ Topics include: "Finding an E-Business Model that Works", "Supply-Chain Management Comes of Age" and "The Implications of Going Wireless." The Annual BusinessWeek Forum of Chief Financial Officers is an exclusive event reserved for today's elite financial leaders. ■



If you have received an invitation, we urge you to RSVP today. If you have not received one, but believe you should attend, please contact us. Simply call 212.512.6673.



IN PARTNERSHIP WITH
Zurich Financial Services

SPONSORED BY
LeapSource
Milliman & Robertson, Inc.

WITH SUPPORT FROM
GetThere

SPEAKER

ROBERT H. BRUST

Executive Vice President and CFO
Eastman Kodak Company

SPEAKER

THOMAS MALONE

Patrick J. McGovern Professor
of Information Systems
Sloan School of Management, MIT

SPEAKER

WARREN C. JENSON

Senior Vice President and CFO
Amazon.com Inc.

SPEAKER

HEIDI G. MILLER

Chief Financial Officer and SEVP,
Strategic Planning and Administration
priceline.com Incorporated

SPEAKER

JERRY M. KENNELLY

Senior Vice President, CFO
and Secretary
Inktomi Corporation

SPEAKER

JAMES A. PARKE

Vice Chairman and CFO
GE Capital

Index to Companies

This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

A

Abarelix **104**
 Adams Express (ADX) **167**
 Advanced Micro Devices (AMD) **116**
 Agfa-Gevaert **95**
 Amazon.com (AMZN) **36, 86, 95, 128, 172**
 American Airlines (AMR) **50**
 American Eagle Outfitters (AEOS) **34**
 American Express (AXP) **50**
 America Online (AOL) **18**
 Ames Department Stores (AMES) **34**
 Amgen (AMGN) **104**
 AMR Research **48**
 Apache (APA) **46**
 Apple Computer (AAPL) **18, 122**
 Arthur Andersen **34**
 Ashford.com (ASFD) **36**
 AstraZeneca (AZN) **104**
 AT&T (T) **18, 22, 144, 182**
 AT&T Wireless (AWE) **50**

B

Baker Hughes (BHI) **175**
 Baltoneximbank **56**
 Bankers' House St. Petersburg **56**
 Bank of America (BAC) **34, 148, 175, 182**
 Bank One (ONE) **148**
 Barnes & Noble (BKS) **36**
 Bear Stearns (BSC) **151**
 BellSouth (BLS) **22**
 Bernstein (Sanford C.) **128**
 Best Buy (BBY) **34**
 Black & Decker (BDK) **95**
 BMW **40**
 Boeing (BA) **128**
 British Sky Broadcasting (BSY) **54**
 British Telecommunications (BTY) **54**
 Broadcast (BRCM) **150**
 Broadway Trading **150**
 Buckingham Capital Management **175**
 Buckman Buckman & Reid **95**
 Buy.com (BUYX) **36**

C

Carlin Equities **150**
 Carmike (CKE) **148**
 Cato Corner **164**
 Challenger Gray & Christmas **36**
 Chase H&Q (CMB) **157**
 Chase Manhattan (CMB) **30, 148**
 Cisco Systems (CSCO) **50**
 Citigroup (C) **127, 148**
 Coca-Cola (KO) **60, 157**

Comcast (CMCSK) **22**
 Commonwealth **128**
 Compaq Computer (CPQ) **116, 122**
 Construction.com **48**
 Costco (COST) **34**
 Coursey's **164**
 Covad Communications (COVD) **42**
 Crédit Lyonnais Securities **54**
 Credit Suisse Group **151**
 Current Income Shares (CUR) **167**
 Custard Beach **164**

D

DaimlerChrysler (DCX) **40, 48**
 Dana (DCN) **48**
 Dataquest **42**
 Dell Computer (DELL) **122**
 Dell'Oro Group **50**
 Delta Air Lines (DAL) **50**
 Deutsche Banc Alex. Brown (DTBK) **40**
 Deutsche Bank (DBK) **144**
 Deutsche Telekom (DT) **144**
 DeWolfe Real Estate **95**
 Dictaphone **63**
 Donaldson Lufkin & Jenrette **151**
 Dow Chemical (DOW) **157**
 Dragon Systems **63**
 Dresdner (DSF) **167**
 Dresdner Bank (DRSDY) **151**
 Drewes (Ted) **164**

E

EarthLink (ELNK) **50**
 Eastman Kodak (EK) **95, 160**
 eBay (EBAY) **16**
 Echostar (DISH) **22**
 Economy.com **36**
 Edwards (A.G.) **34**
 eMarketer **48**
 EMC (EMC) **122**
 Emerson Electric (EMR) **48**
 EOG Resources (EOG) **46**
 Equus II Fund (EQS) **167**
 ErgoWeb **90**
 Ernst & Young **48**
 eToys (ETYS) **36**
 Excite (ATHM) **22**

F

FAO Schwarz **128**
 Federated Department Stores (FD) **34, 128**
 FedEx (FDX) **50**
 First American Asset Management (USB) **104**
 First Call **95**
 First Union (FTU) **182**
 Ford (F) **48, 56, 90**

Forrester Research (FORR) **36**
 Fortis Bank **63**
 France Télécom (FTE) **144**
 Frankfurt Trust **144**
 Franklin Multi-Income Trust (FMI) **167**
 Fuji Photo Film **160**
 Furman Selz **151**

G

Gap (GPS) **128**
 Garden Fresh Restaurant (LTUS) **175**
 Garden.com (GDEN) **36**
 Geico **16**
 General Electric (GE) **18**
 General Motors (GM) **14, 48, 122**
 GMT Communications Partners **144**
 Goldman Sachs (GS) **150, 151, 157**
 Gruntal **175**
 Grupo Finsa (FMX) **60**

H

Halliburton (HAL) **175**
 H&Q Healthcare Investors (HOH) **167**
 Harris Interactive **14**
 Hartmarx (HMX) **128**
 Hasbro (HAS) **128**
 Hewlett-Packard (HWP) **122**
 Hibernia Southcoast Capital **175**
 Hoffmann-LaRoche **104**
 Home Depot (HD) **128**
 homegrocer.com **172**
 Honeywell International (HON) **157**
 Hughes Electronics (GMH) **22**

I

IBM (IBM) **63, 113, 122**
 Immunex (IMNX) **104**
 IMSA (IMY) **60**
 Indico Technologies **113**
 ING Group (ING) **63, 151**
 Insight **64, 116**
 Integrated Circuit Engineering **116**
 Intel (INTC) **63, 116, 122**
 InterWorld (INTW) **48**
 INVESCO Global Health Sciences Fund (GHS) **167**
 Irish Investment Fund (IRL) **167**

J

John Hancock Bank & Thrift Opportunity Fund (BTO) **167**
 Johnson & Johnson (JNJ) **104**
 Juniper Networks (JNPR) **50**

K

Kaplan Thayer Group **16**
 Kimberly-Clark (KMB) **157**
 Kmart (KM) **128**
 K/NEX Industries **128**
 Kohl's (KSS) **34**
 Kopp's **164**

L

Learning Curve International **64**
 Lehman Brothers (LEH) **34, 36, 151**
 Lernout & Hauspie (LHSP) **63**
 Linley Group **116**
 Lionel **64**
 Littlejohn's **164**
 living.com **172**
 Lucent Technologies (LU) **50, 144**
 Lyra Research **95**

M

Macy's West (FD) **34**
 Mannesmann **144**
 MasterCard International **50**
 Mattel (MAT) **128**
 May Department Stores **128**
 McDonald's (MCD) **157**
 McGraw-Hill (MHP) **176**
 Mentor Income Fund (MRF) **167**
 Mercury Research **116**
 Merrill Lynch (MER) **36, 46, 48, 148, 158, 172**
 Microsoft (MSFT) **22, 63, 86**
 Mike's Train House (MTH) **64**
 M.M. Warburg **144**
 Morgan (J.P.) (JPM) **39, 148, 157**
 Morgan Stanley Dean Witter (MWD) **50, 158**
 Motorola (MOT) **127**
 MyFacility.com **48**
 MyPlant.com **48**

N

Nabisco (NGH) **18**
 Napster **54**
 National Discount Brokers **16**
 National Insurance **127**
 Neiman Marcus (NMGA) **34**
 Network Appliance (NTAP) **122**
 Newpark Resources (NR) **175**
 NFL **14**
 Nielsen (NTRT) **36**
 Nikon **160**
 Nortel Networks (NT) **50**
 Northpoint Communications (NPNT) **22, 42**
 Northwest Airlines (NWA) **50**
 NTT DoCoMo (NTT) **50**

O

Olympus **160**
 One 2 One **144**
 Oppenheimer **158**
 Oracle (ORCL) **18, 39**

P

Paccar (PACR) **48**
 PaineWebber **151**
 Peapod (PPOD) **86**
 Peppers & Rogers **16**
 Petersburg Telephone Network **56**
 Pets.com (IPET) **36, 172**
 PG&E (PGC) **46**
 Philips Electronics (PHG) **63**
 Playboy Enterprises (PLAA) **44**
 Polaroid (PRD) **95**
 Powertel (PTEL) **144**
 Praecis Pharmaceuticals (PRCS) **104**
 PricewaterhouseCoopers **34**
 Prudential Securities **158**
 PSINet (PSIX) **14**

R

RadioShack (RSH) **22, 34**
 Rambus (RMBS) **116**
 Rhythms NetConnections (RTHM) **42**
 Robertson Stephens (FBF) **36**
 Roland Berger & Partner **144**
 room33 **54**
 Rover **40**
 Royce Value Trust (RVT) **167**

S

Salomon Smith Barney (C) **40, 116, 158, 167**
 SBC Communications (SBC) **42**
 Schram Auto Parts **34**
 Schwab (Charles) (SCH) **158**
 Seagram (VO) **54**
 Sears (S) **34, 36**
 Sempre Energy (SRE) **46**
 Shamrock Holdings **95**
 smarts **56**
 Sony (SNE) **34, 54, 95, 128, 144**
 Standard & Poor's MMS (MHP) **176**
 StarBand Communications **22**
 STI Small Cap Growth Fund **95**
 Sun Microsystems (SUNW) **122**
 SunSpots **113**
 Syvazinvest **56**
 Synopsys (SNPS) **122**

T

T-Mobile International (DT) **144**

T-Online International

144
 Talking Films **16**
 Talkline **144**
 TAP Pharmaceuticals **1**
 Target (TGT) **34, 36, 12**
 Teleinvest **56**
 Telecom Italia (TI) **144**
 Telecom Italia Mobile **1**
 Telia **56**
 Testa Hurwitz & Thibea **104**
 Thomson Financial Securities Data **151**
 3M (MMM) **90**
 Ticketmaster Online-Citysearch (TMCS) **50**
 Time Warner (TWX) **22**
 Toys 'R' Us (TOY) **128**
 Tradingschool.com **150**
 Trane (ASD) **48**
 Transkaryotic Therapies **104**
 Troika Dialog **56**
 Truckxchange.com **48**

U

UBS (UBSUY) **151**
 United Airlines (UAL) **1**
 United Financial Group **151**
 UPS (UPS) **50**
 US Airways (U) **18**
 USA Networks (USA) **5**
 US Bancorp Piper Jaffrey (USB) **116**

V

Veritas Software (VRTS) **122**
 Verizon Communications (VZ) **22, 42, 50**
 Visa International **50**
 Vivendi (V) **54**
 Vodafone Group (VOD) **144**
 VoiceStream Wireless **144**
 Volkswagen (VLKAY) **3**

W

Wachovia (WB) **148**
 Wal-Mart Stores (WMT) **36, 128**
 Wasserstein & Parella **148**
 Webvan Group (WBV) **148**
 Wells Fargo (WFC) **14**
 Wellspring Capital Management **64**
 Wilsons The Leather (WLSN) **175**
 Wisconsin Energy Group **148**
 World-Wide Shipping **148**

X

Xerox (XRX) **18, 148**

Y

Yahoo! (YHOO) **50, 5**
 Yellow Freight (YELL) **148**

Business Week (ISSN 0007-7135) published weekly, except for one week in January and August, by The McGraw-Hill Companies, Inc. Executive, Editorial, Circulation, and Advertising: 1221 Avenue of the Americas, New York, N.Y. 10020. U.S. subscriber rate \$54.95/year; Can. \$69.95/year. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Post at Montreal, P.Q. Canada Post International Publications Mail Product Sales Agreement No. 906252. Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J. 08520.

Internet

address directory

Each of these Business Week advertisers on the Web:

GlobalPlace
www.oneglobalplace.com

3Com.com

AMRO BANK
www.abnamro.com

Acura.com

Be Systems
www.adobe.com

Advanced Micro Devices
www.amd.com

Alcatel
www.alcatel.com

American Airlines
www.aa.com

American Financial Advisors
www.americanexpress.com/visors

American Institute of Architects
www.aia.org

Apple Computer, Inc.
www.apple.com

Technology Group
www.atg.com

TeleConference Services
www.att.com/conferencing

Avaya.com

Avolent.com

Bank of America
www.bofa.com

Martini
www.bluemartini.com

Bow Street
www.bowstreet.com

TLING WATCHES
www.breitling.com

Para Software
www.centra.com

Checkpoint
www.checkpoint.com

Charles Schwab
www.schwabwelcome.com

Charles Schwab
www.charlesschwab.com

Cognos
www.cognos.com

Commerce One
www.commerceone.com/

Compaq
www.compaq.com

Corechange
www.corechange.com

Corvis
www.corvis.com

Crown Publishing Group
www.randomhouse.com

CyberRebate
www.cyberrebate.com

Dell Computer Corporation
www.dell.com

Deutsche Post Danzas
www.danzas.com

Digex
www.digex.com

Dynegy
www.dynegy.com

eBusiness Technologies
www.ebt.com

Electron Economy
www.electroneconomy.com

Expanets, Inc.
www.expanets.com

FedEx
www.fedex.com

Fidelity Investments
www.fidelity.com

FORD
www.ford.com

Framework Technologies
www.frametech.com

Fuji Digital
www.fujifilm.com

Gateway
www.gateway.com

Hewlett Packard
www.hp.com

Hummingbird
www.hummingbird.com

IBM
www.ibm.i2-ariba.com

IBM
www.ibm.com/eserver

IBM Storage Systems Group
www.ibm.com/storage/solutions6

Instinet
www.ininet.com

Intermedia
www.intermedia.com

JD Edwards
www.jdedwards.com/

Jeep
www.jeep.com

Kinko's
www.kinkos.com

Lavastorm
www.lavastorm.com

LeadersOnline
www.leadersonline.com

Lexus Certified Pre-Owned
www.lexusco.com

Lotus
www.lotus.com/superhuman/software

Lucent
www.lucent.com

Lufthansa
www.lufthansa.com

Maker's Mark
www.makersmark.com

Mastercard
www.mastercard.com

Microsoft Desktop
www.microsoft.com

Microsoft Small Business
www.bcentral.com

Minolta
www.minolta.com

Motient
www.motient.com

Movado
www.movado.com

myCIO.com
www.mycio.com

NetLedger
www.netledger.com

Nextel Communications
www.nextel.com

Niku
www.niku.com

Nissan North America
www.nissandriven.com

Nokia Networks
www.nokia.com

Novell
www.novell.com

Office Environments
www.officeenvironments.com

Oracle
www.oracle.com

PNC Bank
www.pnc.com

Prudential
www.prudential.com

PSinet
www.psinet.com

QMS Minolta
www.minolta.com/

Quadstone
www.quadstone.com

Quintus
www.quintus.com

Rational
www.rational.com

Red Cube
www.redcube.com

Register.com
www.register.com

Robertson Stephens
www.robertsonstephens.com

Royal & Sun Alliance
www.royal-usa.com

Sage Software
www.sage.com

Samsung
www.samsung.com

SAS
www.sas.com

SeeBeyond
www.seebeyond.com

SELECTICA
www.selectica.com

SilverStream
www.silverstream.com

SmartForce
www.smartforce.com

Sprint Spectrum
www.sprint.com

ST Microelectronics
www.st.com

Staples
www.staples.com

Starband
www.starband.com

Stellcom Technologies
www.stellcom.com

StorageNetworks
www.storage-networks.com

Sun Microsystems
www.sun.com

Symantec
www.symantec.com

Teligent
www.teligent.com

Texas Instruments
www.ti.com

Toshiba America Information Systems
www.toshiba.com

Toyota in America
www.toyota.com/usa

University of Michigan Business School
www.execed.bus.umich.edu

USPS
www.usps.com

Versata
www.versata.com

Visioneer
www.visioneer.com/dynahome.html

Visteon
www.visteon.com

Wall Street Journal
www.wsj.com

Williams
www.williams.com

Yantra
www.yantra.com

BusinessWeek

needed to find today's thinking.

What I found was a glimpse into the future."

Mike Harding, Vice President, Plant Operations-Anheuser Busch

At the University of Michigan Business School Executive Education Center, you'll get more than just an update. We'll give you the very latest and most relevant thinking, along with a focused vision of what's to come. You'll be equipped with the knowledge you need to grow. Get ahead. Make an immediate impact. Be a leader. You'll learn from the faculty that create the big ideas and show you how to apply them. In the real world. Your world.

To accommodate your busy schedule, we offer courses that range from three days to four weeks. You can choose from a breadth of courses in General Management, Corporate Strategy, International Business, Managerial Leadership, Human Resources, Accounting/Finance and Marketing/Sales.

Come learn why Michigan is ranked as one of the two best providers of executive education in the world. And why it's the country's most innovative business school.



University
of Michigan
Business
School

Executive
Education
Center

For a free program catalog, please call 734.763.1000 (U.S.), e-mail um.exec.ed@umich.edu, or visit www.execed.bus.umich.edu

THE CLENCHING OF U.S. CREDIT MARKETS

Here are some scary facts. The Federal Deposit Insurance Corp. recently warned that bad real estate loans could hurt the banking industry. A growing number of banks, including Bank of America and First Union Corp., are talking about problem loans. Bank liquidity has fallen to its lowest level since the end of 1989. The growth in bank lending has dropped sharply, to a 1.7% annual rate of increase. The trend is worrisome.

And it's getting worse. The bank syndication market, which packages and sells loans, is cratering. Investors in these loans, mostly insurance companies and other banks, are dialing back fast. Indeed, it appears that a slow-motion financing crunch is under way in the U.S., moving its way up the corporate ladder. First the market for initial public offerings dried up. Then the high-yield junk-bond market weakened considerably. The stock market started to swoon. Now,

the banks are tightening. For many companies, each every avenue for credit is beginning to close down. At least, the cost of borrowing, when it is available, is going sharply (page 148).

Add it all up, and a nascent credit crunch is increasing chances of a hard landing for the economy. The Federal Reserve said in its latest Open Market Committee statement that it is ready to let the economy "expand for a time at a pace below its potential." That potential is probably in the range of 3% to 4% annual growth. With a credit squeeze already putting strong downward pressure on the economy, the Fed must take care not to go too far. It takes 6 to 12 months for changes in monetary policy to affect the economy. If the Federal Reserve waits too long to reverse its current tight money course, the momentum for a hard landing could become unstoppable.

BROADBAND'S SLOW MARCH CAN'T DRAG ON

Providers of interactive cable and high-speed DSL phone lines are clearly off to a poor start in rolling out broadband to the masses. The service is slow and often bad, and the technology is quirky and often disappointing. Despite huge demand, the promise of an always-on, superfast connection to the Internet appears to be, at best, delayed. To anyone working in an office where fast access to the Net has been available for years, the wait to have it at home is increasingly frustrating. The worry is that what may now be merely irritating could develop into a serious economic problem.

Broadband is a major key to future growth. So much is riding on it. Without a mass consumer market, it will be much more difficult for corporations to realize gains from their enormous investments in the Net. A small delay in its rollout to consumers won't amount to much, but a much longer wait of many years could pose real problems down the road for the New Economy. Cable operators, phone companies, and Washington policymakers alike should consider whether some mid-course correction is needed at this time.

Take the financing. Enormously expensive overhauls of the cable- and copper-line infrastructures are required for broadband, but the capital markets are increasingly unwilling to put up the money. Both the telecom and cable companies are financing their Internet forays with huge issues of junk bonds, and now that market is shouting "no more." Telecoms have the largest share of the high-yield bond market, and cable companies come in second. Interest rates on these junk bonds are soaring as investors retreat in the face of greater-than-anticipated expenses and lower-than-anticipated profits. Even AT&T is being forced to reduce its debt load—and abandon its dream of providing voice and data services over

one cable pipe—by spinning off broadband. Will the junk-bond markets or the banks finance this new broadband competition? It's unclear at this juncture (page 42).

The technology is not in great shape, either. Both cable and interactive cable have problems. People have to dig within three miles of a high-speed link for DSL to work on their old copper phone lines. A good percentage, perhaps up to half the population, will never qualify for DSL, as a result. Those who do will often have to work with three or four separate companies if they order DSL from an independent Internet service provider. It can be a nightmare. Cable technology is problematic, too. Cable modems link users together within a small area. The more people within that area use the Net, the slower the connection.

It may simply be that most new technologies are overhyped when introduced and take an unexpectedly long time to take hold. Broadband may be but the latest example of this. And after all, broadband is spreading like wildfire within the business world as corporations everywhere use the Net to cut costs, innovate, and globalize. Continued rapid production gains in the U.S. testify to this fact.

But the slow spread of broadband throughout American households remains troublesome, if for no other reason than it prevents individuals from fully taking advantage of one of the greatest technological advances of our time. Education suffers. Opportunity suffers. In the end, economic growth may suffer. We don't know the answers, but the key questions are clear: Will cable and copper really do the job of linking the public to broadband access to the Net, or will optics have to go into each and every house and apartment across the nation? Can some way be found to make the financially unpalatable broadband more palatable to the credit markets?

10/15/99 One staff developer starts project

2/19/00 Go live—make 10 changes

1/31/00 Pilot begins

2/21/00 Shipping industry's first Internet booking



"When you move over 170,000 shipments every year, you'd better know how to move information fast. That's why we chose Versata e-business automation software to help us build myanzdl.com. Implemented in record time, this global site allows shipping customers around the world to book cargo, get confirmation instantly, and track shipments. And, with Versata's rules-based approach, **we can make fundamental changes in hours rather than weeks.** If you need to deliver a 125-foot yacht or a container of Australian Shiraz, count on us. But if you're moving your business to the Web, visit www.versata.com."

Marc Boyer-Chammad
V.P., Information Systems,
ANZDL

WHAT IF YOUR SUPPLY CHAIN COULD THINK ON ITS FEET?

InternetTONE is the power to identify business rule exceptions instantly and resolve issues automatically.

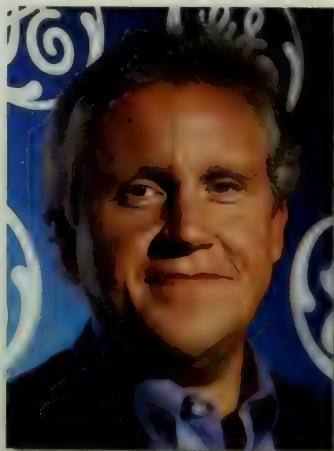
InternetTONE is commerce that thinks. A technology smart enough to monitor and manage the torrid flow of funds, goods and information among partners, clients and customers. Intelligent Commerce Agents provide mission-critical information and the ability to optimize operations on the fly. So supply chains can resolve issues proactively. And reduce costs in inventory, transportation and logistics continually. Download the whitepaper at www.electroneconomy.com/think

BusinessWeek

A PUBLICATION OF THE MCGRAW-HILL COMPANIES

THE CEO TRAP

PAGE 86

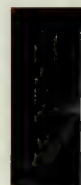


LIBRARY ✓



pentium® III

It is not okay



It is not okay

to rely on your computer more than you trust it.

It is not okay

for your computer to create more work than it eliminates.

It is not okay

for your new computer to not get along with your old ones.

It's time to change the level of reliability we accept from computers.

Demand a better computer.

HP e-Vectra PCs: Featured with Intel® Pentium® III processor 600 MHz.
HP recommends Windows® 2000 Professional for business. For more information, visit www.hp.com/pc.



Intel, the Intel Inside logo and Pentium are registered trademarks of Intel Corporation. Windows is a registered trademark of Microsoft Corporation. ©2000 Hewlett-Packard Company. All rights reserved.



**2001 SATURN IWL300
PERFORMANCE WAGON**

182-horsepower, 3.0-liter V-6

Five-speed automatic

Four-wheel disc brakes

Anti-lock brakes
with Traction Control

Modified spaceframe
construction with
side-impact protection

Daytime running lamps

Remote keyless entry
and Security System

Reduced Force Air Bags

Leather Appointments

Heated front seats

AM/FM/CD/Cassette
with eight-speaker
audio system

Air conditioning with
passenger-cabin filter

Cruise control

Sport-tuned suspension

Alloy wheels

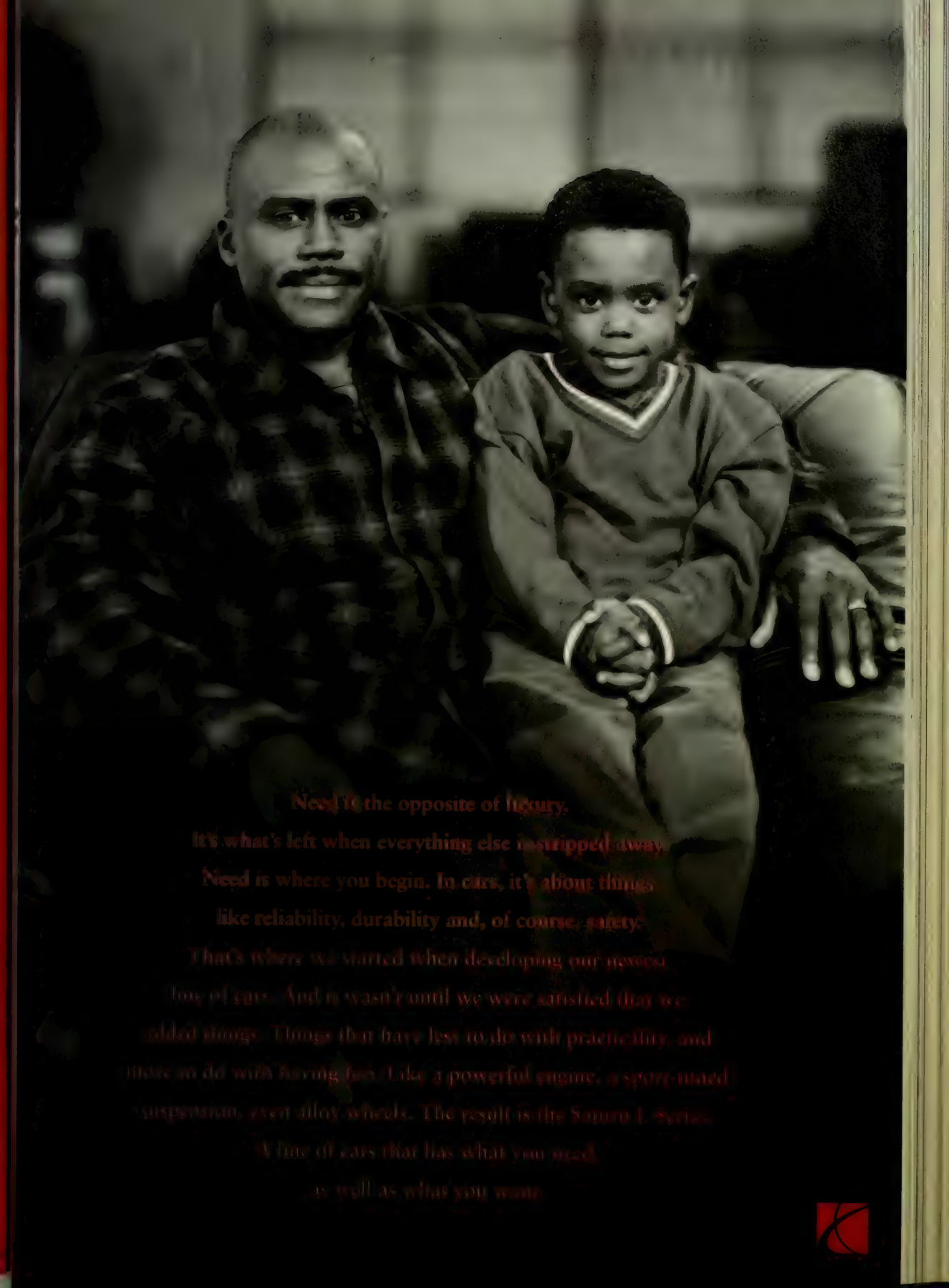
Dent-resistant polymer
doors and fenders

M.S.R.P. \$23,750

www.saturn.com



*A Different Kind of Company.
A Different Kind of Car.*



Need is the opposite of luxury.

It's what's left when everything else is stripped away.

Need is where you begin. In cars, it's about things

like reliability, durability and, of course, safety.

That's where we started when developing our newest line of cars. And it wasn't until we were satisfied that we added things. Things that have less to do with practicality, and more to do with having fun. Like a powerful engine, a sport-tuned suspension, even alloy wheels. The result is the Saturn I-Series.

A line of cars that has what you need.

As well as what you want.



There's no bear market

SAN FRANCISCO NEW YORK LONDON

Robertson Stephens, Inc. is a subsidiary of the FleetBoston Financial family and is an NASD member and a member of all major exchanges

all good ideas.





BECOME

ARCHITECT

OF

FREEDOM.

The writing's on the wall. Collaboration is the key to profitability in the New Economy. Enterprises must share information and processes with the outside world. It's time to harness the power of your partners, vendors, customers and employees to boost efficiencies, build value and achieve competitive advantage. But to truly collaborate, you need freedom of choice. That's what we offer at J.D. Edwards. We provide the only enterprise-wide foundation that gives you the freedom to choose the best solutions. So you can run with any idea. Connect with any business partner. Plug in any application. And transform enterprise software from a constraining liability into a liberating asset. Isn't freedom amazing? To collaborate and thrive, visit www.jdedwards.com/freedom.

THE FREEDOM TO CHOOSE. THE POWER TO SHARE.



THE WELCH ERA
The GE boss's long and winding road, in pictures page 98

COVER STORY
THE CEO TRAP
Boards and investors are looking for superheroes to deliver sky-high growth instantly. But even Jack Welch didn't do that
page 86



BusinessWeek

DECEMBER 11, 2000

Cover Story

86 THE CEO TRAP

These days, it seems as if there is a revolving door on the corner office. Two-thirds of all major global companies have replaced their CEO at least once since 1996. Why? Unrealistic expectations, impatient investors, and now a slowing economy. And no one will be under a bigger gun than GE's new boss, Jeffrey Immelt

88 A TALK WITH HARVEY GOLUB

The AmEx CEO on succession

94 THE MAN WHO WOULD BE WELCH

Much of the GE empire will be virgin territory for Immelt

98 PHOTO ESSAY: THE WELCH YEARS

The 20-year reign that fostered the ultimate high-growth culture

News: Analysis & Commentary

40 WEATHERING SLOW GROWTH

CEOs face a daunting challenge: How to protect their budgets without taking a big hit in profits

42 HOW MUCH CAN TRAVELERS TAKE?

As fares rise and service plummets, companies fight back

44 THE WORST DEALS

The ten biggest disasters to emerge from the recent wave of dealmania

46 KERKORIAN WANTS TO GET EVEN

He wants cold hard cash in his lawsuit against DaimlerChrysler

47 COMMENTARY: DAIMLER

Schrempp's bosses need to get tough—and look out for investors

48 A BOOST FOR AT&T WIRELESS?

NTT DoCoMo may take a 16% stake and help it rev up its struggling smart-phone technology

50 PCs ARE IN A PICKLE

Manufacturers may be pinning false hopes on servers as their salvation

52 COMMENTARY: ENVIRONMENT

This is no time for the U.S. to stop the battle against global warming

54 BEN & JERRY'S ROCKY ROAD

New owner Unilever is already at odds with the hippie confectioners

56 IN BUSINESS THIS WEEK

International Business

60 TAIWAN: BANKING

The debt mess is worse than anyone expected, and the pressure is on President Chen to fix it

62 JAPAN: CREDIT-CARD FRAUD

New technology—and lax laws—are making it easier for criminals to manufacture and use fake cards

64 COMMENTARY: JAPAN

Should the country's insurance industry flounder in insurance industry?

66 EUROPE: TECHNOLOGY

With consumers favoring Net devices, PC sales are slowing

68 INTERNATIONAL OUTLOOK

Germany: Can Angela Merkel lead the Christian Democrats?

Economic Analysis

34 BARRO: ECONOMIC VIEWPOINT

Why countries are so keen to join the dollar club

36 ECONOMIC TRENDS

The New Economy's common myths about IRAS, retail, and golden streets

37 BUSINESS OUTLOOK

U.S.: Shoppers help make holiday season bright
Germany: A slowdown, not a recession

70 COMMENTARY: SCHUMPETER

He's been dead for 50 years, but the economist's theory of creative destruction was never more relevant

SMELLING TROUBLE

Did a paper maker gloss over health hazards? page 76



BACK TALK

Science makes strides in fixing spinal cord injuries

page 113

PRESS UPSTARTS

Newspaper rivalries heat up in three cities page 120



TURKEYS

These mergers just weren't meant to be page 44

BusinessWeek e.biz



SOFTWARE STARS

Meet the scrappy lot who were the first to spot the potential of Web ware

The e.biz supplement starts opposite page 74. An e.biz table of contents appears on page EB5

ment

WASHINGTON OUTLOOK

Hillary will be a demure man senator—then she'll come winging

Business

MENTARY: FRANCHISES

Owners are putting the squeeze on the media

ffairs

ODOR AT APPLETON PAPERS

ed with an alleged health d caused by its main product, company chose to wage war

FALL OF NET ANALYSTS

former highfliers in the hot a new guard has stepped in to grade Internet stocks

TIN' WORDS ABOUT AMAZON

fallout from bond analyst Ravi's bearish report

MENTARY: SCHWAB

tying U.S. Trust, it moves market—and steps on a few toes

Science & Technology

113 REBUILDING THE SPINAL CORD

In the lab, treatment methods for back injuries advance by leaps and bounds

119 DEVELOPMENTS TO WATCH

Cheaper silicon, sweeter hog manure, disembodied brains of lampreys, making superfibers more super—and less costly

Media

120 NEWSPAPER WARS RETURN

A trio of publishers are trying to revive the notion of the two-newspaper town

BusinessWeek Lifestyle

122 PRESENTS YOU CAN'T WRAP

From car racing to balloon rides, such gifts are getting more popular and easier to book via the Web

124 GIFTS THAT CHANGE LIVES

It's now easy to contribute to a wide variety of charities in other people's names

BusinessWeek Investor

127 A FUND DISASTER'S LESSONS

Investors can learn to discern the warning signs after Heartland's muni-bond funds fiasco

130 TODDI GUTNER: HERS

Nina McLemore on how to succeed by watching the numbers

132 THE BARKER PORTFOLIO

Insurer Aetna may finally be headed for health

135 MARCIAL: INSIDE WALL STREET

Features

14 UP FRONT

20 READERS REPORT

28 BOOKS

From mankind's race for gold to the coming high-tech slowdown, this year's best business books

31 WILDSTROM: TECHNOLOGY & YOU

New add-ons to Handspring's Visor put far it ahead among handhelds

136 FIGURES OF THE WEEK

138 INDEX TO COMPANIES

142 EDITORIALS

BusinessWeek online

www.businessweek.com
America Online Keyword: BW

Updated every business day at www.businessweek.com



Winner of the 2000 National Magazine Award for General Excellence in New Media

VIDEO VIEWS

Original streaming video featuring industry experts and BW editors

■ **EURO BLUES:** The currency will go down before it goes up, says Brown Brothers Harriman analyst Lara Rhame



■ **SLOW ROAD:** BW's Bruce Nussbaum on why broadband's poky rollout is bad for America



TOOLS

■ **CAPITAL GAINS CALCULATOR:** Here's how to figure if you should hold, or sell and reinvest



■ **MBA SEARCH:** Which is the right business school for you and your needs?



■ **SALARY SURVEYS:** How much money should you be paying your staff?



■ **YOUR PORTFOLIO:** Check on the health of your investments

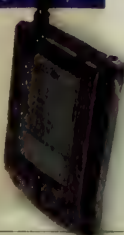


INTERACTIVE FORUMS

■ Join in ongoing discussions on B-schools, assistive technology, investing, info tech, and more—or start your own

HANDHELD EDITION

Put us on your Palm! Get news from Daily Briefing, S&P data, and more. Powered by PricewaterhouseCoopers



Find quick links to everything on this page at the Dec. 11, 2000, issue's table of contents online, or go directly to www.businessweek.com/2000/00_50/online.htm

Web of Greed

Execs and investors hungry for easy money nearly wrecked the Net for all. The big shakeout is a second chance to create a sustainable Net economy



DAILY BRIEFING

Business and investing news, commentary, and analysis

www.businessweek.com/bv

DOWN TO THE WIRE: To the endgame and beyond, our special election coverage continues with reports from Florida, Texas, and Washington

ASSISTIVE TECHNOLOGY: Gifts for disabled kids



INVESTING

Investing insights powered by L&P Personal Wealth

www.businessweek.com/in

STREET WISE: Though Disney is going through a rough patch, rest of Wall Street is giving up on it, especially at this depressed price

SMALL BUSINESS

A resource for entrepreneurs

frontier.businessweek.com

SMART ANSWERS: If you decide bankruptcy is the only option, beware of the common mistakes that make a bad situation worse



TECHNOLOGY

State-of-the-art coverage of info tech

www.businessweek.com/tech

COMPANY CLOSEUP: Disappearing Inc. needs more big customers for its software, which makes sensitive e-mail self-destruct



B-SCHOOLS

Business Week's exclusive rankings and profiles

www.businessweek.com/bv

NEWS: University of Chicago B-school Dean Robert Hamada joins growing ranks of departing deans at big-name Midwest MBA programs

GLOBAL BUSINESS

In-depth coverage of Asia, Europe, and Latin America

www.businessweek.com/glo

Q&A: Former general and governor Alexander Rutskoi first crossed swords with Boris Yeltsin. Now he's on President Putin's wrong side

CAREERS

Advice and tools for upper-management job seekers

www.businessweek.com/c

WORK & FAMILY: The Margaret Mead of the minivan set says the second child is the one who tests the work-family balance





BLUE MARTINI
SOFTWARE

GET TO THEM THROUGH US.

Customers are a moving target. They're likely to show up anywhere. So prepare yourself. Blue Martini lets you meet them head-on at the point of sale, wherever that may be. For example, it's not unusual for someone to research a product on the Web, meet with a sales person, then later contact the call center to check on the order. Now, at any point of interaction, Blue Martini is there, delivering a highly personalized, branded experience. To find out more about Blue Martini's total e-business solution, visit www.bluemartini.com/target.



Industry changes, but logjams are forever. Or are they? Like the "jamcrackers" who specialized in breaking up the great logging bottlenecks of yesterday, we're putting an end to the IT logjams of today. By deliver-

ing IT and business solutions via the web-based administration to email to sales force automation and more-then managing those applications that they work together seamlessly, we enable



**CHIPPEWA,
1909?**

**MISSISSAGI,
1923?**

**YOUR OFFICE,
2001?**



...s to run more efficiently. In the process, we
...T people to focus on strategic, big-picture
...s. Could your office benefit from a whole
...ay to work? Sounds like a job for Jamcracker.

jamcracker
www.jamcracker.com

Up Front

EDITED BY ROBERT McNATT

TALK SHOW "When is the next election, 2006? Why do we let Florida start voting in 2002?"

—Jay Leno on The Tonight Show

I-WAY PATROL

WANTED: A FEW GOOD HACKERS

SO WHERE'S A GOOD hacker when you need one? These days, there doesn't seem to be enough of them interested in honest work, and that has security types worried.

The problem, they say, is compounded by a lack of good academic programs to train those who guard against virus-spreaders and cyberthieves. According to Al Decker, CEO of information-security consultant Fiderus, the U.S. faces a shortfall of up to 75,000 security pros in the next few years. The handful of U.S. academic programs with an information-security emphasis graduate less than 200 people an-



VIRTUAL crime fighters nually. And private sector ten overlook house tra
"We have seen some targeted for research have seen very little targeted specifically for cation," laments Matt op, a security specialist University of California Davis.

Without more money expertise, an increased wired world will be a when Melissa and her kin return. Alex Sa

CITY LIFE

A HIT OF HOSPITALITY

THE WAY BROWN & Williamson Tobacco figures, smoking may not be healthy, but there's no reason it has to be uncomfortable, too.

The makers of Lucky Strikes have unveiled a bigger version of its Lucky Strike Force program, which seeks to make life easier for



office ers for stand street smoke Buffal cago, other spots, Force

bers will roam the st offering hot coffee to smokers forced outdoor

The program, des with ad agency Bates started on a small scale year. Now B&W is bring to 11 big cities. In New Lucky Strike also give free passes to trendy In a warm city like smokers get iced coffee want to provide some comfort in a direct one way," says a spok Such comfort does not free Lucky Strikes.

The antismoking brig fuming. "It's a lighthe act that masks the sm ness and danger of sm says Patrick Reynolds of TobaccoFree.org. "no laughing matter."



LABOR NOTES

INKLESS IN SEATTLE

STRIKING EDITORIAL WORKERS at the *Seattle Times* and the *Seattle Post-Intelligencer* are looking to their online strike paper, UnionRecord.com, as a crucial weapon to help win the walkout, which began on Nov. 21.

With most of the dailies' top reporters on board, UnionRecord.com has already scooped the content-challenged dailies on local stories. The Pacific Northwest Newspaper Guild is betting that because the Net is virtually ubiquitous in Seattle's technopolis, the UnionRecord.com

PUTTING OUT will be a potent force.

Early on, the site was getting more than 100,000 page views daily. Insiders at the *Times* say much of the Web traffic to its pre-strike site was coming from area workers at Microsoft or Amazon.com. Now, the union hopes that those readers will visit its site instead. UnionRecord.com is also aggressively seeking ads during the holiday shopping season. Meanwhile, the Guild's international parent has pledged \$10,000 weekly for a paper edition.

The newspapers, where 1,000 advertising, circulation, and editorial workers are on strike, have responded by giving away their 400,000 daily papers. In the Net's infancy in 1994, strikers at San Francisco's *Examiner* and *Chronicle* put out an online paper. So did strikers at the *Detroit Free Press* and *The Detroit News* in 1995. Neither strike was totally successful. One of the Bay area papers was later sold; the *Detroit* strike went on for five years. Yet Chuck Taylor, a *Times* reporter who is UnionRecord.com's chief, thinks his paper can credibly challenge the dailies. As of Nov. 29, no new labor talks had been scheduled. Cynthia Flash

THE LIST INSIDE MOVES

An analysis of insider trading (from Jan 1 through Oct. 31) at these major Internet companies suggests that management sees this year's tech-sector decline as a buying opportunity, says David Coleman, an analyst at Vickers Stock Research.

COMPANY	INSIDER ACTIVITY	OBSERVATION
RECENT SHARE PRICE/52-WK HIGH		
CMGI 11/163	A cluster of insider sales before a price drop in April	But in October, Chairman David Wetherell buys 250,000 shares.
AOL 43/83	Six insiders sold nearly 979,000 shares Aug. 21-30	Subsequent lack of sales could mean insiders think this stock is oversold.
YAHOO 39/237	After shares fall in October, director buys 10,000 shares	That trade may also indicate insider belief that the stock is oversold.
DOUBLECLICK 14/134	Buys in October of 356,000 shares, when price fell to 14	Indicates that insiders considered that shares represented a good value.

DATA: VICKERS STOCK RESEARCH CORP.



Trade on your own. But not alone.

Now you can trade online with the power of Fidelity behind you. It's called PowerstreetSM online trading.

We offer a suite of high-performance trading tools. Like in-depth analysis from Lehman Brothers, sophisticated stock filters plus real-time



streaming independent news and quotes. And online stock trades start at just \$14.95.

You'll also enjoy Fidelity's renowned customer service, whether online, by phone or in one of our investor centers. All to help you see yourself succeeding.

Fidelity.com

My Fidelity

Accounts & Trade

Quotes & Research

Planning & Retirement

Products & Services

Customer Service



PowerstreetSM Online Trading

- Our most comprehensive suite of high-performance tools
- Extended hours and wireless trading available
- Fidelity.com — ranked Highest in Investor Satisfaction with Online Trading Services by J.D. Power and Associates



1-800-FIDELITY Fidelity.com

System availability and response time may be subject to market conditions. Investment results may vary.

© J.D. Power and Associates 2000 Online Trading Customer Satisfaction Study. Study based on responses from 2,709 investors who utilized online services within the past 6 months. www.jdpower.com.

D. Power and Associates and Lehman Brothers, Inc. are independent companies and are not affiliated with Fidelity.

\$4.95 for stock trades up to 1,000 shares placed via the Web in qualifying accounts (minimum 12 trades per year or \$100,000 in certain mutual fund assets across retail accounts). See Fidelity.com for a complete commission schedule.

Fidelity Brokerage Services, Member NYSE, SIPC

115375

Up Front

SILICON CULTURE

PAGING MISS MANNERS

ALL THOSE CELL PHONES, pocket pagers, e-mails, and Palm Pilots have created a list of dos and don'ts that Emily Post never contemplated. So Luntz Research



NO-NO: Phones in meetings

surveyed 1,000 Americans about e-etiquette—when using such devices is acceptable, inappropriate, or downright rude. Luntz found that beyond the obvious faux pas, such as taking a phone call during a church service, there

are plenty of ways to screw up in the business world.

Requesting a raise or promotion via e-mail is considered bad form by 85% of respondents. Other office no-nos: cell phones that ring in meetings (83%), resigning from a job by e-mail (82%), e-mailed employee reprimands (81%), using Palm Pilots during meetings (76%), and checking a beeper during a business conversation (71%). On the other hand, 75% said it's O.K. to send a thank-you note via e-mail. And 59% approve of using a cell phone for a conference call.

Pollster Frank Luntz, who ran the survey for 1-800-flowers.com, says people more readily accept e-intrusions outside of work. "Apparently," he says, "one's personal life is fair game for technological interference, but an office environment is not." *Richard S. Dunham*

FORTRESS EUROPE

A TANTRUM OVER KIDVID

FOR YEARS, THE FRENCH have railed against American cultural imperialism, while Britain has boasted of its special relationship with the

U.S. But now it's the Brits' turn to sneer, as they take potshots—unfounded, say the targets—



DYKE: Railing

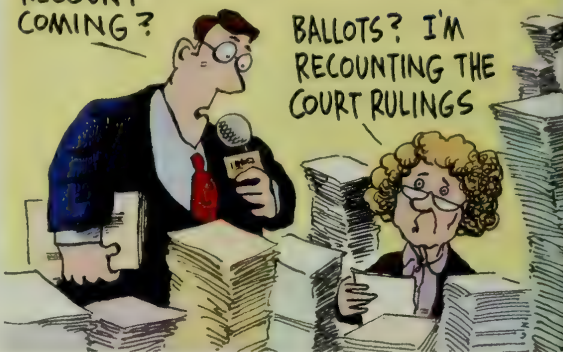
at some U.S. media giants. At the recent U.N. World Television Forum, Greg Dyke, director-general of the British Broadcasting Corp., lambasted Disney, Fox, and Viacom's Nickelodeon. "It's not 'glob-

alization,'" Dyke roared. "It's Americanization." With the BBC set to seek government approval in December to launch two children's channels, U.S. media companies operating in Britain desperately want to derail the plan. They point to a new Arthur Andersen study—commissioned by Nickelodeon—that notes that if the BBC's new channels are O.K.'d, Britain's 14 existing children's TV stations could lose up to \$568 million over the next five years, mainly through lost subscription and ad revenue.

A spokesman for Nickelodeon U.K. adds that despite U.S. ownership, some of these broadcasters can make a good case for basically being British. Nick U.K., for one, spends 40% of its budget on British-made shows. So maybe Dyke should just cool it. After all, it's not Nickelodeon that airs the American *Rugrats* in Britain. It's the BBC. *Joan Oleck*

DRAWN & QUARTERED

HOW'S THE BALLOT RECOUNT COMING?



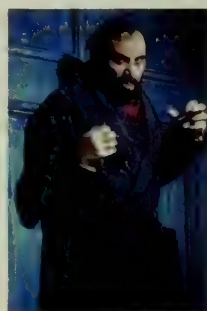
WASSERMAN
© '00 THE BOB D'AMICO
VIA THE TRIBUNE MEDIA

VIRTUAL FUTURE

ALL THE WEB'S A STAGE

DIGITAL SHAKESPEARE? IF things go as planned, London's Heritage Theater could end up beaming plays from some of the world's finest theaters direct to your desktop. Yep: *Hamlet*, right on your PC.

Streaming Shakespeare won't happen until broadband access is more widely available and of higher quality. But Heritage is taking steps to be ready. It has agreements



DIGI-PLAYER: Sher

with four top British theaters, including the Royal Shakespeare Co. and American *Beauty* director Sam

Mendes's Donmar Warehouse to make digital recording shows for DVD and VHS mats. Production costs less than \$100,000 per show and the theaters earn (unclosed) royalties on each sale. Already on tape: a RSC production of *The*

Tale with Antony Sher.

It's the on possibilities most intrigue itage director Robert Marshall. He calls Heritage "the next generation of electronic theater production regardless of medium." If upcoming t

with U.S. Internet service providers work online Shakespeare may come as common as on music videos. *Birgitte R*

THE BIG PICTURE

OUR NEED FOR SPEED The U.S. market for high-speed residential Internet access is predicted to grow 61%, to 29 million subscribers, by 2004. Cable modems will remain the dominant technology over DSL, whose growth is limited by geographic reach.



Whose software can "911" systems count on?



From the beginning, Informix has led the way in database management systems.

Today you can find our software in nearly everything you touch.

And you can see what amazing things we're up to now — and what's coming — at

www.informix.com

We're here to help.

Informix[®]
SOFTWARE
The database company



©2000 Quantum Corporation. All rights reserved. Quantum and the Quantum logo are registered trademarks of Quantum Corporation. Registered in the U.S.A. and other countries.

For more information, call 1-800-624-5545 or visit www.quantum.com



Earth broadcasts



Translation software



Gore/Bush commercials



Earth invasion plans

If it's important to you, save it with us.

Quantum.

being ignored is absurd. Do Presidential candidates now go to campaign in South Dakota or Delaware? The point is that all regions of the country should benefit by nationalizing the process—making every voter equal, at least in theory. Thus it would make sense for candidates to make media-aided visits everywhere to pick up voters.

Things stand now, both candidates are off most of the country because in states are seen as falling in one or the other. This cedes dominance to the other party in a given state, causing the weaker party to continue to wither and debate to be stilled. The injustice is that the votes of losing candidates in a state are given to the winner, disenfranchising minority voters.

Scott S. Smith
West Hollywood, Calif.

There is no basis for Merle Black's assertion that a President George W. Bush "would not get right-wing [Supreme Court] appointments through the Senate" ("What's the mandate?" *Fortune*, Nov. 20). Associate Justice Stephen Thomas was approved when Democrats held a 10-seat majority in the Senate. Surely an equally conservative jurist could win senatorial approval in a Senate with a Republican majority.

Robert Corbett
Berkeley, Calif.

GENETIC FOODS: THE FDA IN CHARGE

Do you know that the U.S. Food & Drug Administration has no authority to require a review of the safety of newly genetically engineered foods? Any review is voluntary. That's certainly no way to create consumer confidence ("Affirmative Action: Can biotech learn its lesson?" *News: Analysis & Commentary*, 11/16/00).

Genetically engineered foods are an important part of the food supply, with potential for benefiting consumers and farmers. But as the food supply changes, it is essential that we take steps to maintain public confidence in food safety. The FDA recently introduced the Genetically Engineered Foods Act to ensure the safety of biotech foods and assure consumers that the government is doing its job. This bill is designed to strengthen the FDA's role in the oversight of genetically engineered foods.

The bill adds important refinements to the Food & Drug Administration's regulatory review process, and it also makes pre-market reviews mandatory. If the bill passes, the FDA would also

be required to initiate a testing program to screen supermarket products and to minimize the likelihood of contamination by another "Starlink"—an unapproved genetically engineered ingredient. The bill also makes the review process more transparent, so that consumer representatives and the public can become involved in the decision-making process.

Richard J. Durbin (D-Ill.)
U.S. Senate
Washington

USERS' IDENTITY IS BOUND UP WITH AOL

Perhaps the reason there are so many users of America Online Inc. is that those who bolt lose their e-mail address, e.g., _____@aol.com. Imagine having to notify friends, family, and colleagues every time you change your Internet service provider ("AOL vs. MSN: A question of style?" *Technology & You*, Nov. 20). Thus the attraction of free e-mail services such as Hotmail and Ya-



"The best way for us to shrug off the occasional fly in the ointment is to be with a big next-generation network like Williams, Vera."

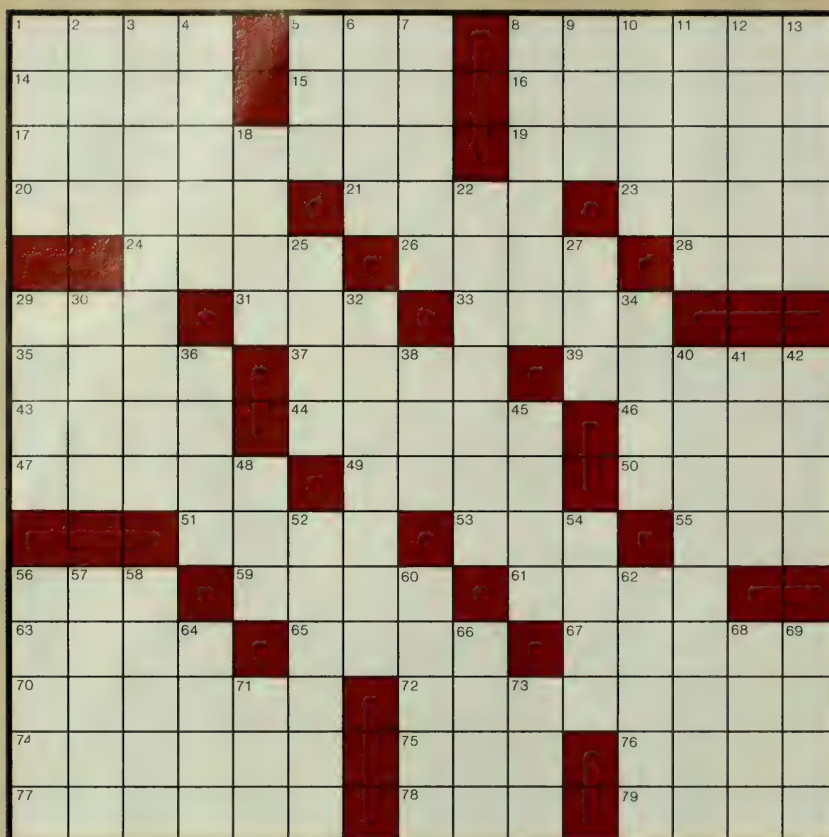
Fly higher, with Williams Communications. Our 30,000-plus miles of next-generation network excellence, innovative equipment engineering and superior customer service always overwhelm any obstacle in your way. And keeps your business connected, big time.

Williams
COMMUNICATIONS.

1-800-WILLIAMS • WWW.WILLIAMSCOMMUNICATIONS.COM • NYSE: WMB & WCG

Mixing Business with Pleasure by Lincoln

Puzzle #35



DOWN

1. __ money (venture capital)
2. __ cost (free)
3. World's #1 owner of commercial real estate
4. Excelled
5. Corporate officers: Abbr.
6. Dickensian clerk
7. Warning sound
8. Carter secretary of state
9. Mary Kay founder
10. Sink alternative
11. River of Paris
12. Bar legally
13. Strategy components
18. On a pension: Abbr.
22. Founder of 3 Down
25. Has a session
27. Experimentation station
29. Write, as a CD
30. Field of expertise
32. Erode, as profits
34. Lure away a competitor's staff
36. Procter and Gamble category
38. Normal way of doing th Abbr.

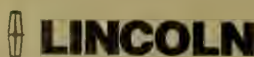
ACROSS

1. __ Club (Costco competitor)
5. Format that beat Beta
8. The public at large
14. Ingrain deeply
15. JFK Library architect
16. Baby Bell bought by Qwest
17. Check payee, usually
19. Division of Islam
20. Lorna __ (Nabisco brand)
21. Health-club membership, maybe
23. Alphabetic quarter
24. Bottom lines
26. Catch red-handed
28. Electronic graphical format: Abbr.
29. Medium-grade bond rating
31. Tool's partner
33. Fiscal period
35. Internet addresses
37. Job to do
39. Finances
43. Make over
44. Mall unit
46. Flapjack franchise
47. Kind of congestion
49. Startups' milestones
50. Ian Fleming novel
51. CFP's creation
53. One side of an issue
55. Bran source
56. Three, in Turin
59. Byte fractions
61. Ivy League school, for short
63. Round of applause
65. Type of IRA
67. __ Cascade
70. Don't pass on, as costs
72. " __ Luxury" (see page at right)
74. Wisconsin-based insurer
75. Defeated in the ring
76. Declined
77. Saturates
78. Slalom curve
79. Sushi-bar selections
40. San Francisco paper
41. Hawaiian coffee
42. Word before price or ch
45. 401(k) adjunct: Abbr.
48. Legal degree: Abbr.
52. Boeing competitor
54. Buffett's home: Abbr.
56. Normalizations of relati
57. African capital
58. Come next
60. Piece of the action
62. Irrelevant statistics
64. Medicinal amount
66. Medical-insurance optio Abbr.
68. Enjoy one's yacht
69. Ultimate objectives
71. Blame, so to speak
73. Magazine executives: Ab

For answers to this puzzle:

Turn to page 24 in this week's issue of Business Week or visit Mixing Business with Pleasure by Lincoln on www.businessweek.com (URL: www.businessweek.com/adsection/puzzlesbylincoln/index.htm)

Puzzle created by: Stanley Newman.



www.lincolnvehicles.com

hours from the city.

A twenty-acre backyard.

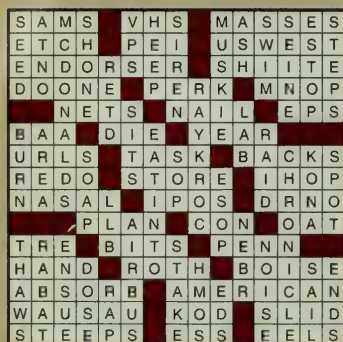
Nothing to do but relax and enjoy the view. | Define luxury for yourself.



Luxury isn't bound by rules. That's why the Navigator combines a 300-hp
V8 with a cabin that's beautifully appointed with walnut and leather. After all,
you can always rough it when you get there. For more information, or to schedule a test
drive, visit lincolnvehicles.com or call 800-688-8898.


LINCOLN
AMERICAN LEGACY

Mixing Business with Pleasure by Lincoln



Answers from puzzle #35
in Business Week.



LINCOLN

1-800-688-8898

Readers Report

hoo! Mail: There are no switching costs per se, since these services are independent of the ISP.

Steven Woo
Los Angeles

WOMEN MAKE GOOD MANAGERS. SO WHAT?

The finding that women make effective managers is old news ("As leaders, women rule," Special Report, Nov. 20). The article suggests that new re-



AS LEADERS, WOMEN RULE

New studies find that female managers outshine their male counterparts in almost every measure

WHERE FEMALE LEADERS DO BETTER: A SCORECARD	
MANAGING A TEAM	90%
MANAGING A BUDGET	90%
MANAGING A PROJECT	90%
MANAGING A RISK	90%
MANAGING A CHANGE	90%
MANAGING A CRISIS	90%
MANAGING A SITUATION	90%
MANAGING A TEAM	90%
MANAGING A BUDGET	90%
MANAGING A PROJECT	90%
MANAGING A RISK	90%
MANAGING A CHANGE	90%
MANAGING A CRISIS	90%
MANAGING A SITUATION	90%

search showing female managers' effectiveness is compelling because it is "based on results from actual performance evaluation rather than surveys, etc." I find solace knowing it reinforces what I, along with others, have been saying and writing for so many years: that women represent undervalued and underutilized human capital. Organizations are beginning to realize they can no longer ignore this reality.

Judy B. Rosener
Irvine, Calif.

You report differences between female and male managers that are interesting but not crucial. The real question a company can profit from is: What talents prove necessary to succeed in each specific job?

My research shows gender is not the key to on-the-job success. Instead, a company needs to do a benchmarking study to identify behaviors and mental abilities of employees who succeed in each job. This enables the company to compare each applicant, male or female, with its successful current employees. Such test benchmarking is objective and non-gender-oriented. Prosperous companies are staffed by productive, dependable human beings hired because they possess crucial job-related talents—and not for any other reason.

Michael W. Mercer
Barrington, Ill.

A WINTRY WELCOME FOR WORKERS ON VISAS

I am a Canadian citizen who re-moved to the U.S. with an H-1B "Workers of the world: Welcome" (Government, Nov. 20) is misleading for who have obtained a visa but are v-for permanent residency. Normal visa is valid for three years, but b-the number of visas has increased past few years, it takes more than years to obtain permanent residency

ers have to renew visas and clog u-system even mor-a frustrating and process.

I do a lot of t-ing outside the and the immigr-officers do not e-welcome workers visas. We are a-last in line, we h-fill out an 1-94 each time we and each officer-pretends things diff-

ly. Please don't get me wrong. I ap-ate the opportunity to work and l-the U.S., but the processes need-improved before we really feel we-

Richard Boul
New

BusinessWeek online

The full text of Business Week, the Business Week Daily Briefing, and five years of BW archives are available on the World Wide Web at:

www.businessweek.com

and on America Online at Keyword: BW.

HOW TO REACH BUSINESS WEEK

LETTERS FOR READERS REPORT

All letters must include an address and daytime/evening phone numbers. We reserve the right to e-letters for clarity and space and to use them in a electronic and print editions.

Mail: Business Week, 1221 Avenue of the Americas

43rd floor, New York, NY 10020

Fax: (212) 512-6458

Internet: bwreader@businessweek.com

America Online: readersbw

SUBSCRIBER SERVICES

For individual subscriptions, corporate subscrip-tions, renewals, changes or problems, and single copie-s: Phone: (800) 635-1200 or (609) 426-7500

Fax: (609) 426-7623

Internet: bwcustsv@businessweek.com

Library fee-based services: (212) 512-6704

REPRINTS AND COPYRIGHT PERMISSIONS

For custom reprints (minimum order of 1,000) con-tact: (212) 512-3148

Fax: (212) 512-2337

Internet: www.businessweek.com/reprints/

For permission contact:

Phone: (212) 512-4801

Fax: (212) 512-4938

Listen with more intelligence.



LITTLE RICHARD

From computer modems to the newest MP3 players, ST microchips are the brains behind the latest ways to enjoy music.



Whether it's *Tutti Frutti* or Beethoven's *Ninth*, the digital revolution has forever changed how we listen to music. And ST is a star performer in the process.

ST supplies microchips for computer modems, sound cards, solid state and hard disk storage devices, active loudspeakers, and portable MP3 players.

People want better access to music, and ST is listening.



We put more intelligence into everything.

STMicroelectronics (formerly SGS-THOMSON) • www.st.com • A world leader in semiconductors for consumer products, automotive, telecommunications, computer peripherals, industrial automation and control systems • For opportunities: <http://jobs.st.com>

STMicroelectronics

delivers

Nokia broadband technology change





the world

Rewrite the rules

Nokia delivers broadband @ the speed of demand.

Nokia makes the hardware that delivers broadband faster than ever. With Nokia's field-proven, next generation DSL and innovative wireless broadband systems, our customers get the scalability and flexibility they need to deploy broadband on demand. And when they add wireless LAN capability using one of our Nokia Home Gateway products, they'll really deliver customer satisfaction. With over 200 million loyal customers, Nokia has learned something about how to deliver. And isn't delivery what broadband's all about these days?

Visit us at www.nokia.com and start rewriting the rules your way.

NOKIA
CONNECTING PEOPLE

THE BEST BUSINESS BOOKS OF 2000

The pendulum swing in technology is rocking the world of books. During 1999, publishers were smitten with all things digital, which meant topics far removed from Silicon Valley were neglected. This year, though, saw the return of an old favorite: volumes focused on finance and the markets. Indeed, such titles represent more than half of BUSINESS WEEK's picks for the top business books of 2000.

Who would have believed that one of the hottest books of the year would contain 296 pages of unbridled number-crunching by an Ivy League economist, published by an academic press? Arriving just as the Nasdaq began its slide, *Irrational Exuberance* (Princeton University), by Yale University economist Robert J. Shiller, preaches that stocks have been ridiculously overvalued—thanks, in part, to pronouncements of New Economy believers in the media, various B-school professors, and, strangely enough, Federal Reserve Chairman Alan Greenspan. Together, says Shiller, they turned what is unquestionably a good story—high productivity and corporate earnings—into a fairy tale featuring soaring price-earnings ratios and ever-higher stock prices. In fact, Shiller predicts that the current stock slump is likely to turn into a prolonged period of stagnant returns. A sobering scenario, in a volume that BUSINESS WEEK Chief Economist William Wolman called “dazzling, richly textured, provocative” and “by far the most important book about the stock market since Jeremy J. Siegel’s 1994 *Stocks for the Long Run*.”

Also alarming is the story told in *When Genius Failed: The Rise and Fall of Long-Term Capital Management* (Random House) by Roger Lowenstein, whose previous book was *Buffett: The Making of an American Capitalist*. LTCM, you will recall, was the \$100 billion hedge fund whose principals included two Nobel-laureate economists and a group of elite traders. In 1998, the company’s vastly leveraged

bets on various forms of arbitrage went sour, and in one month, LTCM lost \$1.9 billion. Fear that its thousands of derivative contracts could drag down all of Wall Street prompted the Federal Reserve to gather threatened banks and ride to the rescue with a \$3.6 billion

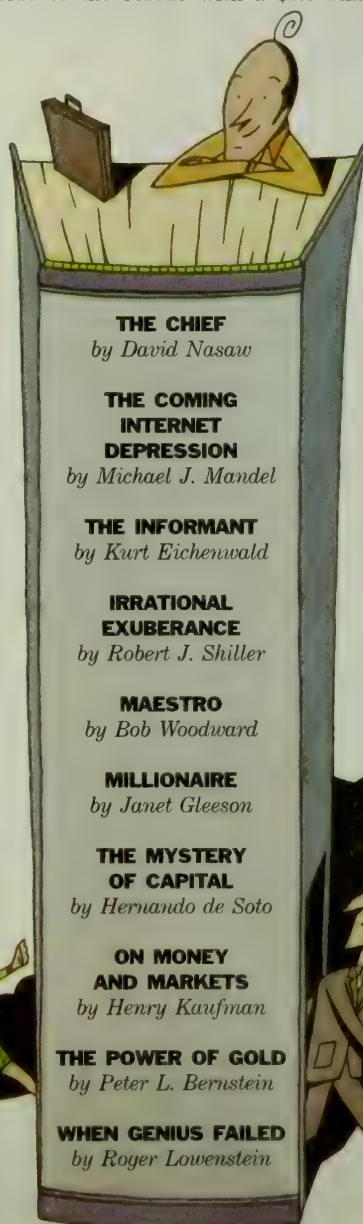
bailout—a move Lowenstein believed was ill-advised. “The author waded through the arcane world of arbitrage with a sure hand,” observed reviewer Gary Weiss, who found the book to be “fascinating tale of world-class greed and, above all, hubris.”

An inside look at the central bank, its chief, and Washington politics can be found in *Maestro: Greenspan’s Fed and the American Boom* (Simon & Schuster) by Bob Woodward, assistant managing editor of the *Washington Post*. It contains no startling revelations but is replete with the sort of fly-on-the-wall reporting for which Woodward is famous. What comes across most clearly is Greenspan’s skill at the political power games that determine who survives in the cutthroat world of Washington. In particular, the author describes how the Fed chief forged close ties with Bill Clinton and other members of his Administration, including Treasury Secretary Robert E. Rubin. Reviewer Richard Miller found that, although Woodward “gives Greenspan too much credit for the current boom,” his “unparalleled access to many of the principal players makes this a worthy addition to the author’s oeuvre.”

Henry Kaufman’s *On Money and Markets: A Wall Street Memoir* (McGraw-Hill) provides an account of the life and intellectual development of one of the most powerful men on Wall Street during the 1970s and ’80s. Kaufman helped set up Salomon Brothers Inc.’s legendary money- and bond-market research unit and, in time, made it one of Wall Street’s largest and most influential research teams. Because of his contributions to the rise of economic and financial forecasting, Kaufman became a Wall

Street guru who could, and often did, move markets. *On Money and Markets* recounts these experiences, along with the author’s early years in Germany, his flight from Nazi persecution in the 1930s, and the years of studying economics and finance in New York. Reviewer James C. Cooper says that Kaufman “writes with objectivity and a rare clarity that can come only from experience and a thorough understanding of his subject.”

In *The Power of Gold: A History of an Obsession* (Oxford University Press), Peter L. Bernstein takes on one of the major stays of the financial world—and of misers through the ages. Bernstein, author of the best-



THE CHIEF

by David Nasaw

THE COMING INTERNET DEPRESSION

by Michael J. Mandel

THE INFORMANT

by Kurt Eichenwald

IRRATIONAL EXUBERANCE

by Robert J. Shiller

MAESTRO

by Bob Woodward

MILLIONAIRE

by Janet Gleason

THE MYSTERY OF CAPITAL

by Hernando de Soto

ON MONEY AND MARKETS

by Henry Kaufman

THE POWER OF GOLD

by Peter L. Bernstein

WHEN GENIUS FAILED

by Roger Lowenstein

What do the largest ISPs know about antivirus?



Trend Micro.

For Internet Service Providers, protecting network availability is especially crucial. Slowdowns or crashes caused by viruses or spam could impact not just their own business but countless others—including many for whom the Internet is more lifeline than luxury.

That's why many of the largest ISPs and ASPs rely on Trend Micro for antivirus protection. Trend Micro's InterScan VirusWall® stops viruses at the enterprise's border—the Internet Gateway. It's part of a complete enterprise solution that scales to any size, yet can be easily managed through a single console. And it's backed by the kind of global support that helps IT managers sleep at night.

If staying online is mission critical for your company, talk to Trend Micro. We'll show you why we're the leading choice of enterprises that know security best.

For a free copy of our "Safe Computing Practices" white paper and a free evaluation CD for Trend Micro antivirus and content-security solutions, call 1-800-238-9983 or visit www.trendmicro.com



ing *Against the Gods: The Remarkable Story of Risk*, here offers a panoramic view of how gold emerged as the manifestation of humankind's longing for power, beauty, and immortality. His story begins in Biblical times, runs through the Roman era and Middle Ages, the Spanish conquest of the Americas, the California gold rush, the catastrophe of World War I, and the Great Depression. He shows how gold became the foundation of modern currency and international trade right up until President Richard M. Nixon in 1971 discarded the practice of pegging the U.S. dollar to the price of gold. Said reviewer Eric Schine: "Bernstein's volume is a *tour de force* with a satisfying conclusion: The characters in this drama prove themselves 'fools for gold...chasing an illusion.'"

For another exploration of the financial world of yore, there's *Millionaire: The Philanderer, Gambler, and Duelist Who Invented Modern Finance* (Simon & Schuster), by British writer Janet Gleeson. This biography of the pioneering 18th century Scottish banker and financier John Law, described by the author as the "financial wizard of his age" and the virtual inventor of paper money, reads like John Kenneth Galbraith crossed with Danielle Steel. There are slashing rapiers, daring prison escapes, palace intrigues, financial cupidity, and illicit sex—and, in the process, one learns about the dawn of high finance. As head of the Banque Générale, Law helped to revive France's beleaguered 18th century economy, but by 1720 he was in jail as a result of his key role in the ruinous Mississippi Com-

Kurt Eichenwald, a *New York Times* reporter. This tells how Archer Daniels Midland Co.'s Mark Whitacre blew the whistle on his company's massive involvement in price-fixing—and how Whitacre subsequently was revealed to have embezzled millions from ADM. *The Informant* depicts a corporate world replete with covert meetings, secret codes, and industrial espionage. The federal investigation ultimately led ADM and co-conspirators to settle federal charges to the tune of more than \$100 million.

"Using loads of new evidence and in-depth interviews with players on every side of the drama, Eichenwald constructs one of the most compelling business narratives since *Barbarians at the Gate*," said reviewer Mike France.

Could a sharp slowdown in tech spending presage a huge economic bust? Michael J. Mandel's *The Coming Internet Depression* (Basic Books) asserts that today's New Economy has not ended the boom-bust business cycle—but rather transformed it into a "tech cycle," with longer expansions followed by deeper and harsher recessions. At the heart of Mandel's analysis is the role of risk capital, which has taken over much of the funding of innovation. Mandel, *BUSINESS WEEK*'s economics editor, worries that a falling stock market could lead sensitive risk capitalists to refrain

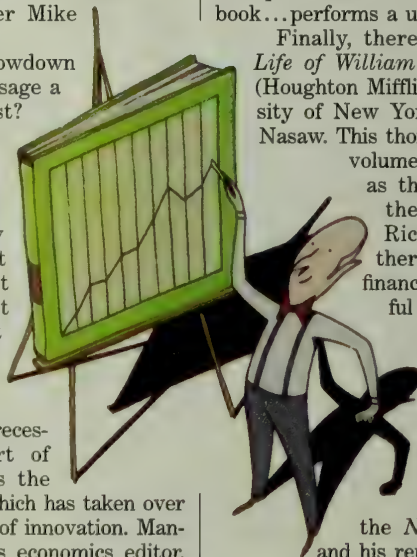
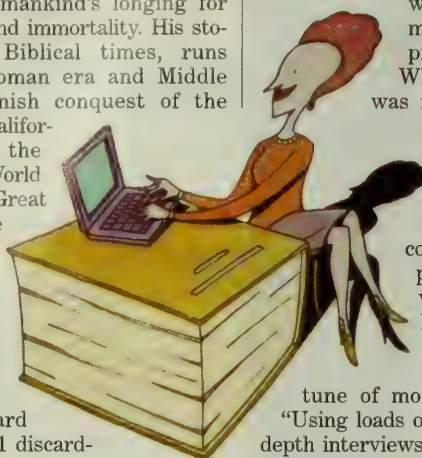
prompt the Fed to raise rates—a bummer, in the author's view.

Economist Hernando de Soto's *Mystery of Capital* (Basic Books) takes another worrisome matter: Why is much of the world stuck in poverty while other parts are dazzlingly rich? The answer, says the Peruvian scholar, can be found in the failure of developing countries' legal systems to acknowledge and respect the property of the poor. The majority of people in such lands live as squatters. Without legal title to their land, homes, or businesses, they can't use them as collateral for loans. Soto argues that reforming the legal system would free that "dead capital," which he estimates to be as much as \$9 trillion worth of assets—to be put to use as an engine for growth, as capital in rich countries. Reviewer Peter H. Brown found that "de Soto overreaches by missing other theories about the persistence of poverty," but he added that the "provocative and elegantly written book...performs a useful service."

Finally, there's *The Chief: Life of William Randolph Hearst* (Houghton Mifflin) by City University of New York historian I. F. Stone. This thoroughly researched volume must be regarded as the definitive history of the media magnate. Riches from his newspaper-financed Hearst's youthful profligacy, his naturalistic experimentation, the *San Francisco Examiner*, his building turn-of-the-century newspaper empire centered in the New York Journal

and his repeated runs for political office. But perhaps the most boyant period of Hearst's life took place in Hollywood, where he conducted a long-term affair with chore-line movie-star Marion Davies, and, in 1919, he set up his own movie studio. During the 1930s, Hearst helped Franklin Roosevelt win the Presidency—then became an apologist for Hitler and started a virulent anticommunist witch hunt that would stretch into the 1950s. Although Nasaw's book has solved many of the mysteries of Hearst's life, it would be hard to imagine a more complete rendering of publishing magnate's life.

COMPILED BY HARDY GREEN
Green is Books Inc.



Woodward highlights Greenspan's skill in the political power games that determine who survives in the cutthroat world of Washington

pany bubble. "Thoroughly researched, *Millionaire* is a marvelous read that animates its flawed hero while intelligently illuminating his time," reported reviewer Mark Frankel.

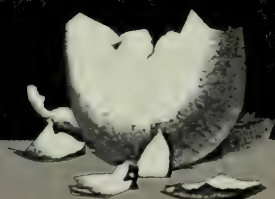
A more modern but equally gripping drama can be found in *The Informant: A True Story* (Broadway Books) by

from backing startups. The resulting decline in innovation might mean a concomitant reduction in productivity growth. Meanwhile, with labor and product markets tight—and with established companies more able to raise prices given reduced competition from startups—inflation could reappear. This could



**It is better to have
a hen tomorrow**

than an egg today.



Let's get this straight—nothing is wrong with an idea that can quickly turn a profit. But at Bay Partners we're far more focused on how big the market is likely to become than whether or not we can flip the investment.

Our focus centers on providers of both wireline and wireless communications equipment, and the software and services that run in these distributed networks. We're also interested in the changing face of Internet infrastructure software and services designed for large businesses. We believe these are the best areas to build large, fast growing markets and

companies, especially as technology moves further and further into mainstream use.

After all, the vast majority of our investments come in the first professional investment round, so we're used to taking a long view.

We've bought into the visions of Brocade Communications (NASDAQ: BRCD), Informatica (NASDAQ: INFA), SonicWALL (NASDAQ: SNWL), and Exodus Communications (NASDAQ: EXDS) because we liked what we saw.

And we were wise enough to be patient.



Alaska

A Wise Investment



**Whether it's time spent with family
or developing business with clients,
your invitation to Waterfall Resort,
Alaska is a wise investment.**

Name (print) _____

Company _____

Address _____

City _____ State _____ Zip _____

Area & Phone _____ Fax _____

Saltwater _____ Freshwater _____ Business _____ Pleasure _____

Number of Guests _____ Best Season: 2001 _____ 2002 _____ 2003 _____

Email Address _____

1-800-544-5125

Fax this page to 907-225-8530

(or email us at: waterfal@ktn.net) to receive a complimentary video and brochure

Legendary Sportfishing



Visit our web site at www.waterfallresort.com

STEPHEN H. WILDSTROM

you@businessweek.com

VISOR: VERSATILITY WITH A VENGEANCE



plug-ins
available
the
handspring
or put it far
ad of the
dheld pack

The Handspring Visor made its debut a little over a year ago as the Palm with a difference. On the back was a slot, called a Springboard, that would someday let you transform the device into a wireless phone, a wireless data terminal, a music player, or just about anything else you wanted. It has taken a long time, but the payoff is finally here, with a profusion of Springboard modules hitting the market. The Visor is now—by far—the most versatile handheld computer you can buy.

Probably the most interesting of the new modules is the \$299 VisorPhone. It's a three-ounce unit that turns the Visor into a wireless phone. I found it clunky to use when holding it to my ear, but with a headset it becomes one very good unit. (I much prefer the \$45 over-the-ear Plantronics M-130 to the earbud

with dangling mike supplied with the VisorPhone.) The VisorPhone also makes effective use of the huge—by phone standards—Visor display. The onscreen dialpad and speed-dial displays both have “buttons” that are easily tapped with a finger. Short messages are much quicker to write in Graftiti shorthand than by tapping them in on a phone keypad, and they are much easier to read than on a phone display. And you can call anyone in your Visor address book just by tapping the “dial” button on the listing.

PLUG & PLAY. The phone uses the GSM standard, the system of choice for most of the world. I have found GSM service generally equal to digital networks such as Sprint's and AT&T's—good in cities, weak to nonexistent elsewhere. The choice of GSM lets the VisorPhone be used as a slow (9.6 or 14.4 kbps per second) but reliable modem. With an add-on program such as Palm's \$40 MultiMail, you can send and receive e-mail by dialing into an Internet service provider or corporate network.

One of the best features of the Springboard is that it offers true plug and play. Modules install all the software needed when inserted and erase

it when the modules are removed. OmniSky service for the Visor is a good example. The Visor service is identical in function to the Palm V's. You get wireless e-mail, Web browsing, and access to dozens of wireless applications—such as stock trading and driving directions—designed for the Palm VII. But on the Palm V, you have to load the OmniSky software by first copying it to a PC, then downloading it to the Palm when you sync with your desktop data. And the clip-on modem must be removed to sync or recharge the Palm. By contrast, the OmniSky for Visor (\$299 plus \$39.95 for monthly service) module not only installs and removes its software automatically, the design also leaves the connector free for syncing.

SPEEDY MODEM. If you only want to use your Visor for limited e-mail, short messages, and retrieving snippets of Internet data, a two-way pager module could be the way to go. The Sky-Tel @tive Link is available for \$428, which includes a Visor (service from \$24.95 a month). For a conventional wired modem, you have several choices. The newest, the \$149 SpringPort from Xircom, is more expensive than Handspring's version, but it offers speeds of up to 56 kbps.

Visor's versatility goes way beyond communications. SoundsGood from Good Technology fits completely into the Springboard slot and turns your Visor into a full-featured MP3 player. It's cool, but it also demonstrates the limitation of this approach: At \$249 after rebate, it's at least as expensive as a stand-alone player. Furthermore, you can't expand its 64 mb of memory, and I found the onscreen controls awkward to use. Another add-on, the \$150 IDEO eyemodule, turns a Visor into a low-resolution but fun camera that is especially effective on the Prism, the new color Visor.

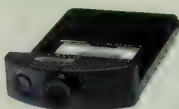
Other makers of Palm OS devices aren't abandoning the add-on field to Handspring. Palm will add a slot for what are known as SD cards. Sony's Clie accepts Memory Stick, and the TRG-pro from TRG Products accepts CompactFlash storage. All of these were designed for memory expansion, and none is likely to be as versatile as the Springboard. In addition to the Visor accessories I've mentioned, Global Positioning System and voice-recorder attachments are already available, and more are on the way. With all of its new accessories, the Visor becomes a bit of a Swiss army knife, with the electronic equivalent of saws and can openers that actually work. It has become a supremely handy tool.



**SOUNDGOOD
MP3 PLAYER**
\$249
by **GOOD TECHNOLOGY**



**SPRINGPORT
MODEM**
\$149
by **XIRCOM**



**EYEMODULE
CAMERA**
\$150
by **IDEO**



VISORPHONE
\$299
by **HANDSPRING**
Shown with
VISOR PRISM
\$449

essWeek online

COLLECTION OF
COLUMNS and
only reviews of
logy products,
www.business-
om/technology/

n e t w o r k



e w o r l d

msdw.net/NetworkTheWorld

(Except Antarctica)

You never know in what part of the world opportunity will beckon. Which is why we've invested decades and billions in creating an extraordinary global resource – of technology and people, companies and governments, partners and investors.

So that you'll have access to the best resources and thinking when you want to jump at an opportunity.

You can connect to it all and network the whole world.

Except, of course, the one place where black tie is *de rigueur* every day of the year.

Network the world

MORGAN STANLEY DEAN WITTER

INSTITUTIONAL SECURITIES & INVESTMENT BANKING

BY ROBERT J. BARRO

THE DOLLAR CLUB: WHY COUNTRIES ARE SO KEEN TO JOIN



SHIFT:
Like Ecuador, El Salvador has decided that importing a monetary policy—from the Fed—serves its best interests

In 1947, there were 76 independent countries. Today there are 193. Until recently, most countries had their own currencies. Hence, the expansion of the number of countries led to a proliferation of currencies.

Individual currencies are valued partly out of national pride and partly because they allow each country to pursue its own monetary policy. However, the benefit attributed to independent monetary policy has diminished as central banks have learned to value price stability over active macroeconomic stabilization. Moreover, the expansion of world trade has made it increasingly inconvenient for each country to have its own money. Therefore, the identification of currencies with countries has weakened, and the discussion has shifted toward one of desirable currency unions.

Roughly 60 small economies have been members of currency unions for some time. Examples are the 15-member Franc zone in Africa, the seven-member Eastern Caribbean Currency Area, and the West Bank and Gaza using the Israeli shekel. The most important example, of course, is the 11 European countries that use the euro.

The dollar bloc, too, has been expanding. One attraction of dollarization is that sound monetary and exchange-rate policies no longer depend on the intelligence and discipline of domestic policymakers. Their monetary policy becomes essentially the one followed by the U.S., and the exchange rate is fixed forever.

The latest country to tie the fate of its currency to the Federal Reserve is El Salvador, which recently said it would dollarize. As a positive sign of the times, this decision immediately received support from the U.S. Treasury and the International Monetary Fund. Currency boards that lock local currencies to the dollar or the euro exist in Hong Kong, Estonia, Bulgaria, and Lithuania.

Argentina adopted a currency board in 1991. The Argentine economy did well on average until 1999, but there is substantial controversy as to how much the current recession stems from this link to the strong U.S. dollar. I would argue that Argentina's economic future would be jeopardized by elimination of the currency board and that a better course would involve full dollarization.

From a scientific standpoint, the most exciting recent development is the dollarization in Ecuador, a country that has been an economic and political disaster for some time. The situation appeared to brighten in 1998 with the election as president of Jamil Mahuad, who had been a successful reformer as mayor of Quito. However,

he couldn't gather the political support needed to solve problems with the public finances, subsidies on consumer goods, foreign debt, and the banking sector. When bank runs occurred in March, he responded by freezing deposits. This action was apparently as dubious legally as it was economically, eventually earning Mahuad an arrest warrant after he was forced to move to the U.S.

Before that, Mahuad proposed to dollarize Ecuador, but his program was not part of a coherent economic package. He just suggested because he became desperate to do something dramatic when his approval rating fell below 10%. Although the proposal led to a rise in approval rating, it was not enough to save his presidency, and he was soon ousted in a bloodless coup. However, his vice-president and successor, Gustavo Noboa, recognized the popularity of dollarization and therefore moved aggressively to make the U.S. dollar the currency of Ecuador. The transition is nearly complete. Fortunately for Ecuador, obtaining U.S. dollars to repay its debts has been aided by the high price of oil.

CHICKEN OR EGG? There is an ongoing debate about whether major monetary reforms, such as dollarization, can be successful without the preconditions of sound fiscal and banking practices. Ecuador is therefore interesting because these preconditions existed. In fact, these deficiencies were part of the crisis atmosphere that generated the political consensus for dollarization.

In other words, the lack of supposed preconditions explains why dollarization occurred in Ecuador in the first place. In contrast, El Salvador is in much better shape in overall economic policy, and the recently announced dollarization had been contemplated for many years. The crucial question for Ecuador is whether dollarization itself will help to cure problems such as fiscal imbalances and banking inadequacies. The temporary problem, caused by the sharp devaluation in 1999, is a burst of inflation that should ease in 2001.

Thus far, dollarization seems to be serving Ecuador as a foundation for the resolution of other economic problems. Progress has been made with international debtors, and some domestic reforms have been accomplished. My prediction is that dollarization will continue to help with these problems, although political instability will sometimes occur. I also predict that other countries in Latin America will observe this success and will move—hopefully more coherently than Ecuador—toward dollarization.

Robert J. Barro is a professor of economics at Harvard University and a senior fellow of the Hoover Institution (rjbweek@harvard.edu).



ngenious

How can something so simple to use be so powerful and productive? With WebFOCUS, an i-business solution from Information Builders, all your critical data is just one click away. That means more than 85 different relational, legacy, and ERP data sources—in warehouses or in production systems, inside or outside the enterprise. WebFOCUS transforms all your data into real-time information and delivers it any way you need it—wireless, Web, e-mail, Microsoft Office—you name it. Experience the power and flexibility of WebFOCUS from Information Builders, the leader in Web business intelligence software. It puts the intelligence in your e-business. And to everyone from executives to employees to partners to customers alike, that's downright genius.

i-business: from information to intelligence

Information Builders

www.informationbuilders.com

1.800.969.INFO

©2000 Information Builders, Inc. All trademarks, registered marks and service marks are the property of their respective owners. All rights reserved.

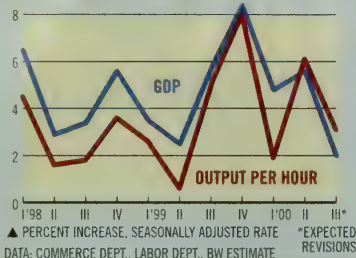
BY GENE KORETZ

A TEST FOR THE NEW ECONOMY

Will productivity fade next year?

The conventional wisdom these days is that technological advances and their diffusion through the economy have produced a long-term acceleration in productivity growth. After all, output per hour in the nonfarm business sector has advanced at a 3% average annual rate for nearly five years, the high-

AS GROWTH SLOWS, SO DOES PRODUCTIVITY



est sustained growth since the 1960s.

Still, the productivity debate is not quite dead. A number of economists, notably Robert J. Gordon of Northwestern University and Stephen S. Roach of Morgan Stanley Dean Witter, remain strong skeptics. And as Paul L. Kasriel of Chicago's Northern Trust Co. observes, the thesis of a lasting productivity surge is about to be tested. "Productivity," he says, "is going to slow. The big question is how much?"

One reason to expect a slowdown, notes Kasriel, is that productivity gains are highly correlated with the business cycle, rising and falling with changes in the pace of business activity (chart). If economic growth slows appreciably over the next year, as most forecasts predict, productivity should follow suit.

What's more, as Northwestern's Gordon argues in a study in the current *Journal of Economic Perspectives*, much of the recent acceleration in U.S. productivity growth has occurred in the durable goods manufacturing sector, notably in the production of computers and other information technology. And while high-tech output at last count remained robust, signs are growing that it is facing a slowdown in demand.

These omens include the falling profit projections and stock prices of many

high-tech companies, the demise of scores of dot.coms, and September's 11% drop in new orders for computers and office equipment. Significantly, inflation-adjusted prices of high-tech equipment and software have risen this year for the first time in recent memory.

If just a few of these omens prove to be prescient, then productivity would suffer added blows. First, the substantial contribution from the actual production of computers and the like would be diminished as output falls. Second, slowing capital investment by businesses would tend to reduce the big productivity dividends gained from rising capital/labor ratios.

Hence, future productivity growth could be subject to a triple whammy: a slowdown in overall economic growth, a slowdown in high-tech production, and a slowdown in business investment in productivity-enhancing capital goods. And with labor compensation apparently heading higher and no offset from productivity gains, says Kasriel, "that would translate into rising unit labor costs which would squeeze profits and put upward pressure on prices."

Believers in the New Economy, of course, reject this scenario. In their view, the huge efficiency gains from technology will keep high-tech investment on a solid uptrend, moderating both the developing economic slowdown and labor cost pressures. From that standpoint, says Kasriel, 2001 should prove an interesting year: "It may reveal whether the productivity miracle was real or a temporary mirage."

IRAS HAVE A DIRTY LITTLE SECRET

They boosted Uncle Sam's tax take

Have individual retirement accounts increased private and national saving? While some economists believe they have, others find they have simply allowed contributors to shift funds from taxable accounts to IRAs. Since the tax breaks for IRAs cost the Treasury money, the critics claim that national saving—which includes both private and government saving—suffered as a result.

In a recent study, however, Brianna Dusseault and Jonathan Skinner of Dartmouth College find that IRAs have actually boosted government revenues—and thus national saving—even if people simply shifted funds from their ordinary taxable saving into IRAs. Many folks, it turns out, would have paid less in taxes if they

had kept their savings out of IRAs.

The reason is that IRA accounts subject to an average income tax rate of 27% when cashed out, whereas capital-gains tax rates or no capital-gains tax at all if they are part of a tax-deferred account. And thanks to the unprecedented stock market boom since IRAs made their debut in 1982, these tax-deferred accounts have piled up huge capital gains, according to government data.

The two researchers figure that total tax revenues the Treasury has already realized and will realize from the appreciation of IRAs between 1982 and 1998 will be at least \$10 billion greater than it would have collected without IRAs. And that's even after subtracting the interest the government paid on bonds issued to cover the initial revenue losses on IRAs. If the available data is correct, the revenue windfall some experts claim, the revenue windfall comes to \$30 billion.

In essence, says Skinner, the stock market boom has permitted the government to effortlessly raise revenue in the guise of a tax giveaway. "Unfortunately," he adds, "we cannot count on repeat performance."

RETAIL STREETS PAVED WITH GOLD

East 57th is now the world's priciest

Last year, it was New York's Madison Avenue. This year, reports Cushman & Wakefield, it's the city's East 57th Street that ranks as the world's priciest shopping thoroughfare. With a 40% increase in prime retail rents, to \$700 per square foot, the Manhattan street now ranks as the top retail street in the world, ahead of Paris' Champs Élysées.

Major gainers among the top retail streets in the world this year are Sydney's Pitt Street Mall, which moved from fifth to third place as its rents rose by 33%, and Dublin's Grafton Street, which climbed from 12th to 8th place. A big loser: Moscow's Trade House GUM, whose 33% drop in dollar rents propelled it from 6th to 11th place.

THE TONIES THOROUGHFAIR

ANNUAL RETAIL RENT DOLLARS PER SQUARE FOOT	NEW YORK (E 57TH ST)
PARIS (CHAMPS ÉLYSÉE)	\$550
SYDNEY (PITT ST MALL)	\$446
LONDON (OXFORD ST)	\$396
HONG KONG (CAUSEWAY)	\$377
TOKYO (GINZA)	\$255
ATHENS (ERMIOU)	\$254
DUBLIN (GRAFTON ST)	\$230

* PRIME RENTS MID-1999
DATA: CUSHMAN & WAKEFIELD

JAMES C. COOPER & KATHLEEN MADIGAN

HOLIDAY SURPRISE: SHOPPERS ARE SHOWING SOME PEP

They're still spending—but with enough moderation to please the Fed

U.S. ECONOMY Americans have cast their ballots, and their decision is clear. Few dimpled chads and arguments before the U.S. Supreme Court will not dissuade them from having a merry holiday season. Early reports on yearend shopping suggest that spending may end up better than current modest expectations, although far short of 1999's for-all. The season got off to a surprisingly strong start. Mail surveys show spending in the Thanksgiving week was up strongly from the previous seven days. Check Services Inc. reported that same-store sales rose 3.8% from a year ago. And malls saw customer traffic rise 6.5% from last year. Retailers will get help in the unusually long stretch of 31 days between Thanksgiving and Christmas, which gives consumers weekends to load up on gifts.

INDERS FLATTEN OUT, BUT AT A HIGH LEVEL



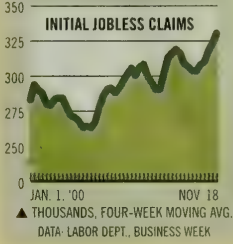
tionary pressure to vent out of the economy. That slowdown began in the third quarter. The Commerce Dept.'s second look on Nov. 29 at real gross domestic product showed growth was a bit slower this summer than first reported. Real GDP grew at an annual rate of just 2.4%, down from the 2.7% pace reported a year earlier, after averaging 5.2% in the first half. Much of the downward revision came from a larger trade deficit and slower inventory growth. But keep in mind that rising imports indicate that domestic demand, especially for capital goods, remains solid (chart).

CRUSH PRICE PRESSURES the economy may not grow below its long-term trend of about 3.5% for a sustained period. Happily for the Fed, the latest data on shopping, confidence, and durable goods show consumers and companies are pulling back a bit. But the slowdown isn't anywhere near sharp enough to justify the rumblings of "recession" being bandied

about. Instead, think of the economy as a car that has been speeding along at 90 miles per hour. The Fed is trying to downshift growth to the 55-mph range to keep the vehicle from careening out of control.

To achieve that speed, the Fed needs consumers to ease up. And so far, households seem willing to practice a little moderation. Shoppers may increase their holiday buying by more than the 3%-4.5% expected by analysts, but they are unlikely to boost their nonauto spending by the 10.5% jump posted in last year's fourth quarter. Powered by a surging stock market, soaring home values, and rising wage gains, the 1999 holiday season was the most successful of this expansion.

A SURE SIGN OF A SLOWER ECONOMY



In 2000, however, those supports for consumer spending are not as sturdy. Equity prices are flat or down from a year ago. Housing has cooled. Rising oil prices have cut into buying power. And climbing jobless claims signal some loosening in the labor markets (chart).

Not surprisingly, consumers are adopting a more conservative attitude about the economy's prospects. Consumer confidence, as measured by the Conference Board, fell again in November to 133.5 from 135.8. The confidence index has dropped nine points in the last two months, dragged down mostly by a decline in expectations about the future.

Even so, the level of confidence remains high by historical standards. The Conference Board says that while the dip in November expectations may "reflect concern about the still unresolved Presidential election," confidence in current economic conditions "points to strong holiday shopping ahead."

CONSUMERS AND BUSINESSES alike are reacting to the increased uncertainty in the outlook, which is crimping the manufacture and sale of big-ticket durable goods, such as cars and computers. Orders for durable goods have shown extreme month-to-month volatility this year, a pattern that continued in October. Orders in the month fell 5.5%, following increases in both August and September.

Aircraft and electronic equipment, which have led the year's wild swings, also caused the October plunge,

but both declines followed very large gains in September. The growth trend in overall orders, while having slowed, is not collapsing.

Capital-goods orders dropped 11.3% in October, but that was almost entirely the result of a 58% plunge in aircraft bookings. The general trend of orders, excluding aircraft, has tapered off, but it gives no indication of severe weakness. In fact, the nonaircraft backlog of unfilled orders continued to rise in October, as did capital goods shipments, suggesting that equipment spending in the fourth quarter is off to a solid start.

The chief risk to the Fed's slowdown strategy is that tighter credit, a slower economy, and a profit squeeze could result in a hard landing for capital spending. So far, nothing that dire is unfolding, although business investment in equipment is clearly growing more slowly. It increased at a revised 5.8% annual rate last quarter—less than a third of the pace of the first half, which was well above the recent trend. Overall business investment actually turned out to be faster than originally reported, because of a huge upward revision to outlays for commercial construction.

CAPITAL-SPENDING FUNDAMENTALS, while less supportive than in 1999, remain firm, at least for now. First, although credit is tighter, it is far from overly restrictive. Second, a lot of capital spending is the result of long-term trends related to the need for in-

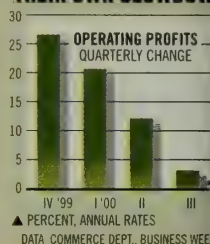
creased competitiveness, not just because of the cyclical ups and downs in the economy. And third, the cost of capital relative to labor still greatly favors capital, especially amid extremely tight labor markets, which are pushing up compensation.

Looking ahead, profits will be a key area to watch. At a time when financing is costlier, the flow of internally generated funds may also begin to diminish. In the third quarter, corporate operating profits, compiled by the Commerce Dept., grew at an annual rate of 3.2% from the second quarter. Earnings at nonfinancial corporations fell slightly.

Although profits are still growing 15.3% from year before, the quarter-by-quarter trend has slowed sharply this year (chart). And with labor costs rising ever faster and productivity slowing, higher units cost along with slower revenue growth, are almost certain to eat further into earnings growth next year.

So far, all signs point to a slowdown, not a slump. And if consumers finish the holiday shopping season with the same gusto they showed at the beginning of the economy will be well on its way to a happy—if bubbly—new year.

PROFITS PERFORM THEIR OWN SLOWDOWN



GERMANY

THE END IS IN SIGHT FOR THIS SLOWDOWN

Germany's economy—and the Euro zone generally—clearly slowed in the third quarter. But growth prospects for the coming year remain good, as oil prices and the euro stabilize and as sizable tax cuts kick in.

Germany's gross domestic product last quarter rose 0.6% from the second quarter, after averaging just under 1% growth per quarter in the first half. Adjusted third-quarter growth from the year before now stands at 3.4%, and despite a slower second half, 3% for the full year seems likely.

The slowdown reflects three things: a tripling of oil prices, a 27% drop in the euro, and rate hikes by the European Central

Bank totaling 2.25 percentage points in the past year. Consumer spending slowed to a near standstill last quarter, as costlier energy and imports drained purchasing power. Also, cooler global

demand continued to crimp export growth.

The slowdown, however, is far from a recession. The cooler pace of growth clearly continued in the fourth quarter and business confidence dipped further in October—the fifth month in a row. But

expectations for the future actually rose, a key sign that businesses think the slowdown may end soon. Business investment picked up last quarter.

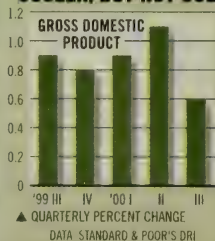
Plus, early next year, Germany

will get a boost from a sweeping five-year tax-reform plan that will cut the tax burden by a total of 2% of GDP. The plan is aimed at increasing employment, improving competitiveness, and encouraging corporate restructuring.

Moreover, outside of energy, inflation remains well contained. Consumer prices in November rose 0.2% from October and 2.5% from the year before. While that's greater than the 2% euro zone target, core inflation excluding energy and food is about 1%, and the rise in overall inflation appears to be topping out, as energy prices stabilize.

Economists generally expect growth in 2001 to match this year's 3% pace, somewhat above the economy's long-term trend of about 2.5%. If so, joblessness will continue to fall.

GERMAN GROWTH: COOLER, BUT NOT COLD



Feeding a growing e-business made easy.

Building an e-business isn't easy. But Dell can make it a lot easier.

We've had the experience of growing to \$15 billion a year in e-commerce. That's why we know what it takes: infrastructure like our reliable, rack-mountable,

scalable Dell PowerEdge™ servers and PowerApp™ appliances. They can grow as easily as your e-business grows.

We also make it easier with everything from custom integration of your operating system options online to

service centers that let you test your solution before you buy. Not to mention our on-site service and pre-failure alert program.

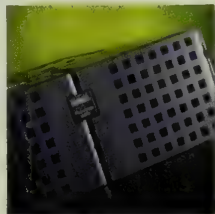
All of which is why companies like Monster.com and NaviSite are powered by Dell PowerEdge servers with Intel® Pentium® III Xeon™ processors.

Why not make the care and feeding of your e-business a lot easier?

PowerEdge™ 2450
Rack-dense,
highly available
application server



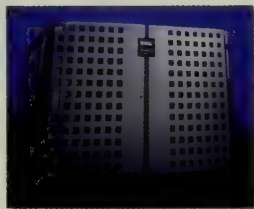
PowerEdge™ 6450
Mission-critical
e-business server



PowerApp™
Turnkey web
& cache
appliance servers



PowerEdge™ 8450
Back-end
database server



800.501.DELL www.dell.com



Dell offers a complete line of Intel® processor-based systems. Expand your e-business with robust Dell PowerEdge servers based on the Intel Pentium III Xeon Processor, including the PowerEdge 8450 with up to eight processors and expandable to 32GB RAM.



Intel Inside logo and Pentium are registered trademarks, and Pentium III Xeon is a trademark of Intel Corporation. Dell, PowerEdge, PowerApp and the Dell logo are registered trademarks of Dell Computer Corporation. These devices have not been approved by the Federal Communications Commission for use in a residential environment. These devices are not, and may not be, offered for sale or lease, or sold or used in a residential environment until the approval of the FCC has been obtained. ©2000 Dell Computer Corporation. All Rights Reserved.

WEATHERING SLOW GROWTH

CEOs face a daunting array of tough choices: Are they ready?

David M. Cote, president of TRW Inc., is putting out the word to his managers. After years of record growth, car sales are slamming into reverse, and production could be down as much as 10% next year. So the Cleveland-based company, which gets two-thirds of its \$17 billion in annual revenue from auto parts, is looking for places to lop off costs. Except for information technology, he says, "we're cutting everywhere." Cote is also scouting around for assets to sell. And he's offering sharply higher bonuses for managers who soundly beat their targets for generating cash.

Welcome to the new reality. With the signs of a slowdown everywhere, budgeters all across America are reviewing their spending plans for 2001 in a new and far more cautious light. The roaring growth of the last several years—which was capped by gains in gross domestic product that are expected to top 5% in 2000—will surely not repeat itself next year. While most economists now project GDP growth of around 3%, a rising chorus also believes the U.S.



Trimming costs is tough enough. An even knot

ld actually be headed for recession. As the economy goes, so goes corporate performance—and that means tough times. Many investors—along with executives and directors, for that matter—have expectations for revenue growth that may be unrealistically high. A weakening economy is going to make it much tougher to book strong year-over-year sales gains compared with this phenomenal year. And with sales growth waning, earnings could take it on the chin. After a stunning 19% gain for the Standard & Poor's 500 companies extended this year, First Call/Thomson Financial reports that analysts have been idly lowering expectations for next year. In early October, analysts still figured earnings for the S&P 500 would grow another 19.1% in 2001. Now, expectations are for 11.6% at best—and they could soon slip into single digits. Says First Call research director Charles Hill: "Can you say 'free-fall'?"

That leaves managers with two big problems. The first is simply figuring out how to trim costs enough to keep earnings from being totally wrecked, and without damaging long-term marketing or product plans. The second may be even tougher: managing investor expectations so that if earnings do fall, the stock won't be completely decimated. In the current dicey market environment, the surest way to a tumble is to set unrealistic expectations.

IN DENIAL. Of course, to manage a slowdown, you must first see it coming. But many managers simply aren't there yet. In a recent survey of 90 senior executives from among the nation's biggest companies, consultancy Bain & Co. found that 73% of them fear their managers are suffering from a false sense of security. "The economy has been so good that they may not be prepared," says Bain director Darrell K. Rigby.

Those who do see the writing on the wall aren't sitting still. A growing number of companies are flattening or cutting spending on capital projects. New orders for manufactured durable goods fell 5.5% in October, reported the Commerce Dept. on Nov. 28. And still more declines are in Morgan Stanley Dean Witter ex-

pects growth in business fixed investment to slow from 13.1% this year to 7.3% in 2001. "I'm looking for a pretty dramatic deceleration," says Richard B. Berner, the firm's chief U.S. economist.

Cuts in spending for such market-sensitive areas as advertising and marketing are looming. Morgan Stanley analysts expect to see ad spending grow by perhaps just 5% next year, down from a roaring 9% gain in 2000.

And that's forcing media companies to rethink game plans. Take Baltimore-based Sinclair Broadcast Group, which owns 62 local TV stations nationwide. To position itself for a slowdown, Sinclair is trying to beef up its reliance on local advertisers from 50% to 75% of its total business. The reason: National advertisers have so many more options, from network TV spots to the Net. In a slower ad market, "you'd end up having to wait for General Motors, Procter & Gamble, and McDonald's to call," says Sinclair's chief financial officer, Patrick Talamantes. He puts growth for 2000 at 4.8%, down from 7% last year.

Not surprisingly, cyclical companies feel the chill most acutely. Sales declines are hitting car- and truckmakers and their suppliers, including such outfits as Rockwell International, Navistar, and Dana. Already, GM has tightened travel spending and North American auto head Ronald L. Zarrella is calling for some budgets to be cut up to 20%. "With the profit pressure we expect there are some things on the fringe we'll forgo," he says. Others have been cutting their workforces. Dana Corp. Vice-President Gary J. Corrigan notes that Dana's headcount is down some 6,000 workers, about 7%, since the beginning of the year. "We're like the first wave, the infantry, and we're seeing the first hits."

"AIR OF CAUTION." Other industries, too, are getting ready for an economic winter of sorts. At General Mills Inc., executives expect sales of Cheerios and

other staples to rise, as consumers stay home more. But they are still avoiding increasing their capital spending. Rival Kellogg expects to spend 15% less on capital projects in 2001, just some \$225 million, after cutting its capital budget 30% last year compared with 1998. CEO Carlos M. Gutierrez says: "The most important thing and maybe the hardest thing to do is face your reality."

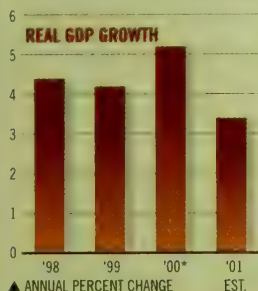
So how to prevent cutting too deeply into muscle? While few will avoid cuts altogether, the trick for managers will be protecting research, marketing, and capital budgets without taking a big hit on profits. That's one reason even companies that don't yet see imminent problems are turning prudent. "We're being very careful," says Mitch Tyson, CEO of PRI Automation, a maker of robotic handling gear for the chip industry. Instead of reviewing budgets quarterly, Tyson now looks them over monthly. Meanwhile, over at Keane Inc., a Boston technology consulting firm, Senior Vice-President John Leahy has told field offices to ready contingency plans in case anticipated growth doesn't materialize. Says Leahy, "we are definitely planning

with an air of caution."

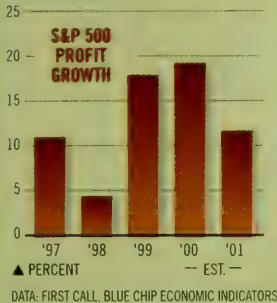
Problem is, if companies rein in spending too sharply, they'll forgo long-term gains—in market share, for instance—to protect margins today. So while Navistar, struggling like much of the rest of the truck business lately, has cut 1,100 jobs, it is still introducing a midsize commercial truck in April. And it will back that up with hefty promotional spending. "We will pick up share," predicts CEO John R. Horne.

For managers whose companies are strong and nimble enough, economic coolness can be a plus. Risk-taking managers can cut deals for ailing competitors far more cheaply. TD Waterhouse Group Inc., the big online brokerage firm looking to move beyond the satu-

AS THE ECONOMY SLOWS...



...PROFITS ARE SHRINKING



DATA: FIRST CALL. BLUE CHIP ECONOMIC INDICATORS

Problem is managing investor expectations

rated U.S. market to find growth, recently announced a joint effort with a Luxembourg firm. "We've got a lot in the hopper," says TD Waterhouse Chief Stephen D. McDonald. Plowing more money into expansions now can be risky, though. Investors have lopped 46% off TD Waterhouse shares since March.

Investor worry or not, managers will soon have to get prepared. And those who move quickly can survive the slowdown and may even gain against weaker rivals. "The people who really consistently build businesses are planning for the worst case at all times," says Kimberly-Clark CEO Wayne R. Sanders.

"They're a little paranoid at all times. As markets begin to look just a little scary, such paranoia might not be a bad idea.

By Joseph Weber in Chicago, with Joann Muller in Detroit, Norm Alstein in Boston, Tom Lowry in New York and bureau reports

REVOLT OF THE BUSINESS CLASS

For business travelers, 2000 may go down as the year the airlines had their way with them. Not only are delays, oversold flights, mishandled bags, and other complaints up across the board, so is the price of that lousy service. In November, the nation's major airlines announced their sixth price increase this year. A typical round-trip domestic coach ticket with a three-day advance purchase now costs \$1,100, according to American Express Co. That's up 13% from last year.

Airlines blame the price hikes on higher fuel and labor costs, but with the overall economy still strong and airline profits robust, many travel experts think the carriers are just being greedy. "The airlines want to know how high they can go before people stop buying tickets," says Steven Shook, a consultant at Carlson Wagonlit, a large corporate-travel agency.

CANNY PLANNING. Armies of executives, of course, aren't likely to stop taking to the skies. There are, in fact, fewer empty seats than ever. Still, companies are getting shrewder about their travel planning. For years, they have been negotiating deals directly with airlines. Now they are forcing employees to fly coach and take connecting flights. They are utilizing low-cost airlines such as Frontier and JetBlue Airways. And many are shifting business to lower-priced online travel services.

All that finagling is paying off. American Express estimates that while the average posted fare may have risen to \$1,100, the actual price paid by business travelers is more like \$624. That is the widest spread between those two prices



LATE AGAIN: Angry fliers are getting creative

that American Express has seen since the company began tracking those numbers five years ago.

Thanks largely to the Internet, corporate travel managers have far more tools at their disposal to work the system than they did even a few years ago. Especially helpful are online corporate-booking services, such as Sabre Holding Corp.'s GetThere and American Express' AXI Travel, that reduce work in corporate travel departments by allowing employees to make reservations themselves. Employees making their own reservations tend to save about 10% per reservation because they are more flexible, says Mark Williams, travel manager for the ac-

counting firm PricewaterhouseCoopers.

Companies are also turning increasingly to negotiated rates. But these have drawbacks. When a work slowdown at United Airlines Inc. caused flight cancellations earlier this year, Chicago-based R. R. Donnelley & Sons Co. had to allow employees to fly on other carriers without discounts. And negotiated rates are no guarantee of a great price. "We negotiate a discount, and the airline raises its overall rates," laments Cindy Heston, a travel manager at Thomson Consumer Electronics Inc.

That has prompted some 58 companies to take the extra step of becoming designated travel agents by Airlines Reporting Corp., an airline-run entity that certifies travel agencies. Brokerage firm Raymond James Financial Inc., for instance, estimates that the move will save it \$200,000 in commissions in its first full year.

Other companies exact their savings through their staff. Managers at tool and appliance maker Black & Decker Corp. fly business class to Europe when they need to be rested for early meetings, but the company encourages them to fly home in coach. Then there's CIBA Vision, the Atlanta-based contact-lens unit of Swiss giant Novartis. It rebates \$1,000 to any employee who agrees to fly coach overseas. CIBA Vision says it expects to save about \$750,000 this year using

this system. A little extra money for employees and a lot less for the airlines. Now, that's satisfying.

By Christopher Palmeri in Los Angeles, with Wendy Zellner in Dallas, Ann Therese Palmeri in Chicago, and Nicole St. Pierre in Washington

UP, UP, AND AWAY
The soaring cost of business air travel

	1998	1999	2000
CHICAGO TO DENVER	\$341	\$620	\$704
CHICAGO TO NEW YORK	\$509	\$514	\$679
NEW YORK TO LOS ANGELES	\$918	\$998	\$1,123

*Three-day advance purchase, economy class fare on Nov. 18

DATA: HARRELL ASSOCIATES FOR AMERICAN EXPRESS



VEHICLE SKID CONTROL* A slick road. A blind curve. And instantly, the Laws of Physics turn on you. But in that same instant, Vehicle Skid Control monitors wheel speed and acceleration. Brakes pulse rapidly. Throttle kicks in. And the curve is behind you. Avalon, with a five-star government crash-test rating.** So much for physics. **TOYOTA AVALON**

*Available on XLS model only. **Claim based on five-star rating in the medium passenger car category for the rear-seat passenger in a side impact, in test conducted by the National Highway Traffic Safety Administration, January 2000. www.toyota.com • 1-800-go-toyota © 2000 Toyota Motor Sales, U.S.A., Inc. Buckle Up! Do it for those who love you.

MERGERS

LET'S TALK TURKEYS

Some mergers were never meant to be. These 10 deals are the oddest of all the recent couplings

When Coca-Cola Chairman Douglas N. Daft sat down with his board on Nov. 21 to push his proposed takeover of Quaker Oats Co., investors widely assumed it was a sure bet. By buying Quaker and its Gatorade unit, Coca-Cola Co. would vault to the lead in the fast-growing sports-drink category. With its global distribution network, Coke also could expand Gatorade beyond the U.S., something Quaker wasn't big enough to do. Plus, the deal would keep Gatorade out of the hands of archrival PepsiCo Inc.

A done deal? Hardly. Despite Daft's sales pitch, the board swatted down the acquisition, concluding that it would cost too much. Moreover, Quaker's pantry of food products would have taken the beverage company too far off course.

Daft may have been a bit miffed at being shot down by his own board. But he probably ought to thank the directors. All too often nowadays, corporate boards seem eager to rubber-stamp deals negotiated by empire-building CEOs. Those CEOs are, in turn, often egged on by a swarm of investment bankers clamoring for their next big score.

So what's to show for the dealmania? Sure, some deals pay off—but far too often, they don't. Take the humiliating failure to date of Daimler-Benz's \$36 billion takeover of Chrysler Corp. And don't forget AT&T's \$90 billion push into cable TV, which the company is now undoing as it breaks into four. Those are only

GOBBLE, GOBBLE, GOBBLE...

As the numbers and size of deals accelerate to new heights, the scope of troubled mergers also is on the rise. Here are 10 of the biggest turkeys to emerge from the recent wave of dealmania.

1996

UNION PACIFIC AND SOUTHERN PACIFIC

The \$4 billion deal was to have created a "seamless" rail network from the Midwest to the West Coast. The reality was complete gridlock.

1997

HFS AND CUC INTERNATIONAL

This \$14 billion deal to create Cendant was intended to build a marketing powerhouse. But accounting irregularities at CUC sent Cendant's share price down 46% in one day and triggered a federal probe.

1998

CONSECO AND GREEN TREE FINANCIAL

With the \$7.6 billion acquisition of lender Green Tree, insurer Consecos foresaw a bonanza. But Green Tree was hit by huge charges on bad loans.

DAIMLER-BENZ AND CHRYSLER

Daimler paid \$36 billion for Chrysler—then the hottest U.S. auto maker. But huge losses, botched product introductions, spiraling costs, and a demoralized U.S. workforce have wiped out \$60 billion in market value.





the two most glaring turkeys hatched in the late '90s merger boom. Other boners must include Mattel Inc.'s purchase of The Learning Co., which ended up costing corporate wonder woman Jill E. Barad her job as chairman and CEO.

Which raises an interesting question: Over the last five years, which were the 10 worst acquisitions of the merger boom? Who made the biggest blunders? BUSINESS WEEK chose 10 duds after grilling more than a dozen investment bankers and business professors. These deals have been among the costliest to shareholders, in terms of lost market capitalization. And many also cost the CEOs who engineered them something they care about even more: their jobs.

But these birds, while the biggest, have plenty of company. Indeed, just one in five deals lives up to its promise, according to research by consultants at KPMG. Others tend to agree. "An acquisition is just like building a house," says Thomas Z. Lys, an accounting professor at Northwestern University's J.L. Kellogg Graduate School of Management. "It costs twice as much and takes twice as long as you planned."

Moreover, as the number and size of takeovers soar, the tally and scale of duds are rising spectacularly. U.S. corporations have logged more than \$1.3 trillion in mergers and acquisitions already this year—nearly matching last year's peak of \$1.4 trillion, but more than four times the level of 1995. And investors are clearly turning their noses up at a what may prove to be a new

crop of stinkers, including America Online's merger with Time Warner and UAL's acquisition of US Airways. AOL shares are off 45% this year; UAL, more than 50%. Critics also worry that General Electric's huge and frenzied \$45 billion deal for Honeywell could be too much for outgoing CEO John F. Welch to digest before he turns the reins over to Jeffrey R. Immelt in 2001.

DRIVING OFF CLIFFS. But if everyone knows the odds are stacked toward failure, that's not exactly slowing the charge. Chalk up many of the deals to the hubris of those at the top. While no more than 20% to 30% of mergers outperform industry peers, management watchers say many CEOs and their directors confidently predict they are smart enough to make their deal pay off. That's human nature, says Ira C. Harris, a management professor at Notre Dame University's Mendoza College of Business. "Deals fail," he says, "but we continue to drive off the cliff."

In some cases, CEOs are simply following high-priced advisers as they dash for the precipice. But investment bankers counter that they and the deals they package get blamed for every post-merger problem. Yet often trouble comes from an outside event like a run-up in oil prices or a shift in consumer tastes that affects everyone in an industry. "There is a lot of carnage in the marketplace that has nothing to do with mergers," says one investment banker.

It's easy to blame mistakes on external events. But the fact is, many deals were simply never well thought

1999

AETNA AND PRUDENTIAL HEALTHCARE

Aetna hoped that the \$1 billion deal would make it the No. 1 HMO.

But Pru and a string of troubled mergers led to the ouster of Aetna's CEO. Now, the company is breaking in two.

ALLIEDSIGNAL AND HONEYWELL

AlliedSignal hoped to combine its efficiency with Honeywell's product innovation. Instead, the \$14 billion combo got hit by rising oil prices, a plunging euro, and management problems.

AT&T Its back-to-back deals for **TCI** and **MEDIAONE**, for a combined \$90 billion, backfired on CEO C. Michael Armstrong. He tried to sell consumers on packaged telecom services, but AT&T's core businesses dried up. Now, with its shares in the tank, AT&T is breaking up again.

FEDERATED DEPARTMENT STORES AND FINGERHUT Federated paid \$1.7 billion to apply Fingerhut's direct-marketing skills to its Macy's and Bloomingdale's units. But Fingerhut's focus on low-end consumers led to huge write-offs.

MATTEL AND LEARNING CO.

Mattel hoped to break into the CD-ROM game market with the \$3.5 billion purchase. But then the Internet caught on, drying up the CD-ROM market. Mattel's stock crashed, and CEO Jill E. Barad was ousted.

McKESSON AND HBO

The \$12 billion merger of No. 1 drug wholesaler McKesson and medical software maker HBO & Co. ran into a buzz saw. Auditors uncovered an accounting scandal at HBO, leading to resignations and criminal charges. McKesson shares are off 47% for the year.

Many duds are 'me-too mergers' that cost way too much

out. And every sector of the economy has its share of blunders, from Federated Department Stores' acquisition of Fingerhut in retailing to McKesson's deal for HBO & Co. in medical services. But the worst clunkers have a couple of common traits: They were friendly stock transactions—which tends to encourage acquirers to overpay, especially in bull markets—that moved companies beyond core businesses or established markets.

PREMIUMS. These friendly deals, especially where the buyer isn't intimately familiar with the new markets it finds itself in, can discourage acquirers from making tough decisions when needed early on. Consider DaimlerChrysler. The \$36 billion "merger of equals" in 1998 wed a by-the-books German company that prided itself on precision engineering with a freewheeling U.S. enterprise best known for salesmanship. Instead of hoped-for synergies and cost savings by melding the best of both, Daimler has now lost or pushed out virtually all its key U.S. man-

agers as Chrysler slumped from the most-profitable carmaker in the U.S. to its biggest money loser. Shrinking sales have caused losses that are expected to hit \$1 billion or more in the second half of 2000.

Then there are those who don't know when to stop. Acquirers typically pay a 30% premium. But as companies keep buying—often, as an industry consolidates—those still in the game have to pay even more. Just as bad, they must settle for a company or business subsidiary from an already-picked-over pool of candidates.

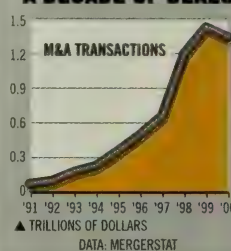
In the midst of a health-care consolidation wave, Aetna Inc. bought its way to the top of the managed-care industry. With each deal, Aetna paid more per customer, culminating with its \$1 billion purchase of troubled Prudential Health-

care in 1999. Since then, Aetna has lost 1.6 million subscribers and is cutting jobs as Prudential bleeds red ink. After ousting deal architect Richard L. Huber as CEO, Aetna has agreed to breathe

up the company.

Do such experiences discourage others? Rarely, says Mark L. Sirower, visiting professor at New York University's Leonard N. Stern School of Business who runs the M&A consulting Group: "Nobody wants you to write a story two years from now that says the world has

A DECADE OF DEALS



changed and Charlie just sat there."

In their merger frenzy, even the shrewdest dealmakers often fail to uncover problems at the company they targeted. That's what happened to E. Chairman and CEO Henry Silverman when he merged his grab-bag of franchised businesses with direct market CUC International to form Cendant. Only after the 1997 merger was completed did Silverman's team uncover massive accounting irregularities at CUC, which tanked Cendant shares and cost it \$2.85 billion to settle a stockholder lawsuit.

TIME TELLS. Bum deals are, of course, as old as commerce. The '80s had share of bombs. Remember Mobil's snafu at diversification with its deal for Montgomery Ward? Nor are failed mergers unique to the U.S. Japanese companies are notorious for making ill-timed, overpriced bids for U.S. companies, such as Sony's \$3.4 billion deal in 1989 for Columbia Studios.

Then there are the widely judged failures that, with time, may actually prove successful. Take 3Com Corp.'s \$7.3 billion buy of modem maker U.S. Robotics. Even before the 1997 deal closed, U.S. Robotics started losing money. Another boneheaded takeover, right? No longer. By buying U.S. Robotics, 3Com lucked into a pocket-organizer that was just hitting the market. It was called the Palm Pilot. In July, 3Com spun off Palm and more than doubled the value of the stock by its investors. So who knows? Maybe in a few years, Daimler's Jürgen Schrempp will be hailed for his masterful takeover of Chrysler.

By Michael Arndt in Chicago, Emily Thornton in New York, David Foust in Atlanta, and bureau reporters

EIGHT BILLION REASONS TO GET EVEN WITH SCHREMPF



KERKORIAN

After DaimlerChrysler's ad hoc shareholders' committee learned in mid-November that Chrysler Group Chief Executive James Holden would be fired, they found out they were getting

axed, too. The demise of the forum for U.S. and German investors not only severed billionaire Kirk Kerkorian's last official link to the former Chrysler Corp.—it was also the final straw. On Nov. 27, the feisty investor filed an \$8 billion lawsuit alleging that DaimlerChrysler and its CEO, Jürgen E. Schrempp, committed fraud by claiming the deal with Chrysler was a "merger of equals."

CLASS ACTIONS. What does Kerkorian—DaimlerChrysler's largest U.S. shareholder, with 4%, or 33 million shares—want? Certainly not another another committee position. He doesn't even want to see a judge re-

store the former Chrysler Corp. to its original investors—although that's what the lawsuit asks.

Kerkorian's real aim? According to his Los Angeles lawyer, Terry N. Christensen, Kerkorian wants to be compensated for what he has lost from the 1998 deal. Daimler's shares have slid from a high of \$108 each after the merger to \$39 this week.

Kerkorian isn't the only angry investor. Four other class actions have been filed in the U.S., and there is one shareholder suit in Germany. Seth M. Glickenhau, a partner in Glickenhau & Co., says that his New York money management firm also plans to sue.

Kerkorian's suit has little chance of succeeding, but he's too tenacious to ignore, says Columbia Law School professor Jeff Gordon. "Kerkorian has proved to be a pretty effective stirrer of waters," he says. Schrempp is likely feeling the waves on both sides of the Atlantic.

By Jeff Green, with Joann Muller, in Detroit and Ronald Grover in Los Angeles

By Christine Tierney

DAIMLER'S BOARD: NOT EXACTLY CRISIS MANAGERS

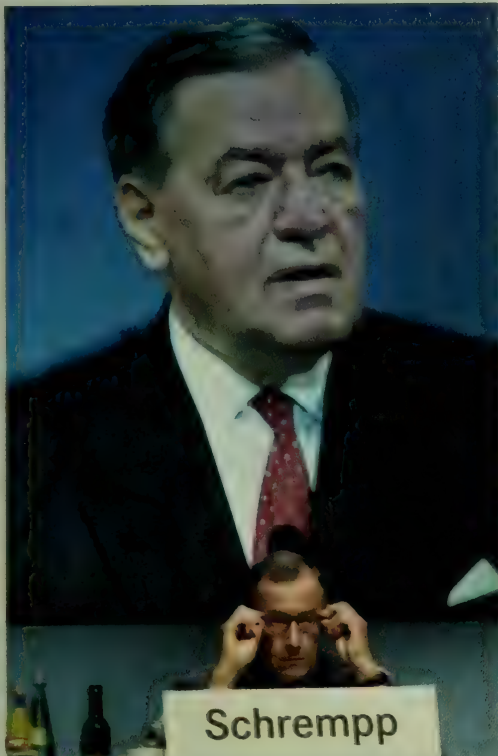
The merger of auto giants Daimler Benz and Chrysler Corp. has wiped 60% off the combined companies' New York-traded shares since the stock's January, 1999, peak. The irony is that this disaster has been presided over by Daimler boss Jürgen Schrempp, Germany's prophet of shareholder value.

It's no surprise, then, that investors are now scrutinizing Schrempp's every move, and that veteran raider and troublemaker Kirk Kerkorian is even suing. Yet one set of players in his drama has managed to escape attention—the company's 10-member supervisory board, a group of directors who oversee Schrempp and the company's management board.

Investors should start scrutinizing the board. It's supposed to represent the interests of workers and shareholders: It even eased out Schrempp's predecessor, Edzard Reuter, for serious strategic fumbles. But at the moment, this is Schrempp's board all the way. And it seems largely to be a one-man show in by Hilmar Kopper, also the supervisory board head for Deutsche Bank, which holds 12% of DaimlerChrysler. As Schrempp's mentor, Kopper is key to the Daimler boss's job security.

COMMENT. With the exception of Kopper, few on the board seem to be in a position to challenge Schrempp. Half the Daimler board, as required by German law, is made up of representatives of Daimler's unions, including United Auto Workers President Stephen P. Yokich, and Daimler's executive staff. Most of these union reps have little vested interest in signing off on massive layoffs or cost cuts.

More disturbing is the caliber of the American board members. One Robert E. Allen, the ex-chairman of AT&T, an executive who left his job under pressure after years of falling



TIGHT: Is Kopper too close to Schrempp?

stock prices and strategic drift at the phone giant. A director in the same boat is G. Richard Thoman, the ousted boss of Xerox Corp. Neither executive has a great record of avoiding nasty surprises for shareholders. All board members refused to comment.

Overall, this does not look like a promising bunch to oversee a huge crisis. U.S. corporate governance analysts figure that if anyone on the board wanted to boost shareholder value, they would face an uphill battle against Daimler and its longtime industrial partners. John M. Nash, vice-chairman of the Center for Board Leadership in Washington, D.C., wouldn't be surprised to see all the Americans off the board in the next year or two as the Germans consolidate control.

The biggest question of all hangs

over the roles of Deutsche Bank and Kopper, who represents the bank's interests and chairs the DaimlerChrysler supervisory board. This pillar of Germany Inc. is also named in Kerkorian's suit.

INCENTIVE. Kopper drives the board's actions. It was Kopper who ousted Reuter, installed Schrempp as Daimler's boss, and wholeheartedly backed Schrempp's plan to acquire Chrysler. Kopper signed off again on Schrempp's decision to invest in Mitsubishi Motors Corp. and South Korea's Hyundai Motor Co. "Nothing was done by Schrempp without Kopper's approval," says Christian Strenger, a retired Deutsche Bank executive who sits on the supervisory board of DWS Investment, Germany's biggest fund. Schrempp's strategy, in essence, is Kopper's, too.

Now, some investors wonder if Kopper isn't too identified with Schrempp's gambles to demand the utmost from Schrempp—and even fire him, if need be. "He's too closely bound up with Schrempp," says a

source close to both.

Perhaps Kopper is doing more than is obvious to rein Schrempp in: He has an incentive to revive the share price, since Deutsche Bank may want to sell a chunk of its shares in two years, after Germany repeals some high capital-gains taxes.

But in this extraordinary situation, the board should openly signal that it will demand tough steps—including dismembering the company—if Schrempp doesn't turn the situation around. And if he won't accept high-powered U.S. board members, at the least he should pack his board with some of Europe's toughest corporate bosses, such as Vodafone Group PLC's Chris Gent, who engineered a hostile takeover of Germany's Mannesmann last year. Schrempp needs the help and the pressure from real shareholder advocates. Otherwise, investors may just assume a supine board is ignoring their interests—and walk away from the company and its languishing stock.

With Jeff Green in Detroit

WEAK DIRECTORS Two left ailing U.S. companies; labor reps are cozy with managers

TELECOMS

AT&T TRIES DOWNLOADING DoCoMo's MAGIC

A deal brings cash and wizardry to AT&T Wireless

A year ago, AT&T Wireless Group was the last company you'd turn to if you wanted to browse the Web or read e-mail from your phone. Sprint PCS Group was the U.S. leader in such services, known as wireless data. Blessed with an abundance of radio spectrum and just the right data-friendly technology, Sprint was the first to concoct attractive Web services on a cell phone. And its alliance with wireless pioneer Qualcomm Inc. gave Sprint an inside lane in the race for "3G," or third-generation phones that will one day pluck music and movies from the Internet.

AT&T Wireless, in contrast, has been stuck in the slow lane—but that may be about to change. On Nov. 30, the company said it would trade 16% of its shares for nearly \$10 billion from Japan's NTT DoCoMo Inc. In its home market, DoCoMo runs the world's most successful wireless data network—a "mobile portal" with 15 million subscribers accessing 15,000 web sites. DoCoMo will share its expertise with AT&T Wireless and help its U.S. partner arm itself for the coming battle over 3G.

For AT&T Wireless, the news couldn't come at a better time. Since the company was spun out of AT&T as a tracking stock last April, its shares have sunk from \$32 to about \$18. The unit has been strapped for cash and swamped with challenges. To compete with Sprint PCS in data services, for example, AT&T Wireless will have to acquire additional radio frequency at public auctions, beginning as early as December. Lehman Brothers Inc. analysts say that all operators combined could spend \$16 billion at the auctions.

Although AT&T raised a total of \$10.6 billion in the April spin-off, Lehman Brothers estimates that the wireless unit currently has access to only about \$3 billion of that. And it must spend \$2.3 billion in the fourth quarter to fund the current business plan—so DoCoMo's cash is sorely

needed. In contrast, Sprint PCS is sitting pretty: It doesn't need extra bandwidth and can raise the cash it needs for operations. VoiceStream Wireless Corp., for its part, has about \$5 billion in cash from Deutsche Telekom, which paid \$45 billion to buy the Seattle-based company last August. Verizon Communications will likely raise money through a wireless initial public offering, and Cingular Wireless can lean on its well-heeled parents, BellSouth Corp. and SBC Communications.

HIGHER VELOCITY. With DoCoMo in its camp, the picture will brighten substantially for AT&T Wireless. The company will have access to about two-thirds of the cash coming from Japan, while its parent absorbs the rest. That, plus technical and strategic advice from DoCoMo, could give AT&T a running start in 3G services. The DoCoMo relationship "makes it certain that AT&T will deploy 3G earlier" than it would on its own, says Andrew Cole, head of the global wireless practice at Adventis Corp., a technology consulting firm in Boston. As a first step, AT&T Wireless will set up a wholly owned subsidiary, with DoCoMo staff, to create a mobile portal that gives cellular users easy access to the Web.

This is still a far cry from any 3G Utopia. While DoCoMo will kick off 3G services next May in Japan, the U.S. won't catch up until mid-decade. That's how long it will take U.S. operators to equip their networks with powerful new base stations and to acquire spiffy new handsets. And there could be glitches on the way. Unlike in Europe and



One advantage of DoCoMo's technology is that it's a growing international standard

parts of Japan, where operators are leaning toward a single 3G standard known as W-CDMA, American service providers are divided into two competing camps. AT&T Wireless, VoiceStream and Cingular will likely hew to the same standard as Europe. But Sprint PCS and Verizon are committed to a rival approach called CDMA2000, which was developed by Qualcomm and may offer certain technical advantages.

When 3G finally arrives, however, AT&T Wireless should be well-served by its choice of W-CDMA. Its subscribers will be able to carry a single cell phone around the planet, according to Lev M. Chakrin, senior vice-president for corporate strategy. They'll also have a huge choice of handsets, developed by a galaxy of companies on at least three continents. And they'll have early access to nifty commerce and entertainment services, which are incubating today in Japan's sophisticated consumer market. "We're excited because we get on the worldwide standard," says Chakrin. In short, for AT&T, the DoCoMo money trade couldn't have rolled up at a better time.

By Roger O. Crockett in Chicago
with Irene M. Kunii in Tokyo

NEW MOMENTUM FOR AT&T WIRELESS

Here's what AT&T Wireless gets from NTT DoCoMo

CASH to invest in equipment and upcoming spectrum auctions

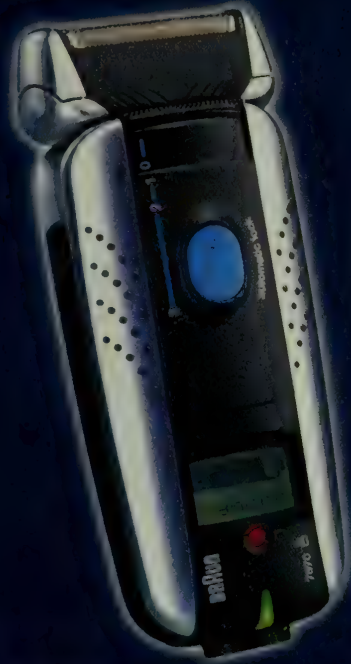
EXPERTISE in running wireless data networks

A POWERFUL ally in third-generation technology known as W-CDMA

Braun

www.braun.com

designed to make a difference



close shave.



self-cleaning shaver.

New Syncro System from Braun is a completely new way to shave. It features a unique 4-way moving head that not only pivots to follow the contours of your face, it gently rotates from side to side, capturing more hair in fewer strokes. This gives you a long-lasting, close shave with less irritation. But that's only half the story of the new Syncro. When you're done, just place the shaver in the

Clean&Charge unit and it automatically cleans it, dries it and recharges the battery. The foil and shaving head are cleaned thoroughly with a special hygienic cleaning solution, so there's no messing with little brushes or running it under the tap. In fact, the Braun Syncro System leaves everything so clean, it's like getting a new shaver every day.

Braun Syncro System

© 2003 Braun

TECHNOLOGY

OUT OF THE FRYING PAN AND INTO... THE FRYING PAN

PC makers build up another cramped market: Servers

From the way they talk, you'd think troubles in the personal computer market were no big deal for PC makers. Forget talk that their inventories are piling up or that 2000 growth for the industry is expected to be just 9.4%, vs. 24% in 1999.

Computer makers have long claimed to have a secret weapon: the burgeoning server market. With hefty 20%-plus margins, vs. 10% or less for a desktop PC, servers have provided lots of revenue growth and a big chunk of profits for such top makers as Compaq Computer Corp. and Dell Computer Corp. Thanks to the billions being invested in Internet infrastructure, crow's Bill Zeitler, IBM's server chief, "this is the greatest business opportunity that's going to come along in the next 20 years."

Despite such optimism, the server market may not bring salvation to PC makers. Most have targeted the market for low- to midlevel PC servers, which can do everything from managing a slice of a company's sales to running its e-mail system. But the push of PC makers into the business—along with competition from a host of newcomers attacking the same markets—have made for a much tougher battle. That's one reason investors remain largely unconvinced that servers will end the PC makers' problems.

DEDICATED MACHINES. Indeed, the biggest threat to their plans may come from the booming demand for "server appliances." These machines can do one Net-based task more reliably and cheaply than general purpose PC servers. Customers seem to prefer these products, in part, because they are designed with special software that eases the hassle of having to manage over the Net. While International Data Corp. expects annual PC server sales to grow from \$8.1 billion in 1998 to \$13 billion in 2002, IDC analyst Mark Melanovsky thinks such server appliances will zoom from \$1.2



ASSEMBLING DELL SERVERS: Growth is starting to slow

billion in 1999 to \$12.4 billion in 2002.

If he's right, it'll be déjà vu. PC makers may find themselves squeezed into a plain vanilla commodity market with little choice but to slash prices to win share—the same formula that squeezed the profits out of desktops. That already seems to be happening: Industry observers say some low-end servers from PC makers now sell for \$2,000, about half the price of a year ago.

To be sure, the server war hasn't claimed big victims yet. The server

Startups with radical business plans are stealing accounts

units of Compaq and IBM have surged 40% each in the past six months. They've catered to the strong market for servers linked to the Net. That market is sizzling largely due to new encyclopedia-size servers that can be stacked efficiently in Web hosting centers.

NEW FOCUS. Others in the PC Old Guard aren't faring so well. Dell, which soared to greatness by applying mass-market efficiencies to the desktop market, is showing signs of hitting the wall in the more complicated server business. By concentrating on the market for cheapservers that do the least complex jobs, Dell boosted its market share from 12% in mid 1998 to 16% this summer.

Still, Dell's growth is slowing dramatically. Analyst Kevin McCarthy of Donaldson, Lufkin & Jenrette Inc. notes that sales of servers and server-related products for data storage have slowed from a 93% gain in the third quarter of 1998 to just 36% in its most recent quarter.

Dell's problem? It relies on the same approach it used for PCs: combining software from Microsoft Corp. with Intel Corp. chips onto a standard hardware design, letting the customer customize and maintain the gear. That's not good enough for many companies, who find such systems crash-prone. Others are rushing in to fill the void. With the flood of e-mail and other Net traffic on the rise, Sun Microsystems (Calif.)-based Network Appliance Inc. has developed servers loaded with special software to ease data management. Servers from Compaq Networks Inc. in nearby Mountain View have simplified Web-hosting.

PC's Old Guard is even losing important accounts to PC startups with radical business plans. Guess who provides the servers for Yahoo!, Google, and E-mail? It's tiny San Jose-based Rack Systems. It has created software that links a series of standard desktop PCs that if one of those machines fails, its duties are picked up by a neighboring machine. "It's the wave of the future," insists Google Chief Information Officer Jim Moore.

Considering the industry's continued mutation, that is hardly a given. But this much is: Unless makers learn from their mistakes in PCs, they are likely to repeat them in servers.

By Peter Burrows in San Francisco



To your network,

they should look the same.

When your business is truly global, your network should be truly seamless. Communications should flow effortlessly and securely all around the globe, regardless of where you are. Global One users receive this kind of superior service worldwide, because we manage our global network from one end of the earth to the other. And we provide innovative and leading edge products and services. So no matter where you're doing business, we can help you make your world one. For more information, call 1-877-460-4141 or visit www.globalone.net.

Global One. Your world. Our shoulders.



A Member of the France Telecom Group

COMMENTARY

By Paul Raeburn

IT'S PERFECT WEATHER TO FIGHT GLOBAL WARMING

The failure of United Nations global warming talks on Nov. 25 comes as the U.S. faces serious energy problems at home. The country remains perilously dependent on foreign oil. Prices of oil and gasoline are sky-high. And the nation's aging power grid is crumbling under the strain of rising demand.

Couple this with an expected slowdown in the U.S. economy, and it might seem that the impasse at The Hague summit was a relief. The U.S. won't face new limits on its use of coal or oil. Nor will it be faced with a big bill for pollution controls.

Nice as that sounds, it's a shortsighted view. Unilateral efforts to limit emissions of the so-called greenhouse gases that cause global warming could quickly aid the U.S. economy, by encouraging a more efficient energy system. Indeed, during the global-warming talks the U.S. Energy Dept. released a report that concluded the nation can "significantly reduce inefficiencies, oil dependence, air pollution, and greenhouse gas emissions at essentially no net cost to the U.S. economy." The benefits extend to individual businesses, too. Investments in energy efficiency would be rapidly repaid by lower fuel costs.

DRAMATIC CUTS. There are plenty of longer-term benefits, too. If the adoption of energy-efficiency technologies and research were pursued aggressively, the U.S. could cut its predicted energy consumption in 2020 by 20%, the report concluded. That would cut the nation's energy bill by \$124 billion. Carbon dioxide emissions would fall by one-third.

Certainly, there will be some pain. Aggressive strategies to boost the nation's energy efficiency could lead to a 50% drop in coal production by 2020. But it is expected that job losses in coal and in railroads—which transport coal—could be offset by job gains in alternative energy and energy-efficiency businesses.

Of course, such arguments haven't won over all critics—particularly

those with something to lose. Many in the utility industry continue to argue that tough limits on emissions would take a sharp toll on the U.S. economy. Just look, they say, at an earlier round of talks that led to the Kyoto Protocol. The protocol says the U.S.



The problem with the U.S. proposal, and the arguments of critics such as the utility industry, is that they ignore the larger cost of not reducing emissions. The recent Energy Dept. study highlights new and existing technologies, along with government incentives, that are hardly onerous. Some of the quickest savings come in heating, cooling, and lighting buildings. They can be as simple as replacing incandescent lights with fluorescent lights; they can be cost-effective now. But even bigger efficiencies will come from metal halide lamps under development. Water heaters are another important source of energy savings in commercial and residential buildings, the report says. If these things were more widely used, the study estimates that by 2020, energy use for buildings could be roughly equal to what it was in 1997—and carbon dioxide emis-

Even in the short run, adhering to emissions guidelines aids the U.S. economy by easing its many other energy woes

must reduce its greenhouse gas emissions to 7% below its 1990 levels by the period 2008-12. The Edison Electric Institute, an association of shareholder-owned utilities, says that may cost utilities \$30 billion by 2010 and the U.S. economy "\$100 billion to \$200 billion or more in 2010."

That attitude was shared in part by the U.S. delegation to the talks at The Hague. U.S. delegates asked for substantial credit for the ability of U.S. forests to absorb carbon dioxide and for building clean power plants elsewhere in the world. They offered only minimal cuts in U.S. carbon dioxide emissions. Western Europe, short on forests and facing sharper emissions cuts, objected. European environmentalists were outraged.

sions would be below 1990 levels.

The problems of global warming aren't going away. The talks, which will probably resume next May, are yet another opportunity to address these problems. There is growing scientific acceptance of the evidence that over the long term, global warming could have a devastating effect. The likely—and costly—plague of disasters will include coastal flooding, widespread disruption of agriculture, increases in the spread of tropical diseases, and sharp changes in global weather patterns. The prudent course is to take action now; the bill later will just be higher.

Senior Writer Raeburn covers science and the environment.



Alcatel is here.

And here.

And here.

Providing just what you're looking for
in optical solutions. Everything.

Experience what's next in optical networking. Alcatel, the world leader in optical networking and cross connect systems, has created the Cross Light photonic cross connect, cornerstone of the Optinex™ family of end-to-end optical networking solutions. Cross Light's capacity increases as the need for bandwidth grows, enabling service providers to build highly intelligent, all-optical networks at reduced cost. For anyone looking to evolve their network, attract and retain customers, Alcatel's Optinex™ solutions will make you feel like a kid in a candy store.

Alcatel, world leader in optical networking.



ARCHITECTS OF AN INTERNET WORLD

Certified Diamonds Below Wholesale



Guaranteed!

Laboratory Graded
and Certified

◆
\$35 Million Inventory

◆
Plus...FREE
14K Gold Mounting!

sapeck.com



S.A. Peck & Co.

Diamond Importers and
Fine Jewelry Manufacturers
Since 1921

55 E. Washington St.
5th Floor
Chicago, IL 60602

1.800.922.0090
312.977.0300

News: Analysis & Commentary

EXECUTIVE SUITE

A FAMOUS BRAND ON A ROCKY ROAD

Would Ben & Jerry's sales
soften without Ben and Jerry?



It was a short honeymoon. Just seven months after Anglo-Dutch conglomerate Unilever PLC bought Ben & Jerry's Homemade Inc. of Vermont for \$326 million, the ice cream company's

two ex-hippie founders are threatening to quit. On Nov. 20, Unilever named Frenchman Yves Couette, the former head of the company's Mexican ice cream business, as Ben & Jerry's next CEO. Later that day, Ben Cohen and Jerry Greenfield issued a statement saying they support someone else, though they didn't say whom. Sources say it's longtime Ben & Jerry's director Pierre Ferreri. "We have not decided whether or not to remain with the company," the pair said in the statement.

Can Ben & Jerry's thrive without Ben and Jerry? Couette isn't talking and neither are Cohen and Greenfield. There's no doubt the founders' departure would be a blow to legions of devotees who like the company's practice of contributing 7.5% of its profits to social causes. But truth be told, Unilever doesn't need Cohen or Greenfield, marketing experts say. The Ben & Jerry's brand has had sluggish growth for years, and any loyalty inspired by Cohen and Greenfield is now less important than Unilever's marketing and distribution muscle. "As long as Unilever doesn't mess with the [ice cream] quality, it will continue to flourish," predicts Michael Wahl, chairman of supermarket marketing consultant HMG Worldwide Corp.

Even so, a noisy exit by Cohen and Greenfield, who have renewable one-year contracts, would

complicate Unilever's plans. The \$40 billion company owns Breyers, Good Humor, and Klondike ice cream in the U.S. plus other top brands in Europe and Asia. Ben & Jerry's CEO Perry D. Odak, who steps down in January, says Unilever is gearing up to move Ben & Jerry's through its worldwide distribution network. "Ben & Jerry's can be a \$1 billion brand for Unilever in three years if everything goes right," Odak says.

FACTORING IN. That would require quadrupling of this year's sales of about \$248 million. In the past two years, two new competitors have challenged Ben & Jerry's U.S. business—Dreyer's Grand Ice Cream Inc.'s Dreamery brand and Campbell Soup Co.'s Godiva ice cream. Through Nov. 5, Ben & Jerry's supermarket dollar sales are down 3.5% this year, according to Information Resources Inc. But Odak thinks Unilever can achieve its target with or without the founders. "This company is not dependent on one or two individuals," he says.

Still, some marketing experts say valuable brand equity would disappear if Cohen and Greenfield were to go. It would be similar, for example, to Pat Newman disassociating himself from Newman's Own brand. "If Newman publicly walked away and that led to doubts about the product in the minds of consumers, there is the potential for that to be destructive," says Gary Stibel, founder of marketing management consultant New England Consulting Group. "That's not the kind of risk Unilever should take," he says.

The ball clearly is in Unilever's court. Unilever spokesman Stephen Milton says his company is eager to see Ben & Jerry's founders stay and that the sooner they work things out, the better. Not that Vermont's most famous entrepreneurs could soon be unemployed.

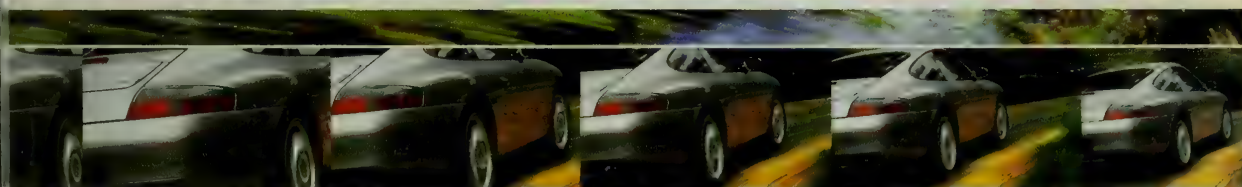
By Geoffrey Smith in Boston

**DOWN WITH
UNILEVER**



**COHEN AND
GREENFIELD**

THE EPITOME OF PERFORMANCE.



ANNOUNCING HIGH-PERFORMANCE PROGRAM
MANAGEMENT SOFTWARE.

Give us one hour. We'll show you how ActiveProject®, our high-performance Web-based program management software, enables world-class companies to communicate with external partners at extraordinary speed—faster than any traditional method. And we'll demonstrate how it helps you deliver your products to market faster. In return for your time, we'll give you an extraordinary chance to win a high-performance Porsche® 911™ Carrera® worth \$82,290 (MSRP). Visit www.frametech.com/AB or call 1.311.9138 to schedule your private product presentation. You must complete your live demo before January 31, 2001 to enter the sweepstakes. Drawing will be held February 15, 2001. Contact us now—your commute may never be the same again!

ActiveProject



AMEWORK
TECHNOLOGIES

PROJECTS VIRTUALLY ANYWHERE™

Sweepstakes available only to program managers and above in selected manufacturing companies. You must complete a live presentation/demo by January 31, 2001 to qualify. No purchase necessary. Void in Florida. View complete rules at www.frametech.com/rules. PORSCHE and CARRERA are registered trademarks. 911 is a trademark, and the distinctive shapes of PORSCHE automobiles are trade dress of Dr. Ing. h.c. F. Porsche AG. Used with permission of Porsche Cars North America, Inc. Porsche Cars North America, Inc. and Dr. Ing. h.c. F. Porsche AG are not affiliated or associated with this contest in any way.

©2000 Frametech Technologies Corporation. All rights reserved.

AB

EDITED BY MONICA ROMAN

CITIGROUP FUMBLES AGAIN

A YEAR AFTER CITIGROUP promised Congress that it had corrected procedural lapses that allowed alleged money launderers to move millions through Citibank private bank accounts, along comes another black eye. A General Accounting Office report released on Nov. 29 says that Citibank branches opened accounts for 236 Delaware companies formed by a Russian agent without knowing the nature of the businesses or who was behind each one.

Over the past nine years, some \$1.4 billion flowed into accounts at Citi and the Commercial Bank of San Francisco. Most of that eventually

was transferred to offshore banks. In a Nov. 28 letter to the GAO, Citigroup said that the questionable accounts have been closed and new safeguards installed. The GAO referred its findings to the Justice Dept.

QUICK DRUG REVIEW, QUICK RECALL

UNDER PRESSURE FROM THE Food & Drug Administration, Glaxo Wellcome withdrew Lotronex from the market on Nov. 28. The drug was the first to directly tackle irritable bowel syndrome, suffered by 15% of Americans, but it has been linked to colitis and ruptured bowels. The FDA took action after learning of 70 injury cases, including five deaths. Glaxo insists that Lotronex is safe, but FDA critics say the case is proof that the agency is approving drugs too quickly. The FDA gave Lotronex a speedy review, approving it for use by women in February.

WHERE VENTURE MONEY IS FLOWING

THE SHAKEOUT IN TECH stocks isn't keeping investors from betting on venture capital funds—but established VC players are getting the lion's share of the capital. The National Venture Capital Assn. reported on Nov. 27 that venture funds raised \$28 billion during the third quarter to invest in new companies, up 16% from the second quarter and 153% from a year earlier. But 93% of the new money went to established venture firms, compared with only 78% last year.

QANTAS JOINS AIRBUS' FLOCK

EUROPEAN AEROSPACE consortium Airbus Industrie has scored a crucial win against

HEADLINER: DAVID DORMAN

INTO THE BREACH AT AT&T

David Dorman, a veteran telecom executive, is no stranger to tough assignments. But his Nov. 28

appointment as president of AT&T's beleaguered business-services and network unit may be Dorman's most challenging yet. His job: to reverse the systemic decline in business long-distance revenue while trying to sell companies more Internet and e-commerce services. And he'll try to do this amid the turmoil of AT&T Chairman and CEO C. Michael Armstrong splitting the company into four stand-alone businesses:

wireless, cable TV, consumer long distance, and business services.

Luckily, Dorman, 46, is familiar with AT&T, having recently served as chief executive of its international joint venture with British Telecommunications called Concert Communications. "Dorman won't upset the applecart," says Gary Jacobi, a telecom analyst at Deutsche Banc Alex. Brown. While daunting, the job could pay off handsomely: Success could put Dorman in line to become Armstrong's heir apparent.

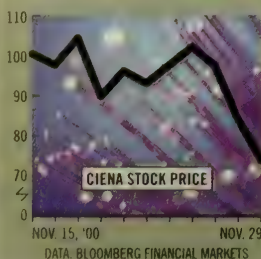
Charles Haddad



CLOSING BELL

BURNT CIENA

In another sign of a slowdown in the telecommunications sector, Ciena took a bath on the three days ended Nov. 29. The Linthicum (Md.) telecom-equipment maker plunged 28%, to 73 a share, on fears of slowing sales. Investors expect key Ciena customer Sprint to choose French telecom-equipment maker Alcatel as a second source for equipment that enhances fiber-optic capacity. And they anticipate increasing price competition in Ciena's products.



U.S. rival Boeing. On Nov. 28, flagship Australian carrier Qantas Airways—until now a 100% Boeing shop—said it will spend \$4.6 billion on 31 Airbus jets, including a dozen new A-3XX superjumbos. When the A-3XXs are delivered in 2006, they will seat up to 600 passengers. Boeing didn't walk away empty-handed, though. Qantas also ordered six new "stretch" Boeing 747s, prompting the Seattle company to officially launch the 500-seat aircraft for 2002 delivery.

MORE HOME BUYERS STAY HOME

IN YET ANOTHER SIGN OF slowing in the once-blazing economy, existing home sales declined for the second month in a row in October. Despite lower mortgage costs, potential home buyers are reacting to flatter income growth, falling stock prices, and wilt-

ing consumer confidence. Home sales dropped 3.9% a softer-than-expected 4.3 million annual rate, the lowest since July. Still, economists aren't panicking—least not yet. That's because sales are hovering near the 5 million-unit level, considered the benchmark of an extremely strong market. J.P. Naroff of Naroff Economic Advisors predicts 2000 is likely to finish up as the best year after 1999, when existing home sales hit a seasonally adjusted annual rate of 5.2 million units.

ET CETERA...

- Gateway expects fourth quarter profits to be significantly lower than estimates
- Forest-products giant Weyerhaeuser launched a hostile bid for Willamette Industries
- Broadcom agreed to buy Israeli video chipmaker VisionTech for \$677 million.



REDLEAF

Where innovation lives.



That's the thing about extraordinary ideas.

They rarely turn up in ordinary places.

By comparing innovative ideas from all over the globe, we can
differentiate prodigy startups from tepid knock-offs.

It's comparative selection, and it's like no seed stage strategy on earth.

www.redleaf.com



Every day, 60,000 people use
their mobile phones to shop.
Mobile commerce is heating up.

stay cool

Mobile security from Ericsson. Worry-free mobile transactions.

So are concerns about security.
That's why Ericsson has developed
a secure online payment
and transaction package for the
new Mobile Internet. Offering
security for network operators,
and total peace of mind for their
customers. How cool is that?

www.ericsson.com

The Mobile Internet Revolution.
It's an everyday thing.

ERICSSON 

EDITED BY PAULA DWYER

FIRST A BRIEF LULL, THEN HURRICANE HILLARY

Once Hillary Rodham Clinton is sworn in as the junior Senator from New York on Jan. 3, friends insist she will take her rightful place—at the bottom of the pecking order. The First Lady will play the role of loyal party trooper as she quietly earns her legislative stripes.

Don't believe it. This is Hillary. Even as a freshman, she has unique advantages, including longtime friends in the Senate and a powerful fund-raising apparatus that could be a major asset to the Dems' bid to win just one more seat in 2002—and take control of the Senate. She was important because of whom she slept with. Now she's important in and of herself," says Georgetown professor Stephen J. Wayne.

Hillary arrives on Capitol Hill representing only 18 million New Yorkers but also a national constituency that admires her position on social issues—not to mention her pizzazz. And allies will expect her to take their causes. Clinton may play the coy freshman Senator for six months or so, but for that, watch out for Hurricane Hillary.

Senator Clinton's first order of business will be to press for a package of economic development initiatives for upstate New York, which earned her a surprising 47% of the vote. Such a move will reward voters and send a pro-business signal. From there, close aides say, she expects to use a seat on the Senate Health, Education, Labor & Pensions Committee to push her social agenda. Among the top issues the panel is expected to take up next year: access to health care for some 40 million uninsured and a \$43 billion school spending bill designed to decrease class size and improve school technology. Aides say she also might accept a ranking committee slot. With fellow New York Senator Charles E. Schumer possibly moving to the tax-writing Finance Committee, the two are expected to work hand-in-glove

promoting the interests of New York's money-center banks.

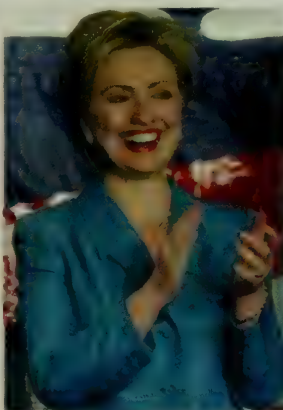
While Clinton's agenda isn't well-defined, expect her to chart a middle-of-the-road course. True, she will work closely with leading Democratic liberals, such as California's Barbara Boxer on Social Security reform and Minnesota's Paul D. Wellstone on child-care tax credits. But she'll also reach out to moderate New Democrats, the party's center of gravity in the Senate—working with them, for example, to push for paying down the national debt. "She never has been as woolly liberal as people have made her out to be," says former White House spokesman Mike McCurry.

FAST RESULTS. Indeed, Hillary could see quick progress on some issues without much heavy lifting. A patients' bill of rights, education reform, and a prescription-drug benefit for seniors were the focus of numerous House and Senate campaigns and have gained currency with the public. With Dems now holding half the seats in the Senate—or almost half if Al Gore and Joe Lieberman ultimately win the White House—the vote count is also leaning Hillary's way. Says her campaign manager, Bill de Blasio: "It is a very good time, in terms of public sentiment, to get something done."

True, Hillary's first year in office won't be a cakewalk. She holds a powerful megaphone but will need to use it sparingly so as not to stir jealousy among fellow Dems. And conservatives could try to trip up any bill bearing her name. Majority Leader Trent Lott (R-Miss.) already has signaled as much. "She's only one of 100, and I intend to remind her of that every day," he says.

Such displays of partisanship chagrin even some GOP senators, who say it would be foolish to play political hardball with Hillary. After all, when it comes to running circles around pesky Republicans, she can get advice from the master by just phoning a Senate spouse named Bill.

By Lorraine Woellert



FRESHMAN: But no novice

CAPITAL WRAPUP

LINKING ON OXLEY

Representative Michael G. Oxley (R-Ohio) appears to have lost out to Billy Tauzin (R-La.) for the chairmanship of the House Commerce Committee, but may snare a consolation prize: the House Banking Committee. By seniority, the chairmanship should go to George Roukema (R-N.J.), a 20-year veteran of the panel. But she is too independent for some Republicans. If the fight gets too messy, however, Richard Baker (R-La.), a loyal party worker, could be a compromise candidate.

CONTROVERSY ON THE COB

►The Environmental Protection Agency is racing to determine whether Aventis CropScience's StarLink corn is safe enough for humans. The gene-altered corn, approved only for animal feed, caused a ruckus when it turned up in taco shells. Figuring the flap would simmer down if the corn were approved for humans, too, Aventis petitioned the EPA to review new data. On Nov. 28, the agency convened an advisory panel. Furious biotech foes charge that the EPA is moving too fast.

SINGAPORE SURPRISE

►President Clinton and U.S. Trade Rep Charlene Barshefsky surprised the rest of the Administration during the Asia-Pacific Economic Cooperation summit in Brunei by proposing a free-trade deal with Singapore. The idea had never been raised in Cabinet councils. Chilean officials, who thought they were next in the free-trade line, were livid. Talks with Singapore will start soon so they can be finished during Clinton's watch. Talks with Chile will be on a hurry-up timetable.

TAIWAN

DEFUSING A DEBT BOMB

Can Chen clean up the troubled banking sector?

As a former U.S. Senator and Republican Vice-President, Dan Quayle is no stranger to Taiwan. As an Asian security flash point, the island has long been a darling of American conservative politicians. When Quayle visited Taiwan in late November as a representative of the private sector, the focus again was the island's vulnerability—but this time to a financial crisis. Quayle's employer, Cerberus Capital Management, the world's largest investor in distressed debt, which has been active in crisis-stricken Thailand, South Korea, and Japan.

The descent of the global-finance vultures on Taiwan shows how serious the country's troubles have become. While the government says nonperforming loans are a manageable 5% of total bank lending, independent estimates range up to 15%—nearly at the level other Asian countries were before their currencies crashed in 1997. "Nobody knows the true scope of the problem," says Quayle, who is helping Cerberus find local partners to set up an asset management company to buy and sell problem loans.

GLUT. Taiwan should be strong enough to avert a full-blown crisis. But as worries mount, and its currency and stock markets steadily drop, the embattled government of President Chen Shui-bian is scrambling to restore confidence. On Nov. 25, he got the opposition-dominated legislature to pass a law laying the groundwork for reform. It removes legal obstacles that have made bank mergers near impossible. It also makes it easier for banks to dispose of bad loans.

That could set off a badly needed consolidation of the financial sector, now glutted with 53 commercial banks and some 360 credit cooperatives serving a population of 23 million. Taiwan "probably has more bank branches than bakeries," quips Neal Stovicek, Taipei-based advisor to National Securities Corp. The competitive frenzy has contributed to reckless lending.

The bill also is viewed as a badly needed victory for Chen. Since taking office in May, the President has been hit with a recall campaign by legislators angry over his cancellation of a nuclear plant and has been under intense fire from business for not paying enough attention to the economy.

Cleaning up the mess won't be easy. And the economic fallout could grow more severe. The roots of the problem

base—a practice that backfired disastrously in Japan—and accept them as collateral. In 1998, serious problems began to surface. Big companies such as Chinese Automobile Co. and Kuoyang Construction Co. defaulted and lenders had to reschedule the huge debts of conglomerates such as textile maker Tuntex Group.

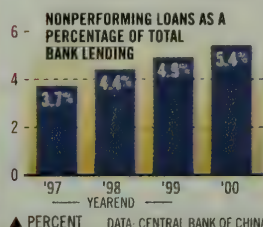
But rather than forcing banks to solve the problem by booking loan losses, regulators urged them to roll over loans. Or banks failed to report problem loans. Such sloppy practices continue. "Everyone is hiding the bad loans," says Jeffrey Koo Jr., president of Chinatrust Commercial Bank, Taiwan's largest private bank. Koo says Chinatrust, one of the few to be rated creditworthy by international firms such as Moody's Investor Service, plans to raise up to \$600 million to fund takeovers.

PROPS. The government has compounded the problem by intervening repeatedly in the stock market, hoping high prices would prop up struggling companies. When Asian markets failed to recover from the 1998 crash, the strategy stopped working. Even under Chen who had promised in his campaign to dismantle the KMT business empire, clean up the banks, Taipei has kept pumping money into the stock market down 40% since May. And it recently asked banks to give weak companies another six months to repay principal.



UNDER FIRE
Business blames President Chen for not focusing on the economy

TAIWAN'S DUD LOANS: A MOUNTING PROBLEM



are lax government oversight, poor disclosure, and Taiwan's reluctance to defuse a debt bomb that's been ticking for a decade. In 1992, the government granted 16 new banking licenses as part of a financial liberalization. Many of these

banks proceeded to lend with abandon, often to conglomerates and overambitious property developers tied to the Kuomintang, then the ruling party. Even more dangerous, many Taiwanese banks include stocks in their asset

WAR CHEST
Chinatrust in Taipei plans raise about \$600 million for takeovers



ow the pain is being felt in the rest
e economy. Because banks have so
e capital and collateral tied up in eq-
s, lower prices mean that even if
seize the shares of a deadbeat bor-
er, they may not recover the cost of
in. Property pledged as loan collat-
has dropped in value as much as
since the mid-1990s. Meanwhile,
loans are piling up. Officially, they
risen from 3.7% of commercial
debt at the end of 1997 to 5.4%—
22 billion—at the end of Septem-
ber 2000. The government figures
show another \$6 billion in bad loans at
bank institutions, such as farmer
credit cooperatives, where bad debt lev-
el is as high as 50%. However, Sal-
omon Smith Barney puts the bad debt
level at \$60 billion, roughly 20% of
the domestic product, and UBS War-
burg says at least 13 commercial banks
could have a negative net worth if they
wrote off all bad loans. "Of course, we
are very concerned," says Edward Lai,
senior director general of bank exami-
nation at Taiwan's central bank. The re-
sulting credit pinch is especially hard
on small and midsize businesses, the
country's backbone. Bank lending grew
0.4% in the third quarter.

Taiwan is not on the brink. It has
\$110 billion in foreign reserves, a
healthy trade surplus, and low govern-
ment debt. Many leading electronics
companies have kept their debt in
check. "We don't have a problem in
maintaining the foundation for sustained
economic development," says Fi-
nance Minister Yen Ching-
chang. The next step, he
adds, is to set up asset-man-
agement corporations to buy
bad debt at a discount, and
then try to recover the loans.

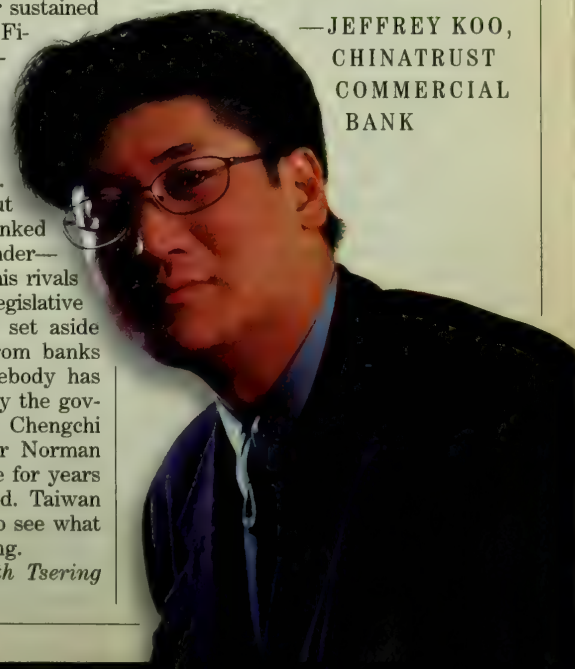
But Chen has his work cut
out to fix the system. KMT-linked
companies would surely go under—
and Chen can't afford to rile his rivals
too much because he lacks a legislative
majority. Also, Taipei hasn't set aside
funds to cover bad loans from banks
forced to restructure. "Somebody has
got to cover the loss, and only the gov-
ernment can," says National Chengchi
University banking professor Norman
Yin. Sooner or later, the price for years
of recklessness must be paid. Taiwan
need only look around Asia to see what
will happen if it waits too long.

*By Frederik Balfour, with Tsering
Namgyal, in Taipei*

NASTY SURPRISE

“Everyone is hiding the bad loans”

—JEFFREY KOO,
CHINATRUST
COMMERCIAL
BANK



JAPAN

LIKE STEALING PLASTIC FROM A BABY

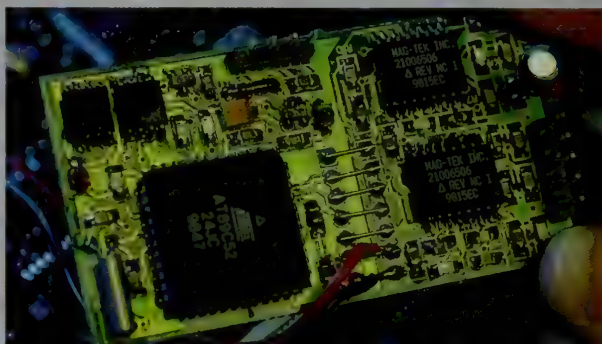
High-tech credit-card fraud is rising fast throughout Asia

The scam was as simple as running a credit card through a "skimmer." That was Koon-cheong Chang's job. A waiter at a Hong Kong tourist spot called the Peak Café, Chang took cards from tourists, most of them Japanese, then quietly swiped an extra copy on a small machine in his pocket that copied the receipts onto a computer chip. According to police, the card numbers were then faxed to Japan, where a criminal gang headed by Chang's brother-in-law used them to make counterfeit credit cards. Weeks later the victims noticed luxury goods and electronics purchases from places like Guam popping up on their card bills.

All across Asia, credit-card fraud is on the rise. The newest technique is to use sophisticated technology to steal card numbers and then manufacture fake credit cards. The favored victims are Japanese. Credit-card fraud involving Japanese has risen 45% in the past three years, while thefts in which fake cards are used has increased eightfold. The rate of such frauds, now running at \$1.60 for every \$10,000 in card charges, is still only half that in the U.S., but rising fast.

LAX LAWS. Gangs from China and Malaysia target Japanese because their cards often come with high credit limits, and Japanese laws against counterfeiting are loose. Counterfeit cards were rare in Japan before three years ago, and it is still not illegal to make or hold forged cards or to pilfer data used to produce them. Police must either prove a credit-card fraud has taken place or bust counterfeiting rings for breaking tax, trademark, or customs laws. "Japan is a good country for these criminals because the economy is so big, and the laws are so lax," says Akira Arakawa, security and risk manager at MasterCard in Tokyo.

Card issuers are now pushing politicians to pass tougher laws. One trou-



THE NEW NUMBERS GAME

▲ Thieves break into stores and insert chips into scanners that copy credit-card data. Later they retrieve the chips and sell the data

◀ Gangs employ store workers to covertly swipe credit cards with pager-size "skimmers," then use the data to make counterfeit cards

bling development: Gangs use the fake cards to buy goods, then sell the merchandise to finance more lucrative ventures such as drug trafficking and transporting illegal immigrants.

The police do have some success stories. Hong Kong and Japanese police working together nabbed Chang and his brother-in-law Man-fat Chan in Tokyo, and both are serving prison terms. In fact, probes led by Hong Kong's Independent Commission Against Corruption (ICAC) have led to some 200 convictions—though over a 10-year period.

Technology is helping the counterfeiters keep ahead of the police. The skimmers they use are made for such legal purposes as electronic entry to offices and can be bought for \$25 in any electronics store. Typically, gang members will recruit restaurant employees or store clerks to scan the numbers for

them. And the money is so good the collaborators aren't hard to find—Chang was paid \$130 per number.

Counterfeiters in Japan and Taiwan recently have taken number skimming to a new level by putting chips in machines at restaurants and other stores used to authorize credit transactions. Criminals break into the stores at night, drill a hole in the back of the machine,

then disable their sensors by pouring glue over them. They insert a chip that will record numbers. Cards are run through the scanner (photo). The thieves return later, remove the chip, and sell the data.

Once the crime is committed, the gangs can move across borders. "The equipment to make cards fits in a suitcase, so it's a mob factory," says ICAC investigator Jim Bell. The chips, which numbers are stored on, are programmed to erase their memories—and incriminating evidence—unless they are examined with special equipment recently developed by the credit-card industry.

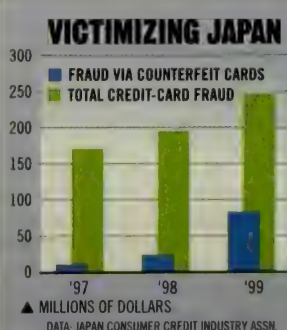
So card companies in Japan and the rest of Asia are focusing on catching thieves when they use cards. That involves tea-

ing Asian and Japanese retailers to spot fakes. Real cards, for instance, include three-dimensional holograms that do not peel off, four-digit codes printed below the embossed card number, and ultraviolet sensors.

Robert DeMaria, director of risk management at Visa International Asia Pacific, says card companies are spending more time monitoring card activity. Visa now looks for similar transactions during short time periods and matches these sales against the cardholder's habits.

Still, the crooks seem to adapt to each countermeasure. They are now ready to foil the credit-card issuers as they push into China. There, law enforcement is lax, and counterfeiting of all kinds is rampant. For the credit card gangs, the battle should continue.

By Ken Belson
Tokyo



Some people use miles on eight different airlines as if they were one. **Are you one of them?**



It's a big world. You won't always fly the same airline. Isn't it nice to know that there's an alliance that lets you earn miles with your favorite frequent flyer program, whichever member airline you fly? And redeem them on any of the others? Welcome to **oneworld**.™



American Airlines

Aer Lingus

BRITISH AIRWAYS

CATHAY PACIFIC

FINNAIR

IBERIA

LANCHILE

QANTAS

Eligible fares only. American Airlines AAdvantage® and British Airways Executive Club members can earn or redeem miles, and earn tier status credit, on all eligible flights except each other's routes between Europe and the Americas. AAdvantage is a registered trademark of American Airlines, Inc. Each oneworld alliance airline reserves the right to change its frequent flyer program rules, regulations, travel awards and special offers and to end their frequent flyer program in accordance with its relevant frequent flyer program rules. All oneworld benefits are only available to passengers on scheduled flights that are both operated and marketed by a oneworld member airline. (Marketed means there must be a oneworld member airline flight number on your ticket.) American Airlines, Aer Lingus, British Airways, Cathay Pacific, Finnair, Iberia, Lanchile and Qantas are all trademarks of their respective companies.

www.oneworldalliance.com

COMMENTARY

By Brian Bremner

LET JAPAN'S FALTERING INSURERS TAKE THE FALL

Two years ago, Tokyo officialdom gave Japanese taxpayers a soaking during the bailout of debt-besotted banks. Now, the wealth-destroyers within the ruling Liberal Democratic Party are at it again. To save Japan's reeling \$250 billion insurance industry, some politicians want to let insurers effectively rip up policies issued in the late 1980s that promise 5% returns to policyholders and replace them with ones that yield about 1%.

Although regulators all over the developed world have allowed bankrupt insurance firms to renege on promised returns from time to time, a bailout on this scale would be a "first in the history of the insurance industry," says Runa Ichihari, associate director of Standard & Poor's in Tokyo. Even so, Financial Reconstruction Commission chief Hideyuki Aizawa and Finance Minister Kiichi Miyazawa argue such radical measures are needed to avert another teeth-rattling financial crisis in Tokyo.

Not so fast. What's proposed is a misguided bailout with no strings attached that might reverse the healthy, cathartic shakeout now under way in Japan's overcrowded insurance industry. There is no denying Prime Minister Yoshiro Mori's government has a big problem on its hands. The triple-whammy of bad loans from the 1980s, a depressed stock market, and ultralow interest rates has triggered a series of insurance failures. October alone claimed Chiyoda Mutual Life Insurance Co. and Kyoei Life Insurance Co.

And, yes, Japanese life insurers are monsters whose collapse can be traumatic. They manage about \$1.8 trillion of the nation's savings and collectively own some 10% of Japan's \$3.4 trillion bond market. They are large-scale global investors in the U.S. Treasury and European bond markets. If some big players went under,



there would be trouble all around.

It's also true that the insurers, big and small, are suffering greatly from the dreaded negative yield spread. That's jargon for the gap between the 5% return they guaranteed on policies issued in the late 1980s and the 2% or so return they have been

Hitting up policyholders to save second-tier insurers is a travesty

getting over the past five years on their stock and bond investments. Japan's top five insurers reported \$10 billion in such valuation losses on invested premiums last fiscal year.

But are things really so dire as to require a massive wealth transfer from policyholders to insurers? Japan's banking crisis certainly justified a \$70 billion bailout. The failure of big players such as Long Term Credit Bank of Japan and Nippon Credit Bank Ltd., and the weakened condition of other major lenders,

threatened to clog the banking sector—the circulatory system of any economy—and possibly roil global markets.

In contrast, such big insurers as Nippon, Dai-Ichi, and Sumitomo have strong capital ratios and are enjoying gains in premium income by diversifying into health and nursing care coverage—big markets in Japan. And though their half-year results released on Nov. 27 were lackluster, the biggies are not in serious peril.

JUNGLE LAW. It is the smaller insurers that are in the biggest trouble. Which raises another point: Does Japan need 40-odd life insurers? The answer is no, and consolidation is on the way. Foreign insurers like Prudential

and Aetna—with their cleaner balance sheets, better portfolio management, and lower costs—are snapping up insolvent Japanese firms, deepening their reach into the world's No. 2 insurance market.

The politicians may scream crisis, but the reality is that a government handout would only help a bunch of coddled insurance bosses running second-rate firms. Better to let them fend for themselves and, if they go under, compensate policyholders by drawing on an existing \$10 billion in industry-run fund that was partially state-funded. That may entail using some taxpayer money, but that's better than making policyholders shoulder \$15 billion a year in lost returns—which is what will happen if the industry is allowed to cut policy returns from 5% to 2%.

Letting the losers go under could be messy. But at least the insurance industry would continue to downsize and open itself up to more global competition, capital, and managerial expertise. Hitting up Japanese policyholders, who didn't create this mess, is not only a travesty but is sure to make the recovery longer and all the more painful.

Bremner is Tokyo bureau chief.

reams made real.

Scalpel. Clamp. Handheld wireless Web browser.

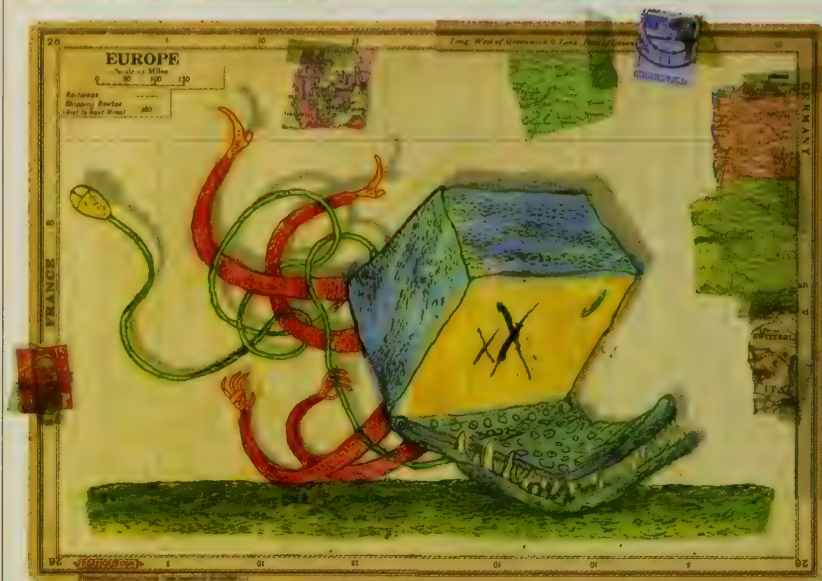
Modern medicine now has an efficient new tool.

Telemedicine technologies from Agilent decrease the distance between doctor and patient. With wired or wireless Web access, vital signs are just two clicks away. Making faster, more informed decisions possible. Anytime. Anywhere. From now on, the doctor is always in.



Agilent Technologies
Innovating the HP Way

Agilent Technologies is a new company composed of the former Hewlett-Packard test and measurement, chemical analysis, semiconductor components and medical products businesses. www.agilent.com



EUROPE

SUDDENLY, PCs ARE FALLING FLAT

Europeans seem to favor smaller, simpler Net devices

Sophie Cabanes appears to be a natural candidate to buy a new personal computer for Christmas. The 40-year-old Parisian architect works with an out-of-date Apple at her office. Her two boys would like to begin surfing the Net. But home is a small, 800-sq.-ft. apartment, and Cabanes won't buy a PC for her boys. It's much more likely that she'll sign up for interactive digital TV or Internet service on her mobile phone. "We don't have room for a computer, and they are too expensive," she says.

It's a surprising development for Europe's fledgling New Economy. A year ago, PC purchases were surging by 17% a year. Analysts were predicting that the Continent's levels of computer usage soon would reach U.S. levels.

But this year, the PC growth rate has tumbled to half that, confounding predictions of future double-digit growth. That's in part because of rising prices

and competition from digital TV and mobile phones. Whatever the cause, the slowdown is hitting the earnings of far-flung tech powerhouses like Intel Corp. and Dell Computer Corp.

Although some PC boosters see only a temporary blip, more and more industry officials and analysts perceive a fundamental change. "Europe simply won't be as PC-centric as the U.S.," argues Noah Yasskin, chief researcher at Internet consulting company Jupiter Research 2000 in London. He predicts continental PC penetration will plateau in 2005 at only 52% of households, while it should rise to 73% in the U.S. And only 43% of European households will use PCs to hook up to the Net, compared with 74% in the U.S. Most Europeans are expected to reach the Net in ways different from those of Americans. So computer makers will have to adapt to the European preference for smaller, simpler, and cheaper interactive devices.

The immediate causes of this year's

PC burnout are easy to detect. Corporate sales, which make up about 73% of the total market, collapsed because companies had stocked up in advance to prepare for the much-feared Y2K problems. Even more important, most computer components are priced in dollars, so the weak euro has forced up prices for PCs by as much as 20% in local currency—just when Europeans were facing high prices at the gas pump as well. "The euro and petrol crises destroyed confidence," says Maria A. Marced-Martin, Intel's general manager for Europe.

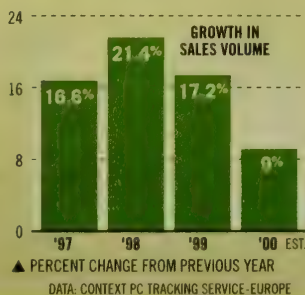
The bad news blindsided the chip maker and some of its PC partners. Intel believes sluggish European sales will keep fourth-quarter sales growth under 8%, less than half the company's typical fourth-quarter rate. And Dell says third-quarter European sales rose only 2%. **BIG SQUEEZE?** Tactical errors may also have contributed. Market leader International Business Machines Corp. ran into problems because its highest-margin customers are Europe's 25,000-plus mom-and-pop PC assemblers. They are losing market share to big brands like Compaq, so their orders for Intel chips are dropping quickly.

If Europeans are buying computers, they seem to prefer smaller notebooks these days. Sales of desktop computers haven't grown at all this year, while notebook purchases will soar by an estimated 41% by yearend. Meanwhile, Europeans are snapping up personal digital assistants like mad. Compaq is selling 30,000 of its iPAQ personal assistants per month—three times more than it expected. Soon, these devices will be able to connect to the mobile Web. Notes François Bornibus, Compaq Computer Corp.'s European PC manager, "We're convinced the main Internet access device in Europe will be wireless and mobile."

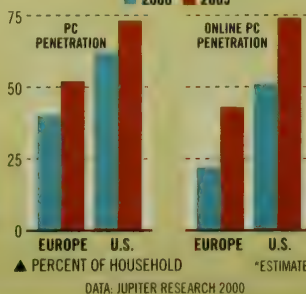
If Europeans keep gravitating toward PDAs and mobile phones, the squeeze on personal-computer sales could continue. How much will it hurt Europe's search for a high-tech lift to a new economy? A lot depends on how quickly companies can adapt. No doubt, Europe will have its own digital future—but not one imported wholesale from the U.S.

By William Echols, in Brussels, and Andy Reinhardt in San Mateo, Calif.

EUROPE'S PC SALES ARE SLOWING DOWN...



...WHILE PERSONAL-COMPUTER USE LAGS



STILL WAITING FOR HIGH-
SPEED INTERNET ACCESS?



JUST LOOK UP SM



ed of waiting for broadband? StarBand™ is here now. StarBand is the
company to deliver two-way, high-speed Internet access via satellite to consumers.
always on and it's available virtually everywhere. If you can see the southern sky,
can get StarBand. Just look up: StarBand is available now at selected DISH Network™
lers and through MSN® HighSpeed - Satellite at your local RadioShack® store.
more info go to www.StarBand.com or call toll-free 1-800-421-3464.



STARBAND™

www.StarBand.com

EDITED BY ROSE BRADY

GERMANY: SO FAR, MERKEL CAN'T REVIVE THE CHRISTIAN DEMOCRATS

Seven months ago, Angela Merkel took on the toughest job in German politics: leading the Christian Democratic Union (CDU) out of the abyss of a campaign-finance scandal. Today, the unpretentious Merkel is still groping for the exit. She's in danger of becoming a transitional figure unless she can get control of squabbling comrades and find a message that will restore the party's standing in the polls.

At stake are Merkel's chances of challenging Gerhard Schröder for Chancellor in the country's 2002 national elections. But so far, she hasn't been able to get other party leaders to agree on a program to lure voters from Schröder's Social Democratic Party (SPD), which has moved firmly to the political middle. Even business has abandoned the center-right CDU and defected to Schröder's coalition with the Greens. If national elections were held now, Schröder would trounce Merkel 47% to 30%, according to a recent poll by Berlin's Forsa Institute. "The CDU totally lacks orientation," says political scientist Gero Neugebauer of the Free University of Berlin.

BLINDSIDED. Merkel, 46, isn't getting much help from her party colleagues. Recently, for example, she was blindsided when Friedrich Merz, a conservative rival who heads the CDU delegation in Parliament, told a newspaper that foreigners in Germany should accept the idea of a *Leitkultur*, or "guiding culture." Merz was playing to German fears that the country is about to be overrun by East European job-seekers who will trample German sensibilities. But the comment seemed crass against a background of rising right-wing violence against *Ausländer*. And it played into Schröder's hand by allowing his allies to paint the CDU as intolerant nationalists.

The immigration flap was just the latest sign that Merkel can't keep the party in line. She also faces resentment from

the CDU old guard, which remains loyal to ex-Chancellor Helmut Kohl. And Merkel is likely to face more trouble as the 2002 elections draw nearer. As party chairman, she has no automatic claim to the candidacy, while others are discreetly positioning themselves. One is the 45-year-old Merz, who is likely to look for more hot-button issues while portraying himself as a small-business advocate. Another is Edmund Stoiber, 59, Prime Minister of Bavaria, whose platform mixes social conservatism with generous social-welfare benefits.



MERKEL: Is labor reform next?

None of the candidates stands much of a chance unless they bring business back to the Christian Democrats' fold. That will be tough. Schröder has pushed through major economic reform in two years than the CDU managed in 16 years under Kohl. Besides cutting taxes, Schröder is cleaning up the pension system and putting the country on a course for a balanced budget. But he may be leaving Merkel one opening: Business is frustrated at the Chancellor's refusal to reform Germany's inflexible work rules. "That would be an issue where the CDU could win stature," says Ulrich Schröder, a senior economist with Deutsche Bank.

Will Merkel grab the opportunity? She seems to be thinking about it. On Nov. 18, she published an essay in the *Frankfurter Allgemeine* newspaper urging Germany to "examine the competitiveness of national regulations that affect the cost of production, especially the cost of labor." Championing labor reform would be politically risky. But by taking a bold stance, Merkel could boost her economic credentials and puncture Schröder's aura of modernizer. Says Wolfgang Schaüble, Merkel's predecessor: "The CDU must convince people that our program is the only one in an era of globalization." Right now, that's a tall order.

By Jack Ewing in Frankfurt

GLOBAL WRAPUP

BARAK'S CHALLENGE

► Israeli Prime Minister Ehud Barak is now banking on reaching agreement with the Palestinians to give him a boost in his plunging popularity among voters. That's going to be tough to achieve, as violence continues to flare between Israelis and Palestinians. But it's about his only chance to win reelection in a ballot likely to be held in May. The Knesset voted overwhelmingly on Nov. 28 for the new elections—two years before the end of Barak's term.

Polls show Barak trailing former

Prime Minister Benjamin Netanyahu of the Likud Party by as much as 20 points. Barak slightly trails Likud leader Ariel Sharon. Netanyahu has yet to declare he will run, but most experts believe he will. If he does, Netanyahu and Sharon would face off in primaries early in the new year. Barak has his own problems inside the Labor Party, since he may face a challenge from Knesset Speaker Avraham Burg.

Barak is already stepping up efforts to reach at least a limited agreement with the Palestinians in the time that he—and President Bill Clinton—have

in office. Israeli and Palestinian officials have been contacting each other in the past few days in an attempt to return to the negotiating table.

Experts say Barak needs a deal with the Palestinians to regain the favor of Israeli Arab voters who have been alienated by the *intifada*, which has claimed more than 280 lives. But even a limited agreement that allows a Palestinian state but excludes such thorny issues as the fate of Jerusalem may not win enough voters for the Prime Minister to stay in office.

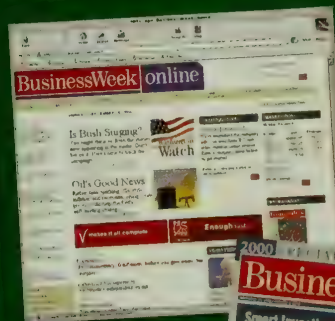
By Neal Sandler in Jerusalem



Because this is no gift for an executive.

This holiday give the gift every executive wants. For \$54.95 you can present them with a one-year subscription to both BusinessWeek magazine and BusinessWeek Online. That's a cool discount of 72% off the newsstand price. Plus, each additional gift subscription costs just \$27.50. So don't clutter their space. Expand their horizons.

Give on the present that promises a rich future. To give the gift of BusinessWeek visit our Web site at www.businessweekholidayoffer.com or call 1-800-635-1200 (please reference number XNB0976).



BusinessWeek

BusinessWeek online

www.businessweek.com

Keyword: BusinessWeek
net Keyword: BusinessWeek

A Division of The McGraw-Hill Companies



COMMENTARY

By Charles J. Whalen

TODAY'S HOTTEST ECONOMIST DIED 50 YEARS AGO

The world of economics has a new superstar: Joseph A. Schumpeter. Never mind that the Austrian-born Schumpeter has been dead for a half-century, that he was overshadowed while alive by John Maynard Keynes, and that he was famously wrong in predicting that capitalism would become a victim of its own success. Today he's more influential than ever—because the high-growth, high-risk New Economy is exactly the kind of economy he wanted.

Even people who have never heard of Schumpeter know the phrase he coined: "creative destruction," the process by which new products and production methods render old ones obsolete. Federal Reserve Chairman Alan Greenspan frequently uses the term. So does Treasury Secretary Lawrence Summers, who in a September speech contrasted Schumpeter's dynamic vision with the equilibrium of Adam Smith's invisible hand. Said Summers: "If the agricultural and industrial economies were Smithian, the new economy is Schumpeterian." The International Schumpeter Society, founded in 1986, has members in 33 countries. Fleet-Boston Financial Corp. has even constructed a "Creative Destruction Index" to score nations according to their affinity for change.



What makes Schumpeter so popular—especially with free-marketeers—is that he not only chronicled creative destruction but considered it the source of human progress. He correctly placed technological change at the core of economics. His one flaw was that he occasionally overreached, leaving theories that were incomplete or even inconsistent—a

legacy that scholars continue to battle over even today.

The flamboyant Schumpeter had an unlikely start for a brilliant academic. Born into the declining Austro-Hungarian Empire of 1883, he was educated as a lawyer, not an economist. By age 30, he began saying that his aspiration was to be "Europe's greatest lover of beautiful women and Eu-

SCHUMPETER: rope's greatest
Seeing horseman—and
"creative perhaps also the
destruction" world's greatest
as the source economist." (He
of all progress later claimed to
have achieved

two out of the three, without specifying which two.) Schumpeter served as Austria's finance minister during the ruinous hyperinflation of the early 1920s, then became president of a Viennese bank that soon collapsed. His luck improved when he landed teaching jobs in Bonn and then at Harvard University, where he taught from 1932 until his death in 1950.

NEW RECIPES. Schumpeter realized that growth comes from "creating new recipes," says Leonard I. Nakamura, economic adviser at the Federal Reserve Bank of Philadelphia. In his best-known work, *Capitalism, Socialism and Democracy*, written in 1942, Schumpeter wrote that technological change "incessantly revolutionizes the economic structure from within."

While standard theory assumes that an economy grows steadily, Schumpeter argued that short-term booms occur as entrepreneurs gather in "swarms" around new opportunities. He also saw longer booms marked by major clusters of new technologies and industries. His 1939 book, *Business Cycles*, studied the jolts produced by steam power, electrification, and the rise of the automobile. It's easy to see how the Internet fits that pattern.

The emphasis on the transformative power of technology makes Schumpeter relevant to the New Economy. When labor markets are tight, the standard remedy is to raise interest rates to stave off infla-

NEW ECONOMY, NEW ECONOMIC PARADIGM

The ideas of Joseph Schumpeter are more relevant than ever

HOW
CAPITALISM
WORKS

CONVENTIONAL ECONOMICS

Markets adjust according to an "invisible hand." Prices of products and services move to equate supply and demand.

TECHNOLOGICAL
CHANGE

Technological change is outside the scope of economics.

MARKETS AND
REGULATION

Price competition makes markets efficient. Antitrust policy should promote such competition.

SCHUMPETER'S PERSPECTIVE

Through "creative destruction," new products, processes, and markets are created—and existing ones become obsolete.

Technological change "incessantly revolutionizes the economic structure from within."

Competition through innovation is more important than price competition. Government regulation should promote innovation.

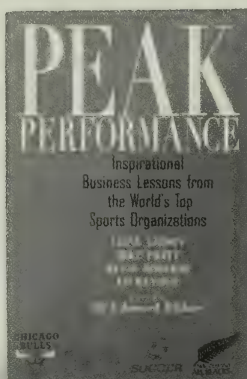


WHAT'S YOUR TECHNOLOGY FORGETTING?

APRISMA
MANAGE WHAT MATTERS

If everything in your life stops when there's a problem with your IT infrastructure, then you need intelligent technology that helps you monitor and manage the things that matter. Because your infrastructure should know what's important to your business and your world. And that's exactly what Aprisma develops and delivers—solutions as dependable as you. 877.437.0291 www.aprisma.com

Perhaps the only book
about sports that
could actually change the
way you do business.



"I think 'Peak Performance' will inspire you to rethink your business from the inside out." H. Okuda, Chairman, Toyota Motor Corporation. More at www.etexere.com

TEXERE

NEW FUND

With new technology comes a new global opportunity

T. Rowe Price Global Technology Fund. From wireless communications development in the U.S. and Europe to semiconductor fabrication in the Far East, our new fund represents an aggressive addition to most portfolios and is poised to tap the high return potential of high-tech around the world.

Invest in technology worldwide

A focus on companies that are reshaping technologies and markets worldwide.

Invest with an international no-load leader. With a worldwide network of investment analysts and more than \$35 billion in foreign stock and bond assets, we bring in-depth expertise to investors seeking opportunities abroad. Of course, the risks of investing in this field are commensurate with the rewards. International investing holds special risks including currency fluctuation. **100% no load.**



Call 24 hours for your
free investment kit
including a prospectus

1-800-401-5251
www.troweprice.com

Invest With Confidence™

T. Rowe Price



For more information, including fees, expenses, and risks, read the prospectus carefully before investing.
T. Rowe Price Investment Services, Inc., Distributor.

GTF057405

Economics

tion. But neo-Schumpeterians predict that "if the labor market is tight, firms will invest in new technology and boost the productivity of labor, instead of raising prices," says Elias Dinopoulos, a University of Florida economist.

Schumpeter said that competing to out-innovate helps the economy more than competing on price—and antitrust policy is moving in his direction. The government's goal in the Microsoft Corp. case was to preserve innovation. "The Microsoft case was about illegal attempts to prevent creative destruction—about blocking widespread distribution of technologies that the company thought might make Windows obsolete," says Timothy F. Bresnahan, a Stanford University economist and former chief economist of the Justice Dept.'s Antitrust Div.

RIGHT QUESTIONS. Schumpeter's work can be frustratingly ambiguous at times. While he favored free markets, he hinted at the possibility that government could encourage and channel innovation. In his early work he highlighted entrepreneurs and small companies, whereas in his better-known late writing he said that large companies were the main source of innovation. At least, say followers like Steven Klepper, an economist at Carnegie Mellon University, Schumpeter asked the right questions.

Indeed, many economists even forgive Schumpeter for his biggest blunder: the prediction in *Capitalism, Socialism and Democracy* that corporate and government bureaucracies would cause socialism to triumph over capitalism. Says William Milberg, a historian of economic theory at New School University: "Schumpeter's remarks on the end of capitalism should be read as a warning, not a forecast."

If anything, Schumpeter's error came from underestimating the very force that he trumpeted: the innovative power of capitalism. With creative destruction blowing at gale force, this may at last be the Age of Schumpeter.

Before joining *BUSINESS WEEK*, Whalen taught the history of economic theory.

FOR THE BEST DIGITAL DOCUMENT HANDLING SOLUTIONS, HERE ARE TWO NUMBERS TO CALL.



(Think of it this way, we saved you a call.)

At Savin we believe we offer some of the best document handling solutions around.

After all, like you-know-who, we too have the forward-thinking, award-winning technology essential to boosting productivity in today's digital offices. With fast, versatile, connectable digital imaging systems that allow you (or your workgroup) to print, sort, duplex and staple – right from your desktop. And full-color imaging systems that turn electronic documents into brilliant hard copy.

But advanced digital technology is just the beginning. Because at Savin we're dedicating ourselves to becoming the fastest, most responsive, most easy to work with name in the business. With smart, energetic Savin professionals willing to do whatever it takes to give you the satisfaction and service you deserve.

To find out more about the company with the technology and attitude that will win you over, call us at 1-800-234-1900 or contact us online at www.savin.com. And that other number? Sorry, you'll have to look it up.



Savin®

WE'VE GOT WHAT IT TAKES TO WIN YOU OVER™

SAVIN CORPORATION, 333 LUDLOW ST., STAMFORD, CT 06904

COOL

YOUR CUSTOMERS BUY AT WEB SPEED.

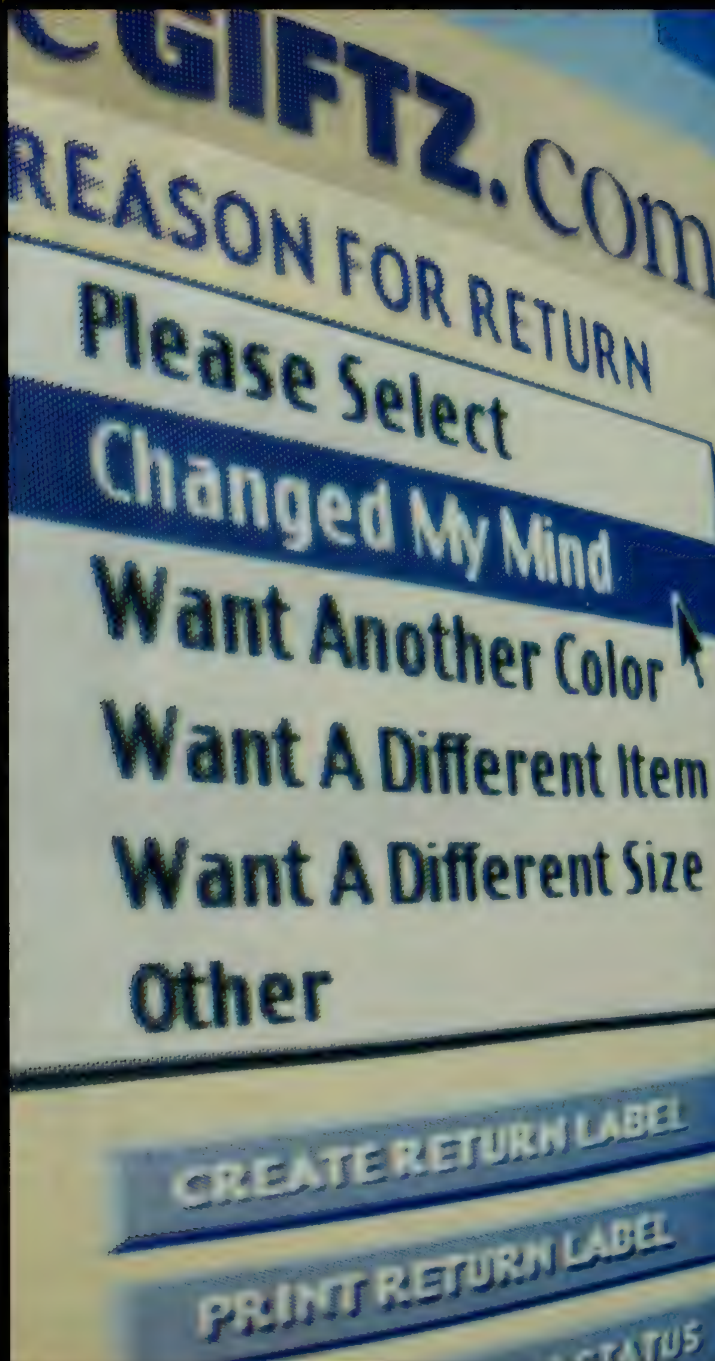
WAY COOL

UPS NOW HELPS YOU HANDLE E-RETURNS JUST AS FAST.

Announcing point-and-click returns. UPS now offers the quickest, simplest way to handle your e-returns. A new, customizable solution that allows your customers to print return labels directly from their PC—shrinking the process from five days to five minutes. In addition, you'll be able to route your returns to the right vendor and rapidly restock your inventory, with full visibility tracking throughout. It all adds up to fewer customer inquiries, lower operating costs and much happier returns. How cool is that? To find out more, visit us at ec.ups.com



MOVING at the SPEED of BUSINESS



Business Week

DECEMBER 11, 2000

e**biz**

A R E E L E C T R O N I C B U S I N E S S

SPECIAL REPORT

Why Online
Health Failed.
How It Can Work

PERSONALITIES

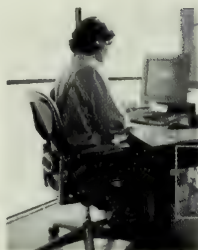
Joe Galli Fires
Up VerticalNet

**Move Over,
Bill!**

EA Systems
CO William Coleman

Here come the brash
new software stars

BusinessWeek



Appliance dealer enters Whirlpool® partner portal.



Order is placed through customized price list.



Dealer tracks status of shipment online.

IBM designed and built Whirlpool's partner portal, allowing appliance dealers to manage orders and inventory online.

In the first 3 months, the portal generated \$100 million in revenue.



Whirlpool Corporation is an **IBM** e-business

Contents December 11, 2000



cover story

30 Move Over, Bill!

Meet the software Class of 2000, a scrappy lot whose members were the first to spy out the potential of Web software and are now cashing in. With kooky little names like BEA, i2, Kana, and E.piphany, these upstarts are shaking up the computer landscape, snaring big customers, and leaving industry stalwarts shaking their heads. But life isn't going to be all peaches and cream for these upstarts, because the big boys aren't going to give up without a fight—and they still have a lot of firepower

special report

► Curing an Industry's Ills

The whole health-care sector is in dire need of a high-tech overhaul, but the first wave of e-health companies took the wrong tack. Now, investors and entrepreneurs are starting to get it

An Rx for Drug Trials

Drugmakers have long wasted millions on antiquated methods for testing new products. The Web is changing all that

How e-Hospitals Can Save Your Life

When they computerize patient care, errors and costs are drastically reduced

Monitoring Patients Long Distance

Young companies are blazing trails on a vast frontier called electronic care management. One goal is to keep patients out of the hospital

Who's Prying Now?

As hospitals and Web sites sell health data online, patient privacy is compromised



Contents December 11, 2000

features

12 ► **Home Page**

IPOs, religion, name game, investment scams, Sally Struthers, stifling the critics

► **Web Smart Companies**44 **Nestlé: An Elephant Dances**

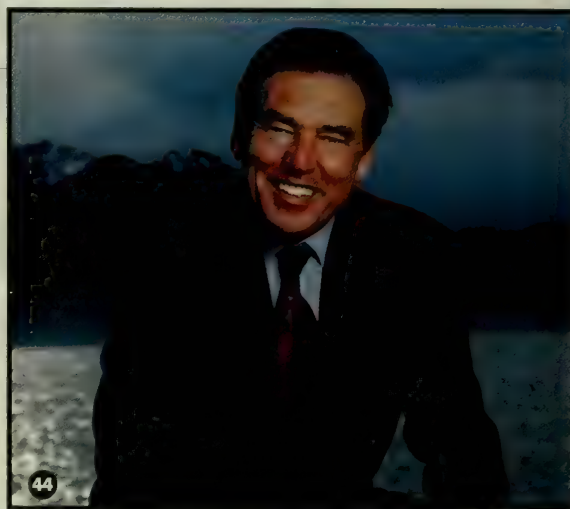
The Web promises to make this giant more agile—and put a serious dent in the cash Nestlé lays out for supplies

► **Personalities**52 **VerticalNet's Joe Galli**

He's super-intense. That helped him rev up Black & Decker. Now, can he build a Web dynamo?

► **Upstarts**82 **Leave It in the Smartbox**

Can Brivo Systems' new digital appliance solve home delivery dilemmas?

► **Management**85 **Adios, B2C**

Lots of consumer-oriented sites are reinventing themselves as business-to-business companies

► **Net Worth**90 **Surprise, Money for Dot-Coms**

Do these venture capitalists know something you don't? Could be

96 **When Good Options Go Bad**

More outfits are finding that issuing special stock options to keep staff may not be a great idea

► **Net Culture**104 **Carnegie Mellon: The Wired Campus**

How CMU is aggressively adopting Net technology to pioneer online education

commentary

16 ► **Neuborne on E-tailing**
Beyond the Banner Ad

With a shot of creativity, there are lots of ways the Internet can bolster brands

18 ► **Data Mine**
Surfing in Tongues

It's not English-only anymore, so it's time for Net merchants to go multilingual

20 ► **Clicks & Misses**
A Mixed Bag for E-Xmas

A shopping bot isn't what it used to be, but Amazon.com shines

25 ► **The Digital Lifestyle**
'So Exciting I Can't Sleep'

A Stanford student takes time off to pursue his vision

100 ► **Due Diligence**
The End of Fuzzy Math?

E-tailers such as Amazon should report expenses the way old-line retailers do

116 ► **Cutting Edge**
A Hotbed for Collusion?

In the brave new e-tail world, it's all too possible to cheat



MORE AADVANTAGE



GO TO **AA.com**[®] PURCHASE UPGRADES.* RECEIVE E-MAIL SUMMARY STATEMENT. REGISTER FOR SPECIAL MILEAGE PROMOTIONS. ALL FROM YOUR ONLINE A[®]ADVANTAGE[®] ACCOUNT. DETAILS AT www.aa.com/aadvantage OR AOL KEYWORD: AA AADVANTAGE

AA.COM. THE ULTIMATE SITE FOR EVERYTHING **American Airlines**
American Eagle

*AAdvantage upgrade miles currently available only for Executive Platinum, Platinum and Gold members and valid only for travel on American Airlines and American Eagle flights. American Airlines reserves the right to change the AAdvantage program at any time without notice. American Airlines is not responsible for products or services offered by other participating companies. For complete details about the AAdvantage program, visit www.aa.com.

THIS WEEK

DECEMBER 4-8



Mike McCurry, Grassroots.com

Defending President Clinton during the Monica Lewinsky scandal wasn't exactly the sort of stuff Mike McCurry signed on for at the White House. His new job, CEO of advocacy site Grassroots.com, should be more to his liking. **Tuesday**

MONDAY

Beauty Biz Gets Ugly

Who killed the beauty business on the Web? The list of suspects starts with the big brands.

Perspective by Ellen Neuborne

TUESDAY

No Sex Scandals, Please

Mike McCurry just wants to support political activists at Grassroots.com. *Company Closeup by Margaret Young*

WEDNESDAY

Microsoft's Turncoat?

At Microsoft, Tod Nielsen was in charge of relations with outside developers who wrote companion software. As CEO of Crossgain, he's trying to lure developers away to his company.

Movers & Shakers by Jay Greene

THURSDAY

Let's Talk Money

If there is money in talking computers, SpeechWorks and Nuance may be the first to prove it.

Street Wise by Arney Stone

FRIDAY

Avoid Writer's Cramp

Web site Shutterfly.com serves up digital photography most of the year.

For Christmas they'll create your cards and mail them out, too.

Clicks & Misses by Larry Armstrong

COMING ATTRACTIONS

Airlines are calling their new venture, Orbitz.com, the unbiased online ticket site. Now it's up to Jeremy Wertheimer to make sure.

EXTRAS

• Q&As

Click in for diverse takes on the Net era of software from the brash upstarts trying to reshape the industry. The lineup of CEOs: William Coleman of BEA Systems, Roger Siboni of E.piphany, and Mark Hoffman of Commerce One. For the perspective of an exec who uses information technology, there is Peter Brabeck, CEO of Nestlé.

• E-biz Europe

Thanks to our partnership with *Le Monde*, e.biz online visitors now get regular features on the latest developments in Europe from the Paris paper's *Interactif* supplement. Keep up with the hot startups or listen in on conversations with the Continent's savviest investors. If you want to catch up, use our e.biz search engine and plug in "Le Monde."



Did You Miss?

Now Here's an Idea: GE*Trade

Online brokers have touched off a revolution, all right. But it's time for them to wave the white flag. That means finding acquirers. There's no shortage of companies that might find them attractive. Start with General Electric. *Perspective, Oct. 23*

Beware of Dirt-Cheap Stocks

Think all those formerly high-flying tech stocks look good at \$5 a share or less? Think again. Cheap stocks have a bundle of problems. *Street Wise, Nov. 2*



◀ A Survivor's Guide to Divorce

When it comes to sorting out the finances of a messy divorce, Lorna Wendt has been there. Her new Web site is a guide for other women. *Clicks & Misses, Nov. 3*

Michael Rubin's End Run at Global Sports

E-tailing is dicey right now, and nothing is dicier than sporting goods. Michael Rubin, who ran a ski-sharpening business at 12, has a distinctive plan for Global Sports: Run Web stores for established retailers. *Movers & Shakers, Nov. 15*



All she did her
whole life was
give, give,
give, give.

And look what
it got her.

© 2000, Netcentives Inc. All Rights Reserved. Netcentives and Rewarding Relationships are trademarks of Netcentives Inc.



Find out what every grandmother (not to mention companies like American Express and AOL) already knows: Loyal relationships deliver the greatest returns of all.

That's why hundreds of top companies have turned to Netcentives for loyalty and direct marketing solutions that help them nurture enduring relationships with their customers, employees, and channel partners.

Today, Netcentives provides the scalable infrastructure powering millions of relationships for some of the world's best-known brands. And our complete range of services—from network design to campaign management to merchant services and 24x7 customer support—ensures that each client's solution is built to last a lifetime.

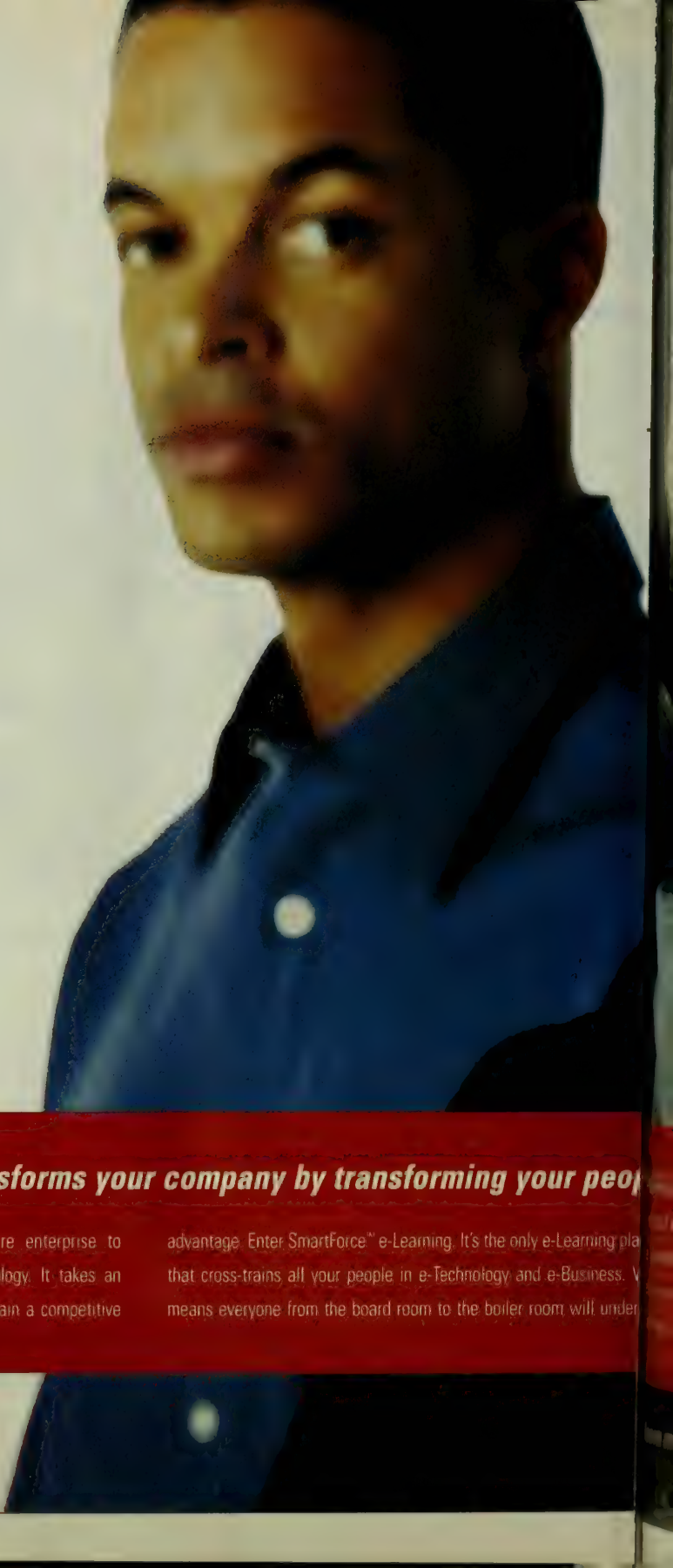
Discover what the amazing power of loyalty can do for your business. Visit loyalty.netcentives.com today.

You'll get, get, get more than you ever expected in return.



Netcentives™

Rewarding Relationships™



***Wants the entire company
to move to e-Business.***

SmartForce™ e-Learning transforms your company by transforming your people.

Smart business leaders know that moving an entire enterprise to e-Business takes more than an investment in technology. It takes an investment in people, so they can use technology to gain a competitive

advantage. Enter SmartForce™ e-Learning. It's the only e-Learning platform that cross-trains all your people in e-Technology and e-Business. V means everyone from the board room to the boiler room will under



***Knows how to
get there now.***

to actualize initiatives like e-Support, e-Supply, and e-CRM. The
of stuff that puts business on the fast track to e-Business. And
SmartForce e-Learning is a web-hosted, outsourced solution.
is no waiting around to get started. In fact, we'll even help
roll out your program. SmartForce e-Learning. e-Business now.

SmartForce
The e-Learning Company

learn more, go to www.smartforce.com/ebiz or call 1-888-395-0014.

home page

Sometimes A Great Crapshoot

The simplest trick of 1999 day traders was to buy IPOs backed by big-name venture capitalists. But how smart was that, especially if you weren't an insider who got the IPO price? Here's how some of the big VC boys and girls have done for investors on deals launched between Jan. 1, 1999, and June 30 this year. Almost all did just fine for themselves.

FIRM	NO. OF DEALS	AVG. RETURN SINCE 1ST TRADING DAY
THE GOOD		
BAY PARTNERS	6	169.7%*
LIGHTSPEED	13	127.8%
CROSSPOINT VENTURES	12	36.6%
KLEINER PERKINS	23	31.7%

THE BAD		
MAYFIELD FUND	13	-14.8
ACCEL PARTNERS	16	-27.2
CMGI@VENTURES	5	-50.6
SEQUOIA CAPITAL	23	-51.7

THE UGLY		
SOFTBANK	17	-67.2
VULCAN VENTURES	23	-73.3
HUMMER WINBLAD	6	-88.1
IDEALABI	7	-90.6

*RETURNS ARE CAPITALIZATION-WEIGHTED, MEANING HIGHER-VALUED COMPANIES' RESULTS COUNT MORE HEAVILY
DATA: VENTURE ECONOMICS/NATIONAL VENTURE CAPITAL ASSOCIATION; BASED ON TRADING THROUGH 11/8/2000

WHAT DO YOU BELIEVE?

I was raised a strict Roman Catholic but just found out I'm really closer to being an Orthodox Jew. A colleague who shares my religious upbringing is more or less a Quaker. And another raised as an Orthodox Jew is Baha'i, a faith teaching that the world is a single race and the day has come for its unification. Is this a crisis of belief?

No. We've been puttering around SpeakOut.com, a political Web site whose "religion selector" can help people see if they really know as much about their beliefs as they think they do. Obviously, we don't—or else we're just heretics. All you have to do is answer about 20 ques-

tions, covering everything from the nature of God to the family roles of husbands and wives. The selector then compares your answers to the doctrines of 26 major religions or belief systems and tells you which ones come closest to matching your beliefs. SpeakOut.com posted the quiz to broaden interest in the site after the election. With the holiday season prompting many people to head back to places of worship, we figure they should at least go to the right one.

—Timothy J. Mullar

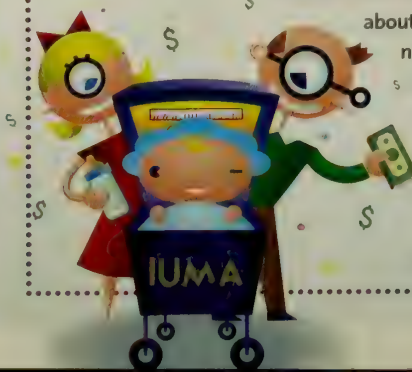
The Name Game

If this Internet tale had a theme song, it would have to be a cross between *Money (That's What I Want)* and *A Boy Named Sue*. When a startup called the Internet Underground Music Archive (IUMA) began looking for a cheap way to generate publicity, it got more than it expected.

Founder Jeff Patterson figured \$5,000 might entice someone to name a baby Iuma, after his site showcasing the music of unsigned bands. He capped the contest at 10 winners, but 20 more couples wanted to put their progeny

where the money was. "I didn't really worry much about my kid killing me someday over the name—and besides, the money helped get us into a house," says Travis Thornhill, father of the first Iuma baby.

Parents had to sign contracts promising not to change their Iuma's name until age 18. The tally: 4 boys, 6 girls. And a shrink to be named later? —Jeanette Brown





ANNOUNCING SOLUTIONS FOR THE NEW, NEW ECONOMY.

YOU KNOW, THE PROFITABLE ONE.)

The promise of e-business is every bit as robust today as it was when the "new economy" was declared. It's just that things that were labeled passé, like planning, infrastructure and profitability, have returned with a vengeance. Welcome to the new "new economy." No company is better suited for this new world of value-oriented e-business than SAP, with our supply chain, collaboration and customer relationship solutions. Out with the "new." In with the "new new." Learn more, type in www.sap.com

THE BEST-RUN E-BUSINESSES RUN mySAP.com



home page

Invest in Freedonia!

Ah, royalty. Elizabeth I. Louis XIV. And Prince Lazarus R. Long, ruler of New Utopia!

But the U.S. Securities & Exchange Commission isn't hailing new nobility. It's busting frauds who declare independent nations in cyberspace and then sell bogus investments. Prince Long, once Howard Turney of Tulsa, ran one of three such scams that were shut down this year. They were all pretty outlandish: New Utopia was to be built on piers off the Caymans, the Kingdom of EnenKio tried to sell \$1 billion in war bonds,

and the Dominion of Melchizedek claimed control of Antarctica.

How can this work? Blame slick online presentations. "The Net lends an air of credibility to things that otherwise seem ludicrous," says David M. Levine, senior adviser in the sec's Enforcement Division. The sec says victims sent \$1.2 million to what they thought was a Melchizedek-chartered bank, and Turney raised \$24,000. Us, we're saving our money for TV rights to the royal weddings. —Mike McNamee



"SALLY SEZ SAVE THE DOT-COMS"

With Web companies flaming out daily, Sally Struthers needs your help to save the dot-coms. "All over the world, dot-coms are hurting. They are suffering from faulty business plans and cash-flow shortfalls. They lack earnings and even the most basic of revenue models. In many countries, four out of five dot-coms will die within the next two years..."

This pitch is really just a parody of Struthers' famous ads for Save the Children. The complete version can be found at SatireWire.com, a source of pseudo-news on the New Economy. Founder Andrew Marlatt says it's all in good fun. And Struthers doesn't mind. Her spokesperson says she's "for saving anything but rubber bands and tinfoil balls." So, remember, "for as little as 79¢ a day (or the cost of the average Net stock), you can help..." —Ronald Grover



Stifling the Critics

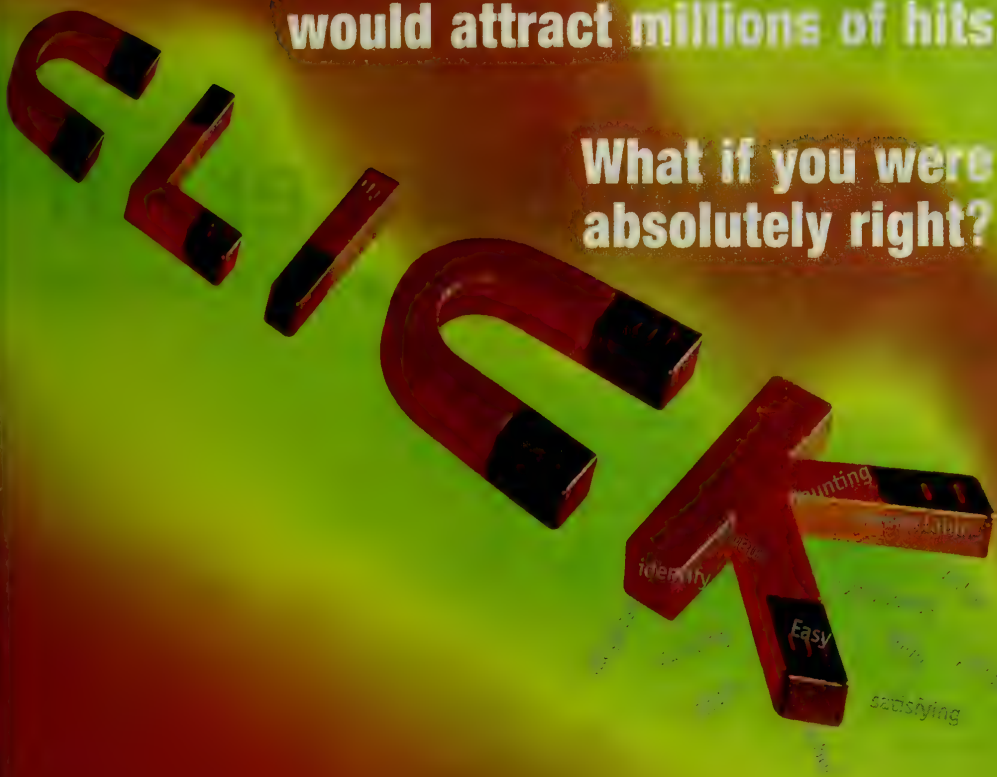
Anyone who runs a business understands the issue: What if some creep built a site named "YourCompanySucks.com?" Most big companies try to nab the obvious names before the critics do. So which names do you grab? Below is a pungent survey of which names companies and critics register the most. By the way, boss: Guess who registered BusinessWeekSucks.com while researching this piece? About that raise...

THE NAME	THE COUNT
...Sucks.com (or .net or .org)	15,000
IHate....com	2,500
...Bites.com	1,000
...Blows.com	800
...Stinks.com	600

DATA: NETWORK SOLUTIONS INC. REGISTRAR

**You told the Board your site
would attract millions of hits.**

**What if you were
absolutely right?**



The Tonic web applications management enterprise solution has arrived.

Suddenly the leading place of e-business is a much more comfortable place to be. No matter how many customers you attract.

Tonic's ability to identify a web application problem before your customers do, diagnose the cause, and take automated corrective action — guarantees a satisfying on-line experience.

You'll have peace of mind in knowing that your site is available and performing at peak. That makes the e-world far less daunting. Even predictable.

Up and running in hours, not days. Easy to use with immediate results. That's Tonic. And that's better.

www.tonic.com

TONIC™

Guaranteeing Your Net Works.™



BY ELLEN NEUBORNE

ellen_neuborne@ebiz.businessweek.com

Beyond the Banner Ad

With a shot of creativity, there are lots of ways the Internet can bolster brands

The latest study on banner ads is out, and the news is not good. Banners—the kind that sit like a valance atop your screen, are still the most popular form of Internet advertising, though not a very effective one, reports AdRelevance. The only I-ad delivering fewer eyeballs than the horizontal banner ad is the vertical banner ad, which runs the length of the screen

The worst part of this news is that it's not news. Everyone in marketing and advertising already knows that banner ads stink. They are a pale imitation of their richer television and magazine cousins. People's eyes slide over them easily. And if they dare to get uppity and try to wave at us and get our attention, we complain. Banners can't win. Yet marketers cling to them, unwilling to take risks and venture into other tactics.

That's a shame, because there is a smart way to advertise using the Net, which only a handful of companies have figured out. Instead of plastering ads on Web pages in the same old way, savvy companies are launching branding campaigns that tap into what the Web stands for—tech-smart folks who fancy themselves as hip.

Take Kmart Corp. The discount chain has a new tech offering, the BlueLight True Blue Personal Computer, your basic \$499 PC. It will do little in the way of big league profits. But that's fine, because what it loses in margin, it will make up in marketing. The key is in its name. It's branded with the moniker of Kmart's hot new online store, BlueLight.com. This gives Kmart a link to more affluent, techie customers—the Web's bread-and-butter.

Yule buzz. After years of searching for a Web strategy, Kmart is starting to get some traction with BlueLight. Among online discounters, BlueLight's site traffic is strong: More than 4 million consumers have signed on for its free Internet access. And, while rival Wal-Mart Stores Inc.'s latest online incarnation has drawn yawns, BlueLight.com has buzz heading into the holidays. The new PC borrows on that buzz and boomerangs it

back home to the discount aisles, elevating the Kmart image by connecting it to the Net, according to Heidi Gibson, director of product marketing at BlueLight. "We leverage that brand to serve the master brand—Kmart," she says.

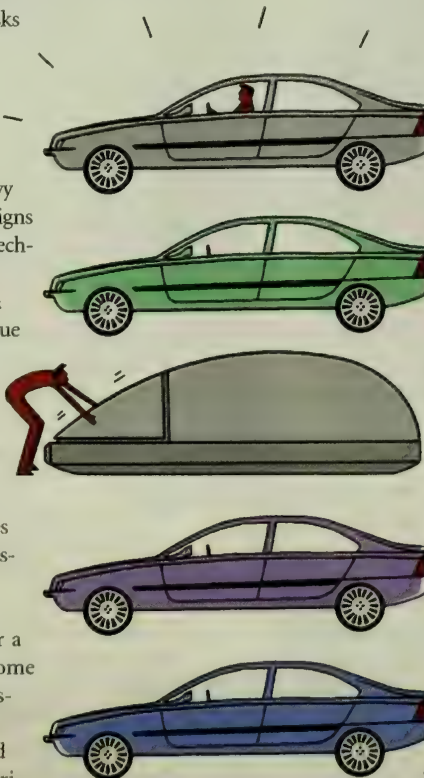
Volvo also is taking a stab at leveraging the Web for what it does best. To attract younger consumers and inject a little

pizzazz into its safe-and-boxy image, Volvo this month is launching its new model, the S60 sedan, entirely on the Net. Volvo is funneling its marketing for this car into the Web, primarily into real estate on America Online—with everything from informational Web sites to sweepstakes. By doing this, Volvo not only reaches key customers—company research shows 80% of its target market online—but also gives its brand a lift by breaking from traditional ads and making a cutting-edge statement online.

These marketing efforts are exciting because they stray from the beaten banner path. Instead of trying to make the Internet into a computerized TV, they reach out and use what works about the Internet. That's crucial. E-tailers will draw record numbers of shoppers this Christmas. But the Web remains the medium of the out-of-the-box and the adventurous. These are worthwhile brand attributes.

AdRelevance suggests that marketers try other ad shapes and technologies, such as the button or the form ad, which includes text boxes or drop-down menus. That may not solve the marketing problem

Creativity gets more attention than a fleeting moment of pixels. Quit banging your heads against those banners and find the ways the Web works. ●



The wisdom of experience.
The energy of youth.
Limitless potential.



covisint

Covisint, combining the heritage of the automotive industry and the promise of Internet technology to open a new window of possibility. Covisint is a global automotive business-to-business exchange developed by DaimlerChrysler, Ford Motor Company, General Motors, Nissan and Renault.

Here, connection increases organization.
Collaboration transcends geography.
Speed breeds efficiency.
Knowledge is exchanged securely.
This time, everyone gets to grow.

covisint.com





BY ROGER O. CROCKETT

roger_crockett@ebiz.businessweek.com

Surfing in Tongues

It's not English-only anymore. It's time for Net merchants to go multilingual

Around the globe, English is the language of power: It's the official tongue in dozens of nations, from Australia to Zimbabwe. It's spoken by millions of people in more than 100 countries. Business and cultural elites everywhere can manage at least a few words. It's not surprising, then, that as the Internet has revolutionized global commerce, English has become the lingua franca of the World Wide Web.

But *Achtung*, baby. This Web is finally living up to its worldwide name. Just four years ago, English was the native language of 80% of Web users, and nearly all Netizens could read it to some degree. Today, English is the mother tongue of less than half the people on the Net, says market researcher Global Reach Inc. That means merchants had better not talk dollars to German-speaking cybercitizens who think in Deutsche marks. "It gives you an incentive to use a service—if it's multilingual," says Brigitte E. Biver, a German working for Commerzbank in Chicago. "It's smart."

Attenzione, Web merchants. This is no passing phase. As the Net penetrates ever-deeper into non-Anglophone societies, more users won't know English. By 2004, only one-third of Web users will be native English speakers, estimates Global Reach. In three years, Internet spending outside the U.S. will top \$914 billion, two-thirds of the world's \$1.64 trillion in e-commerce, according to researcher International Data Corp.

Smart Net companies such as Yahoo! Inc. and Amazon.com are perking up their ears. Yahoo has sites in a dozen tongues, and Amazon hawks books on Japanese-, French-, and German-language sites. But they're the exception. Despite growing multiculturalism online, 55% of U.S.-based Net companies offer sites only in English, says IDC. Overseas firms are stepping into the breach. From Asian financial source Boom.com to Central European city-guide Globopolis.com, foreign-owned sites are creating pages in multi-

ple languages to reach their customers around the world.

Companies reap big benefits from going global. eBay Inc., for example, runs sites in Germany and France—dominating those markets, selling twice as many goods as competitors do. And GongShee.com, an online store for Chinese foods, launched an English-only site last spring, but sales were sluggish. In September, it added Chinese descriptions and orders jumped sevenfold, says Par Singh, chief executive of EthnicGrocer.com Inc., GongShee's parent.

Building a multilingual e-commerce site is no cinch. The overhaul can cost anywhere from tens of thousands to millions of dollars, depending on a site's size, says Al S. Pressman, president of Uniscape Inc., globalization software company. It's not just about language: A site must handle orders in different currencies, characters, and measurements. And there are differences

in the way cultures handle the Web.

Some languages, and site designs, are read from right to left. And U.S. Net icons such as mailboxes or shopping carts are unfamiliar in some countries. Designing Web sites is "different in each culture," says Alison C. Toole, globalization guru at Hewlett-Packard Co.'s e-business Resource Center. So snap to it, Webmasters: Translate and start posting pages that reflect the wide world of today's Web. ●



Babel.net

Although English was the first language of 80% of Web users in 1996, today it's the mother tongue of fewer than half.

Web users' first language:

	1996	2000
ENGLISH:	80%	49.9%
CHINESE:	1%	7.6%
JAPANESE:	4%	7.2%
GERMAN:	1%	5.9%
SPANISH:	1%	5%

DATA: GLOBAL REACH



WOULD YOU ASK CUSTOMERS
TO GO THROUGH THIS BEFORE DOING
BUSINESS WITH YOU?

NOW A FEW WORDS ABOUT YOUR WEB SITE.

To build rewarding relationships with your customers, you have to make it easy for them to do business with you. Today, that means implementing a Web strategy that allows you to interact with customers in ways you never could before. At SilverStream, we provide the software and services that help you deliver an Internet experience that has the breadth, depth and professionalism your customers and trading partners expect. We're setting new standards for building next-generation eBusiness Web sites. Sites with the most advanced eCRM technologies and B2B integration capabilities, to give you a real competitive edge – now and in the future. Are you ready to take your eBusiness to a whole new level?

www.silverstream.com

SilverStream

Are you ready to do eBusiness?



BY TIMOTHY J. MULLANEY

tim_mullaney@ebiz.businessweek.com

A Mixed Bag for E-Xmas

MySimon loses some luster, but Amazon.com shines

Christmas in my family comes with its own traditions and lore, which my six siblings and I have relayed to leery new spouses in the odd wedding toast. One of the best stories is the one about my brother storming down the stairs on Christmas Eve in the 1970s demanding to know who stole

his \$2, because without it he couldn't buy presents. Poor us.

So one can imagine how I took to Web business models that promised consumers more leverage, especially during the holidays. Tricks such as shopping bots that seek out the lowest price on the Web, and sites where groups of buyers can team up to get group-buying discounts on popular goods promised Christmases even brother Pat could afford! But when I looked at some of them last year, I found mixed results. And when I looked again this year, expecting things to be better, I found mixed results again. Some of the Web models I expected to force big price cuts have done little. And many sites still don't tell you enough about the products they sell. Here's how three big sites with different approaches stacked up as I worked through a shopping list that was part real and part hypothetical.

Mercata Most perplexing is Mercata.com, the group buying site backed by Microsoft co-founder Paul Allen. The idea behind Mercata is to limit selection somewhat so the group's buying power can be concentrated. Last year I figured all the site needed was time and maturity to become a major force, but selection is still poor and prices are often high.

Here's how it works: You register for a PowerBuy, which is basically a sign-up period of several days in which you tell Mercata what you'll pay for the goods you bid on. A few days later, you see how you

fared. The group's size determines the price—Mercata does explain the details—and everyone whose bid is equal to or higher than the final price gets the lower group price in the end. If you bid \$120 for a Razor scooter and a big group pushes the price to \$99, you pay \$99.

Selection and scanty product information are two big problems that undercut Mercata's price proposition. A search for carry-luggage yielded three choices, and only 10 TVs were available even though electronics is Mercata's strong suit. Product information is skimpier than at major bot sites, let alone the wonderfully merchandised Amazon.com Inc. And Mercata doesn't consistently

command better prices than you can find on

Web—or even at the Wiz. We only about 400,000 monthly visitors (outside of holiday time), power that group buying is supposed to afford just isn't there.

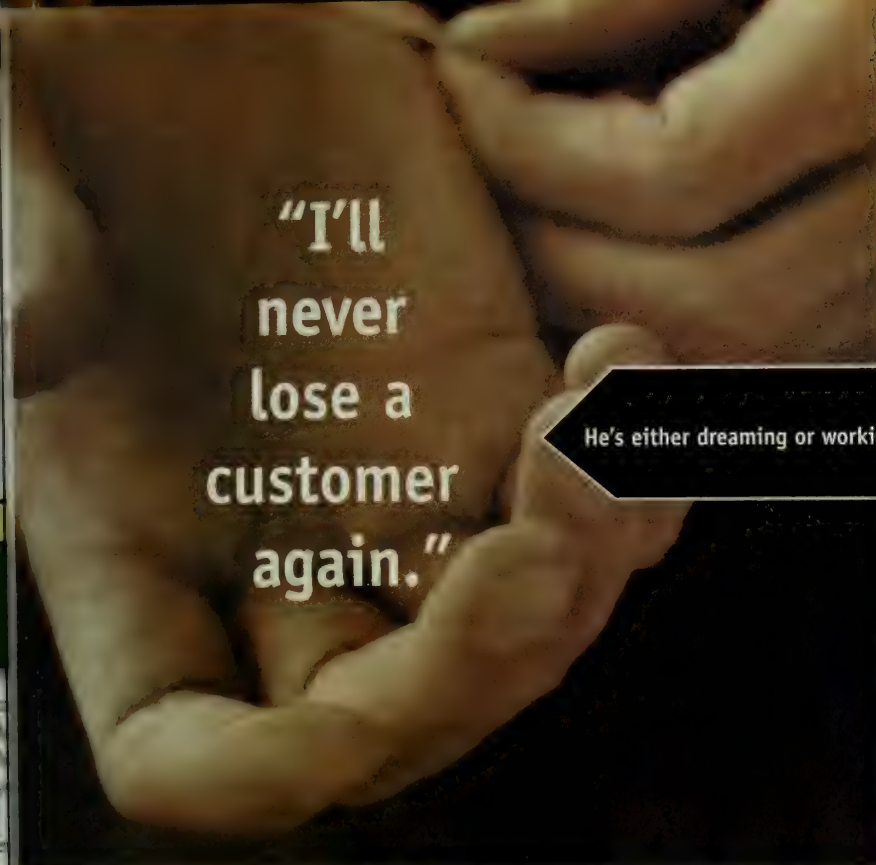
Disappointment with Mercata's prices was nearly constant. Bots mySimon and Dealtix trounced Mercata's price when I came to a Palm V10x. In PCs, Mercata wanted more than \$1,000 for a Compaq system running on a 633MHz Intel Celeron chip. I found more powerful PCs on Compaq's own Web site for less. Mercata's luggage prices could be matched—for a bigger bag—in the same brand—eBags.com, and so on. The best-of-the-Web price on Mercata was for a Movado watch. Over the course of a week, its prices moved only a few dollars lower as more people bid. Its bidders must wait for



Web reviews

Shopping sites

- www.mysimon.com
- www.amazon.com
- www.mercata.com



**"I'll
never
lose a
customer
again."**

He's either dreaming or working with CA's Intelligent CRM Suite.

Customer Intelligence

Human Touch

Customer Service

Sales and Marketing**

There have never been so many ways to lose a customer. Thanks to the Internet, our customers' expectations have never been higher. Their sources of information have never been greater. And their access to your competitors has never been faster. What's more, research tells us that companies can boost profits by almost 100% just by retaining 5% more of their customers.* The first step to retaining those customers is gaining a better understanding of them.

Computer Associates' Intelligent CRM offers you a comprehensive suite of applications to understand and retain those demanding customers. From our predictive Customer Intelligence that mines the information in your database for decision-making analyses and insights to our predictive Sales and Marketing that provides you with a consolidated view of all customer activity across your business through personalized portals: CA's Intelligent CRM Suite is unique in the industry.

Furthermore, our 3-D visualization technologies bring information and analyses to life and give customers, staff, and suppliers the opportunity to perceive it in all its many dimensions rather than simply view it. Whether you begin with a single application or choose the entire solution, it's powered by Jasmine® ii, CA's eBusiness platform. So it seamlessly integrates with your existing systems and applications to leverage your investment, regardless of underlying technologies.

To find out more about how Computer Associates can help you get closer to your customer and empower your staff, visit www.ca.com/solutions/crm.htm or call 800-225-5224. Don't wait too long, your competitors are reading this too.

© 2000 Computer Associates International, Inc., Islandia, NY 11749. All trademarks, trade names, service marks and logos contained herein belong to their respective companies. *Harvard Business Review, Sept.-Oct. 1990, Frederick F. Reichheld and Earl Sasser, Jr., Zero Defections: Quality Comes to Services.

provided through a partnership with eWare.

**COMPUTER
ASSOCIATES**
Software superior by design.

end of the PowerBuy to know what the price is going to be—let alone to get their stuff. No bargain, that.

mySimon.com MySimon is the leading bot site on the Web. It does what it's supposed to do: deliver price comparisons, and a bit more. But it has regressed in some ways since I reviewed it last year. In particular, its data about products isn't as deep or as easy to use as it once was. The reason is sad but simple: In 1999, mySimon tapped a lot of that info by partnering with Productopia.com, a for-profit twist on *Consumer Reports* that closed in October. The loss of Productopia is a big one. The site let you research dozens of categories and see recommendations. If you wanted a digital camera, you could choose between its picks, the best value models, and so on—then let mySimon find the best price on the camera you chose. The system worked wonderfully: I chose a digital camera by relying on Productopia and mySimon, beating Wal-Mart's price by \$30.

This year, however, mySimon has user-written reviews and general buying guides, which are mostly lists of staff-recommended gifts. The best info comes from questionnaires that help match you to different products, but links to these questionnaires are so small that I didn't initially notice them. They are no match for the detailed comparisons Productopia complemented with lively writing. But mySimon's price still beats both Amazon and Mercata 8 or 9 times out of 10.

The site certainly has its points. One strength: mySimon addresses concerns that a cheap price from a no-name store might prove a bad bargain. It does that by listing prices next to a store's reliability rating from Gomez Advisors Inc.

Amazon After hard-core bot shopping, Amazon.com seems positively traditional. Like offline stores, Amazon offers selective discounts to get your attention but sells most goods at full price or close to it. What sets it apart is what the full price pays for—lots of product info, sharp merchandising, recommendations, and a sense of fun.

Considering it was Amazon, I began with a book for my other older brother, a big-shot economist. Dealttime.com delivered BUSINESS WEEK economics editor Michael J. Mandel's new book, *The Coming Internet Depression*, for just \$13.44, well below Amazon's \$19.20. But Amazon made up the difference in other ways—especially with well-written reviews of Mandel's book, some from magazines and others from readers who had absorbed the book and commented thoughtfully on it. Amazon is not that complete outside of books

What sets Amazon apart? Lots of product information and sharp merchandising

and music, but it's unexpectedly detailed considering the wide range of products it sells. Its merchandising dangles fun things in front of you to induce impulse buys. My favorite: Checking Amazon's prices on Razor scooters, I found its list of Top 10 Corporate Good Off Gifts. The \$29 Wiffle-ball pitching machine, perfect for long straight office hallways, sounded like a must.

The development of all these models highlights that the Web has room for the new and the old. Most of us overestimated the importance of dynamic pricing, from Mercata to priceline.com. But it does have a place. Other people value the frills Amazon offers more than rock-bottom prices. The market needs a mix. And this holiday season, for all of this year's problems, it still has one. ●

THE BOT'S STILL THE BEST

Web technology fostered all sorts of only-on-the-Web pricing: Name-your-own-price, group buying, and shopping bots that automatically find the best price on standard goods. So what's the best way to get a good value? Here's what we found.

		MY SIMON MYSIMON.COM	AMAZON AMAZON.COM	MERCATA MERCATA.COM
Product Information	Amazon delivers the most, which is one reason it usually commands full price. Mercata has general shopping guides I didn't find useful. MySimon has general guides and product-comparison utilities, but suffers from the loss of data it used to get from now-defunct Productopia.com.			
Prices	MySimon delivered the lowest prices most of the time. Mercata's group buying model delivered many prices we could beat with a simple look at the Sunday paper. Amazon discounts selectively, like the major offline retailers.			
Convenience	Amazon has successfully built its business around delivering convenience. At Mercata, you have to wait to know an item's final price—or if you'll get the stuff. MySimon's convenience hinges on the quality of the store with the lowest price, as rated by mySimon partner Gomez.com.			

E-MARKETPLACES ARE TAKING OFF. DON'T GET LEFT BEHIND.

Enterworks can help you reach new customers faster by quickly joining all the e-marketplaces you need to sell in.

If you want to quickly reach new customers through e-marketplaces, call Enterworks. Our e-business integration solutions give you a competitive edge by getting your business processes and catalog content to work smoothly with the e-marketplaces of your choice — faster and less expensively than you might think.

- We help you *leverage your best practices* by automating processes in critical areas like inventory management, PO fulfillment, and invoicing, and then integrating them quickly and securely with e-marketplaces.
- We make sure that you're *always prepared for changing market conditions* and customer requirements by making it easy to instantly deliver up-to-date catalog content to marketplaces in the format they require — xCBL, cXML, RosettaNet PIPs, and others.

And Enterworks protects your cherished brand equity, too, with pre-built process templates that support Ariba's PunchOut and RoundTrip/OCI from Commerce One-SAP — so buyers know they're buying from you when they make purchases through the marketplace.

E-marketplaces can be a powerful way to find and serve new customers. To learn more about Enterworks' solutions for helping you take advantage of e-marketplaces to build new business relationships, visit our Web site at www.enterworks.com/1031.html and download a FREE executive overview of *Challenges and Solutions for Supplier Enablement*. Or call 888-242-8356, ext. 1031.

Enterworks. We'll help you arrive on time in successful e-marketplace sales.



Enterworks®

POWERING PORTALS AND E-MARKETPLACES

1-888-242-8356 x1031 www.enterworks.com/1031.html

amazon.com.

YAHOO!

CISCO SYSTEMS



 **Sun**
microsystems

**The companies
that know the
Internet best
run Oracle**

ORACLE
SOFTWARE POWERS THE INTERNET

www.oracle.com

Copyright © 2000 Oracle Corporation. All rights reserved. Oracle is a registered trademark, and Software Powers the Internet is a trademark or registered trademark of Oracle Corporation. Other names may be trademarks of their respective owners. AMAZON.com is the registered trademark of Amazon.com, Inc. Copyright © 2000 Yahoo! Inc. All rights reserved. Cisco, Cisco Systems and the Cisco Systems logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries. Sun, Sun Microsystems and the Sun logo are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

BY JOAN O'C. HAMILTON

joan_hamilton@ebiz.businessweek.com



'So Exciting I Can't Sleep'

a dot-com winter, we track a Stanford student taking time off to pursue his vision

It's a rainy afternoon in Menlo Park, Calif., and I'm slurping French onion soup in a local bistro, Vida, with my young friend Stephen Oskoui. "It's strange in Silicon Valley right now. You can feel something different in the air," Oskoui says. There is a trace of puzzlement in his large, intense eyes. It is autumn, but we are talking about the dot-com winter that is hard upon us. For a positive thinker like Steve, even that mild observation is startling.

I first met Steve, a 21-year-old computer science wizard at Stanford University, about a year and a half ago. I was working on a column about young entrepreneurs and he had just turned in a seven-figure offer to sell some technology that he and a friend had put together over a summer. The buyer insisted that Steve and his buddy would have to be part of the deal, and at the time, Steve was determined to stay in school.

Steve and his tech savvy cronies are the bonus babies of the

dot-com Economy. Many aren't old enough to be millionaires, but nonetheless are as well-known to venture capitalists as Heisman Trophy winners. Some, like Napster's Shawn Fanning and former Netscape's Angus Davis, now of Tellme Networks, have attained near rock star status.

Steve liked Steve right off. He's smart, polite, and lacking the braggadocio of many of his peers. Despite that eye-popping offer, he decided that college was a great chance for him to grow as a person, not just as a professional. So you can imagine my dismay when, one day, I received an e-mail from Steve that read, "I recently filed for a leave of absence from Stanford and will be gone for at least the next year... I'm not taking this decision lightly and I'm only doing it because I've hit on something that's so exciting I can't sleep."

That something is a startup. He and a fellow Stanford Valley software engineer partner are looking to produce a flat-rate cell-phone service aimed at the 15-to-26 crowd. But there was a seven-figure check awaiting him this week. In fact, Steve's note arrived soon after the dot-com bubble popped. As I read his note with some concern I thought, If you don't jump when you had a sure thing, what now?

The lunch at Vida is one of several we've had since that e-mail. Meanwhile, market conditions have gotten worse. The golf retailing site where Steve interned last summer, Chipshot.com—yet another concern led by a young star that raised over \$20 million—went bankrupt. Many other highfliers are now trading in what my friend, biotech consultant Joanna Sullivan, recently christened the "drill bit" range—11/16 and other frightening fractions. Steve, however, is undaunted. "What I'm



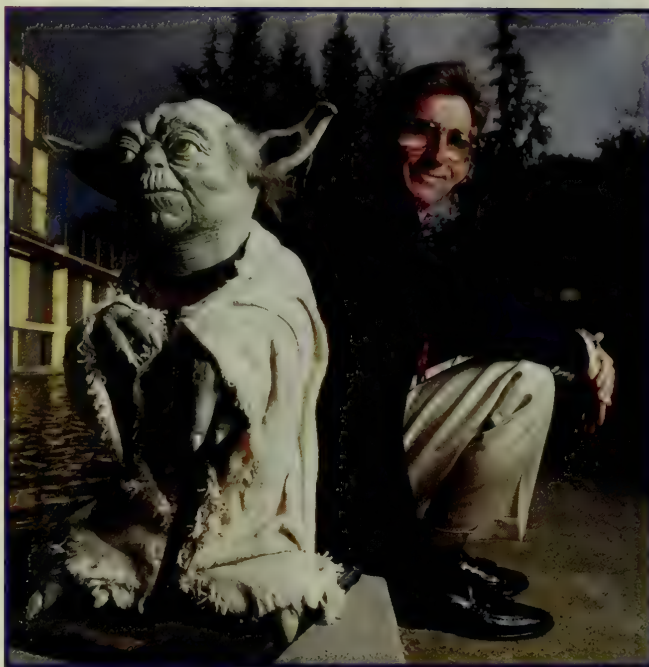
Oskoui is working on a pivotal deal

doing now feels so right," he insists.

His company, Piko Communications, is up and running in a nearby two-bedroom apartment where the decor is Bachelor Provincial. Steve often has the sore-looking red eyes common to late-night hackers. Piko is nothing if not ambitious: It must assemble software, hardware, and networking capability. Steve admits it has been harder than he thought it would be. The first round of meetings with venture capitalists did not produce those "Aha!"s Steve might have hoped for, nor a fat bankroll of seed money. He and his partner have changed strategy and product focus since his first bouts of insomnia. He has had to liquidate some of his own

stock portfolio in this down market to buy the domain name, Piko.com, from a young Hawaiian woman for \$20,000. (Piko is Hawaiian for "your connection to your family.") However, Steve says he has some smart backers interested in his outfit, and an important partnership that could be finalized any day now.

It's impossible to predict whether the stars will align for Steve and Piko, but I think there is something important that resonates in his phrase "so exciting I can't sleep." We have agreed to keep meeting, and starting in January I hope to give my online readers monthly updates on how Piko develops (ebiz.business-week.com). From talking to Steve, I have come to realize that the entrepreneurial calling is as much about where you are in your life as it is about any one opportunity. After he turned down that other offer, Steve spent a year as a resident assistant in a Stanford dormitory, where he dealt with students and their highs and lows—a far cry from the self-directed, solitary, Web-site-building years that first gave him the entrepreneurial bug. He has a supportive girlfriend whose parents are entrepreneurs. Also, he explains, "When I'd finish a paper, I didn't feel like I'd contributed something to the world. My hobby was always thinking up business ideas and figuring out what I could do to make them work. Now, I'm do-



Kosnik is mentor to the bonus babies

"No more three-MBAs-and-an-idea"

downturn will last. They continue to flock to venture capitalists the way freshman visit their academic advisers whenever a new market looks interesting. Heidi Roizen, a venture capitalist at Softbank, calls the Stanford student who recently assured her that his business proposal wasn't some fly-by-night notion. "You have to realize that I've been thinking about this idea for an entire quarter," he said.

Now that the big chill is in the air, what will become of the bonus-baby generation? "It could be that companies like Microsoft and Hewlett-Packard will again become the finishing school for young entrepreneurs," says Trevor Traina, the 32-year-old founder of shopping engine CompareNet. Traina made millions selling CompareNet to Microsoft in 1999 and now says he sees an awful lot of unwrinkled faces in the company cafeteria—faces he thinks a slowing booming market might have attracted to startups.

Stanford professor Tom Kosnik, a mentor to Oskoui and dozens of other engineering and business school students, says he sees no despair among the young go-getters. The engineering school's 16 courses on entrepreneurship have long waiting lists, and on-campus talks by high-tech heroes are standing room only. Students now realize they need more than "three-MBAs and an idea," Kosnik says. "But students still believe they can create great companies on the combination of good technology and the power of their own will and vision."

The inexperience, even naivete, of scores of young entrepreneurs certainly helped fuel the recent dot-com excesses. Now, however, it will be interesting to see whether the smarts and optimism of Steve and others might also help revive tech. Innovation and force of personality swirls around many of these young stars like a brisk, invigorating wind. You can feel it in the air. ●

POINTERS

At universities such as Stanford and MIT, on-campus organizations fostering entrepreneurship have become as popular as homecoming parties. And it's not unusual to see high-tech execs dropping by for a guest lecture—and maybe even to eyeball a few hot engineering prospects. See Stanford's Business Association of Stanford Engineering Students program at <http://www.bases.stanford.edu> and MIT's Entrepreneurship Center at <http://entreprneurship.mit.edu/>



MILLION DOLLAR SERVICE WITH OVER HALF A MILLION IN SAVINGS.

Saks Incorporated has long been famous for attentive, personal service. So when they wanted to restyle their customer service operations for today's eBusiness environment, they chose Aspect. Using Aspect eCRM solutions, Saks integrated three contact centers into a single virtual contact center. Without adding a single agent, Saks now handles 16% more customer interactions. Whenever—and however—their customers choose. It's all resulted in three-quarters of a million dollars in annual savings, while preserving Saks' legendary service for generations to come. It seems that success does indeed come gift-wrapped.

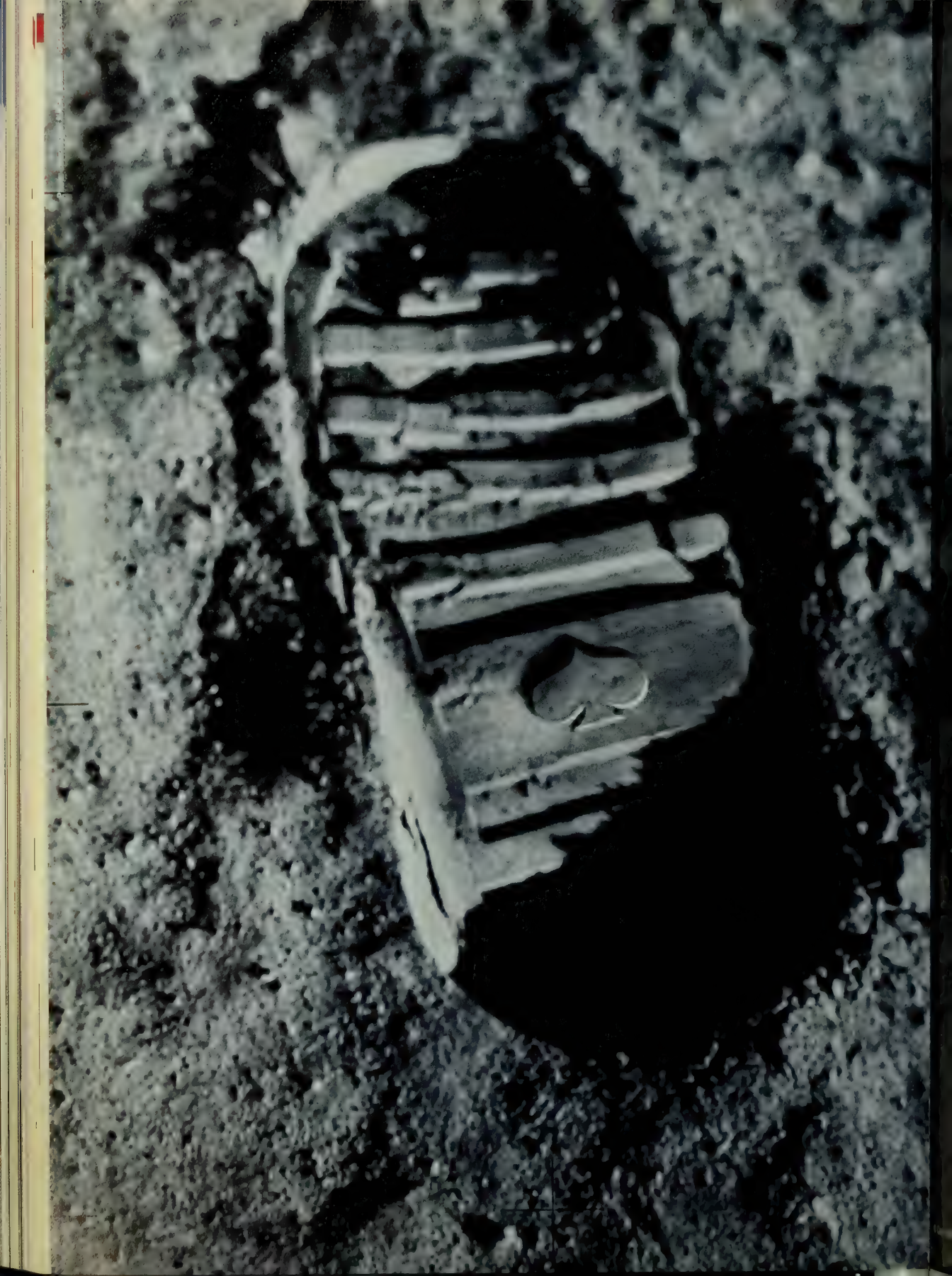
Get the whole story behind Aspect's solution for Saks at www.aspect.com/go/maxsuccess or call us at 1-888-412-7728.

Aspect, the Aspect logo, and the phrase "The Starting Point for eBusiness" are trademarks and/or service marks of Aspect Communications Corporation in the United States and/or other countries. All other product or service names mentioned in this document may be trademarks of the companies with which they are associated.
© 2000 Aspect Communications Corporation



ASPECT

The Starting Point for eBusiness™



**If it's part of a focused strategy,
your people embrace it,
your customers buy it and
your technology supports it...**

One idea can take you
where you want to go.

**From innovation to execution,
our people deliver.**





The New Software Whizzes

Meet the scrappy lot who were the first to spot the potential of Web software—and are now cashing in

by SPENCER E. ANTE
AND JIM KERSTETTER

Kevin O'Connor's career was on the line. In the fall of 1999, O'Connor, the head of Deutsche Bank's applied technology group, was put in charge of building a new Internet computing system for the entire financial-services conglomerate, an outfit with 93,000 employees serving more than 9 million customers. O'Connor needed to pick a technology that would serve as the sturdy foundation of Deutsche Bank's global e-commerce operation. The cost of making the wrong choice could be hundreds of millions of dollars in

PHOTOGRAPHS BY ALAN LEVENSON





To identify the players,
see page 33

wasted capital, useless employee training, and ticked-off customers.

In another era, O'Connor's job would have been a no-brainer. He could have picked a tried-and-true technology supplier such as IBM, Microsoft, or Oracle, knowing that things couldn't go too far wrong. Not these days, however. Even though IBM discounted the price of its e-commerce software by over 50%, Deutsche Bank decided to pass. Instead, O'Connor opted to license software that he felt worked better from a Silicon Valley upstart, BEA Systems Inc. The deal is so important to Deutsche Bank that O'Connor arranged to have a sort of Bat Phone hooked directly into the office of BEA Chief Executive William T. Coleman III. Got a problem? Call Coleman, who will bird-dog it until it's fixed. "I've never had to use the phone," says O'Connor.

Move over, Bill Gates and Larry Ellison—there are new pretenders to the software throne. Out of the Internet tumult of the past five years, a band of software upstarts has emerged that, unlike their dot-bomb brethren, look to have real staying power. They're a scrappy lot that were the first to figure out the huge potential of Web software and are now starting to cash in with altogether new kinds of programs—from managing bazillions of Web pages to providing online customer help. With kooky monikers such as BEA, i2, Kana, and E.piphany, the newcomers are snaring big customers, shaking up the computer landscape, and leaving industry stalwarts scratching their heads.

Could it be? After more than a decade in which the Big 3—Microsoft, Oracle, and IBM—dominated the software scene, could there actually be competition stiff enough to upset the status quo? Is there a new Microsoft or Oracle in the making? The odds are surprisingly good. Out of the hundreds of software companies launched since 1995, 16 stand out as leaders in their markets. Their quarterly revenues are growing from 77% to 2900% year over year, and half of them are—gasp—profitable. "We want to do for e-commerce what Microsoft did for the PC," says BEA's Coleman, a former Sun Microsystems Inc. executive.

BEA is off to a promising start. In just five years, the company has landed 8,000 customers, ranging from Old Economy stalwart General Electric Co. to Net pioneer Amazon.com Inc. The draw: BEA's specialized computer-server software that allows corporations to custom-build their Web site operations. For the quarter ended on Oct. 31,



Software's Brash Upstarts

Procurement

These programs enable companies to automate purchasing.

■ **MARKET SIZE:** \$1.2 billion in 2000; \$3.9 billion in 2003

■ **PLAYERS:** Ariba is the leader but faces Oracle and threats from SAP, Commerce One, and upstarts.

E-Marketplaces

The software is used to build online exchanges—connecting buyers and sellers.

■ **MARKET SIZE:** \$428 million in 2000; \$2.1 billion in 2003

■ **PLAYERS:** Commerce One rules the realm, but Ariba and FreeMarkets are gaining.

Supply Management

This software connects a company's Web operations with its suppliers.

■ **MARKET SIZE:** \$5.3 billion in 2000; \$14.6 billion in 2003

■ **PLAYERS:** i2 connects the links in supply chains. webMethods and Vitria specialize in hooking the supply chain to corporate software. i2 dominates, but look out for Oracle and SAP.

Web Content Distribution

Software that helps companies get Web pages to users computers more quickly.

■ **MARKET SIZE:** \$1 billion in 2000; \$3 billion in 2003

■ **PLAYERS:** Akamai and Inktomi are the bigs, but Oracle and Cisco are entering the market.



◀ The Sweet 16 of Net software

Shown, front row: left to right:

William Coleman, BEA Systems

Keith Krach, Ariba

JoMei Chang, Vitria

Jeet Singh, Art Technology

Michael McCloskey, Kana

Communications

George Conrades, Akamai

Shown, back row:

Sanjiv Sidhu, i2 Technologies

Pehong Chen, BroadVision

Greg Peters, Vignette

Mark Hoffman, Commerce One

Roger Siboni, E.piphany

Phillip Merrick, webMethods

Not shown:

David Peterschmidt, Inktomi

Martin Brauns, Interwoven

Robert Wrubel, Ask Jeeves

Chuck Bay, Broadbase

BEA reported revenues of \$224 million, up 77% from a year earlier, and a \$31.3 million profit. This year, analysts figure the company will hit sales of \$925 million. That may seem like small change in the grand scheme of things, but it's a far sight more than Microsoft's \$7.5 million in revenue when it was the same age. "BEA has an opportunity to be a major platform for this new wave of computing for the Web," says analyst Rick Sherlund of Goldman, Sachs & Co.

Indeed, it's the promise of radically new ways of doing business that could catapult these small fry into the big leagues. Using the Internet, companies are tackling big and small projects alike—from capturing a company's storehouse of expertise on Web pages so employees can do smarter work to comparison-shopping for tape dispensers and toilet paper with the click of a mouse. The explosion of ways that companies are squeezing out new efficiencies via the Web holds the tantalizing possibility that Internet software will eventually grow to dominate the market. Today, e-business software is a \$13.5 billion market—just 13% of the entire corporate-software market. Yet in just three years, e-biz software will account for \$44.7 billion in revenues and 24% of the whole, according to Merrill Lynch & Co.

Even the threat of an impending economic slowdown hasn't dampened enthusiasm for the brash upstarts. Experts say the

While giants like Microsoft, Oracle, and SAP dominate traditional software, BUSINESS WEEK editors have picked 16 as top dogs in Net markets.

Web Content Management

These programs help companies manage thousands of pages on Web sites.

MARKET SIZE: \$917 million in 2000; \$1.9 billion in 2003

PLAYERS: Vignette and Interwoven dominate the market, but up-and-comers such as IntraNet Solutions and eTree are threats.

E-Marketing

This software tracks customers' interests and predicts what and when they'll buy.

MARKET SIZE: \$564 million in 2000; \$1.9 billion in 2003

PLAYERS: E.piphany has jumped ahead, but Siebel is always a threat, and SAP and Art Technology are wading in.

Commerce

This software lets companies build product catalogs, collect payments, and track deliveries.

MARKET SIZE: \$3.7 billion in 2000; \$9 billion in 2003

PLAYERS: BEA Systems leads, but BroadVision, IBM, and Art Technology are contenders.

Customer Support

Automates online customer service tasks such as e-mail questions about billing or delivery.

MARKET SIZE: \$433 million in 2000; \$1.8 billion in 2003

PLAYERS: Kana Communications and Ask Jeeves are leaders. Siebel Systems is a major rival.

i2 Technologies Inc.

CEO: Sanjiv Sidhu

FOUNDED: 1989

BUSINESS: Software for linking up with suppliers

MOST RECENT QUARTERLY

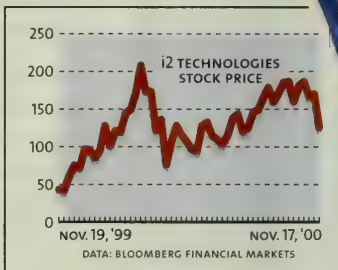
REVENUES: \$319 million, up 118% over a year ago

MOST RECENT QUARTERLY NET INCOME: \$28.8

million, up 188% over the same quarter last year

ANNUAL REVENUES AT FIVE YEARS: For 1994, \$11.5 million, 53% more than Microsoft at the same juncture

PROSPECTS: i2 is the king of internal supply-chain software but must now transform its programs into a more collaborative application that connects a business to its external trading partners



young software makers are likely to fare better than the rest of the industry because they sell must-have products that can improve productivity or help open new markets. Boise Cascade Corp., for example, is automating the way it handles transactions with suppliers and customers, using the Internet to speed up communication and share information. The paper-products company is spending \$100 million on technology this year, including about \$1 million on marketing software from E.piphany Inc. in San Mateo, Calif. Says Robert Egan, Boise Cascade's director of information services: "You have to keep

Nasdaq Composite Index. And some have soared. The stock of Ariba, a maker of e-marketplace software, is up 44%, BEA's shares have climbed over 93%, and Interwoven, whose software manages Web content, is up a startling 200%.

That doesn't mean that every one of these pipsqueaks will grow to be a Goliath. Any Microsoft wannabe must first contend with Microsoft, which is also angling for a fat slice of the Web-software pie. Then there's IBM, Oracle, SAP, and Siebel Systems, today's software kings, each with its own strategy for grabbing market share in the new Net fields. And they wield key advantages: Gobs of money, existing relationships with customers, and the ability to price low on key products to edge out the whippersnappers. Says Oracle CEO Lawrence J. Ellison: "You have to distinguish between companies that have endurance and meteors." Are the upstarts cowed? "Oracle and SAP are dying a very slow death," responds

Sanjiv S. Sidhu, CEO of rival i2 Technologies

Who will be the winners and who will be the losers? After the dust settles 5 or 10 years from now, analysts predict that just a handful of companies will end up being the royalty of software. Microsoft seems almost sure to be among the winners, though not likely the king of kings that it is in the PC world. Microsoft's software for heavy-duty servers and computers is shaping up as a solid foundation for e-business applications. But so far, it's the software platform of choice for only one of the 16 upstarts—Commerce One Inc.—to develop its programs on. Worse, customers have yet to clamor for it (page 42). Other giants that seem likely to retain their thrones: Oracle, because its databases power many of the largest e-commerce sites, and IBM, thanks to its mighty consulting business.

And the new kings? A handful of the upstarts will carve out sizable niches where they can thrive—such as Vignette Corp. for handling Web-site content, and Commerce One and Ariba for e-marketplaces. To become a true giant in the industry, the upstarts will have to branch out to offer a broad set of products that create software so powerful that it becomes a platform much like Windows—for customers and other software companies build on. Two of our 16 insurgents have those qualities: i2 can help corporations automate a huge swath of their businesses—from

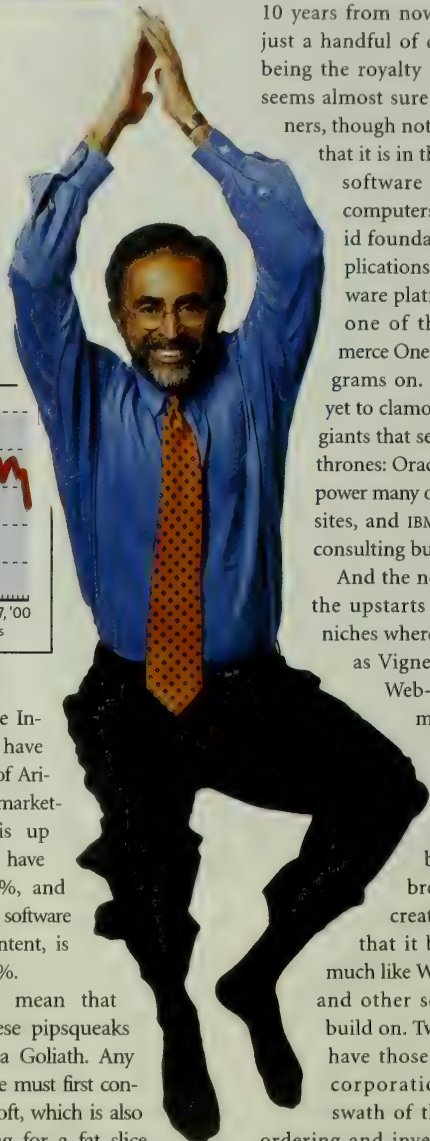
ordering and inventory management collaboration with suppliers—while i2 has the best chance of supplying the building blocks upon which Net computing is built. "BEA is probably the next big infrastructure company," says Charles Phillips, a managing director at Morgan Stanley Dean Witter.

In each case, the Net pioneers spot an opportunity when others simply did not see it. Four years ago, for example, Commerce One CEO Mark Hoffman foresaw that there would be a need for software to support e-marketplaces in which buyers and sellers could meet and make deals.

Watch out for the Old Guard. They want a place at the table

moving ahead. Five years out, all of our competitors will have these capabilities."

It's spending plans such as Boise Cascade's that have kept the stocks of the insurgents afloat in a market that's under water. In the past six months, shares of our 16 upstarts have risen an average 13%, vs. -5% for the



most of the established companies didn't survive that out until late last year. Often, these CEOs took huge risks to get their companies off the ground. i2's Sidhu strapped his company with \$200,000 of his personal savings. He didn't collect a salary for the first two years, and, to save money, he insisted that new employees assemble their own desks when they first reported to work. Others walked away from megabucks of money by leaping from e-bet mature companies to the uncertainty of shaky startups. BEA's Coleman behind 50,000 shares of not-yet-vested Sun Microsystems stock, which would have been worth \$72 million. His reward: BEA shares are now worth \$650 million. Whether he can turn that nest egg into a fortune of Gatesian proportions depends on what happens next.

Taking an early lead with the latest technology plays a major role in separating winners from losers. Unlike the established giants, which are trying to adapt their old products to the Web world, the upstarts have been able to build from scratch. That means that their programs are easier for customers to install and use and easier to iterate when new features become available. "Running these companies is not so much about the competition as it is figuring out the next generation of technology," says David C. Peterschmidt, CEO of Inktomi Inc.

Vignette Corp.

CEO: Greg Peters

FOUNDED: 1995

BUSINESS: Web site content management software

MOST RECENT QUARTERLY REVENUES:

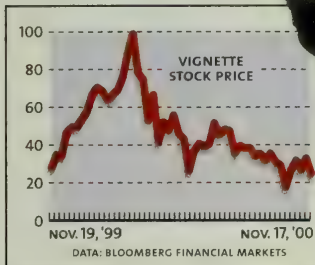
\$110 million, up 35% over a year ago

MOST RECENT QUARTERLY LOSS: \$2.8 million, vs. a loss of \$4.87 million a year earlier

ANNUAL REVENUES AT FIVE YEARS:

For 2000, estimated \$350 million, 4,566% more than Microsoft at the same point

PROSPECTS: Vignette is the leader in content manager, but it will face bigger competitors as it broadens into new markets like B2B software



in Foster City, Calif., which makes software that speeds content delivered on the Net.

Keeping that technological edge is a necessary but costly proposition. Inktomi, for example, is spending over 20% of its revenues

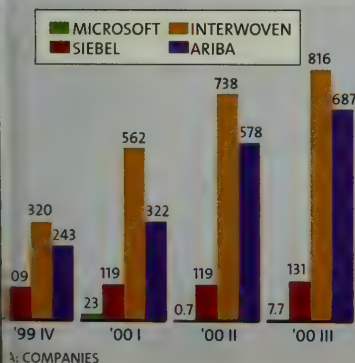
on research and development. And that's not unusual for the top tier of Web-software makers. The 16 insurgents we cite are, on average, funneling 23% of their revenues into R&D—compared with just 7% for Siebel,

How the Challengers Stack Up

A sampling of upstarts compared to giants

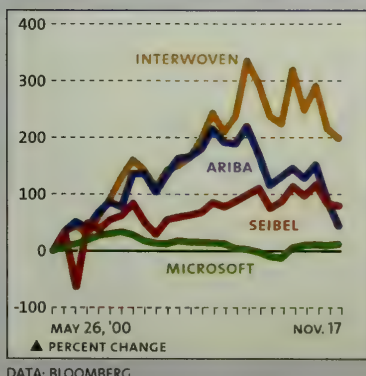
The upstarts are growing fast...

YEAR-OVER-YEAR QUARTERLY REVENUE GROWTH



... boosting their stock performance...

PERCENTAGE INCREASES



... and winning buy recommendations

ANALYST RATINGS

Nov. 21, 2000

COMPANY	STRONG BUY	MOD. BUY	HOLD
Microsoft	6	9	2
Siebel	16	1	0
Interwoven	2	2	0
Ariba	16	14	1

Three Months Ago

COMPANY	STRONG BUY	MOD. BUY	HOLD
Microsoft	9	15	3
Siebel	14	4	0
Interwoven	4	1	0
Ariba	15	13	2

DATA: ZACKS.COM

11% for Oracle, and 16% for Microsoft.

Some upstarts have learned the hard way that old-time technology could hurt them dearly. Last July, BroadVision Inc., a maker of software for running online shops, lost one of its blue-chip customers, American Airlines Inc., to startup rival Art Technology Group. American Airlines declined to comment on the deal, but analysts estimate that it may be worth at least \$150,000 to Art Technology. The reason for BroadVision's loss: It was slow to embrace a new kind of software programming called Enterprise Java Beans that makes software products from different suppliers fit together like bricks do at different construction sites. The fallout was immediate. Although BroadVision was profitable and growing at a 300% annual clip, the Redwood City (Calif.) company's market cap was cut to a third of its June value in September when the shares bottomed out at \$17.62. Stung, BroadVision went so far as to forge an alliance with sometime rival BEA Systems to incorporate BEA's Java technology into BroadVision products.

Most of the young software makers, BroadVision included, got off the ground by focusing intensely on doing a few things really well. That gave them breathing room

because they could invest all of their relatively meager resources in one place and concentrate on small but promising markets that haven't yet attracted the attention of the big players. For four-year-old Ask Jeeves Inc., the bull's-eye is Web-search technology. Ask Jeeves has kept its 725 employees focused on creating cutting-edge search technology.

software maker Tradex Technologies. That gave it the complete package of software for companies seeking to set up business-to-business e-commerce Web sites.

Those that don't broaden their portfolio are destined to run into trouble. Lower-tier outfits, such as e-sales specialists InterWor Corp. and Web-marketing company Ne-

Forming alliances with major players now looks attractive

That made it the choice for Ford Motor Co. when the auto giant went looking for a search service for its consumer Web site. The service, on fordvehicles.com, allows buyers to ask questions about Ford products and services, such as information about discounts for recent college grads.

For other upstarts, the key has been to get critical mass in their niche—fast. That way, customers don't spend as much time sizing up the alternatives. Ariba is a good example. Last November, Ariba, which at the time was selling only corporate-purchasing software, spent nearly \$2 billion on auction-software maker Trading-Dynamics and e-marketplace

Perceptions Inc., posted disappointing revenues for the third quarter and watched their stock prices crater by as much as 90%. "Those companies that haven't moved beyond being a small piece are getting killed," says Internet software analyst Greg Vogt of Banc of America Securities.

That's why forming alliances with major tech players looks mighty attractive to some of these emerging companies. Back in March, for example, Ariba and i2 Technologies made a three-way partnership with IBM, while i2 bought small stakes in Ariba and in i2. The idea is that by making their software work well together, selling each other's products and approaching customers as a team, they'll be able to land major buyers. That seems to be working. So far, the alliance has won 25 customers, including such online exchanges as e2open, Metaspine, Spectrum, and Worldwired. Retail Exchange.

But it's not

BEA Systems Inc.

CEO: William Coleman

FOUNDED: 1995

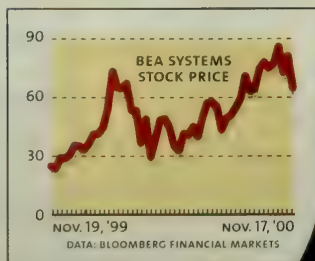
BUSINESS: The Web software that acts as a foundation for e-commerce applications

MOST RECENT QUARTERLY REVENUES: \$224 million, up 77% over a year ago

MOST RECENT QUARTERLY NET INCOME: \$31.3 million, a 200% jump over the same quarter last year

REVENUES AT FIVE YEARS: For 2000, \$925 million, 12,300% better than Microsoft at the same point

PROSPECTS: Could be the fastest software company to top \$1 billion; it's head-to-head with IBM—and holding its own



just the upstarts that badly want these partnerships. The tech giants need the little guys every bit as much—not more. Look at SAP, which got caught flat-footed last year when corporations started clamoring for software to run e-marketplaces, connect manufacturers and their suppliers. The German powerhouse is expected to be operating, financially, and manu-



.com fort



It's knowing American Express can help you control your e-purchasing. The American Express® Corporate Purchasing Card: a secure e-purchasing tool with built-in cost controls. Establish spending limits. Designate preferred vendors. Track expenses online or off. Integrate purchasing data with commerce software. And cut process costs up to 95% along the way. Call 1-800-AXP-1200 or visit americanexpress.com.

Ariba Inc.

CEO: Keith Krach

FOUNDED: 1996

BUSINESS: Business-to-business and e-marketplace software

MOST RECENT QUARTERLY REVENUES:

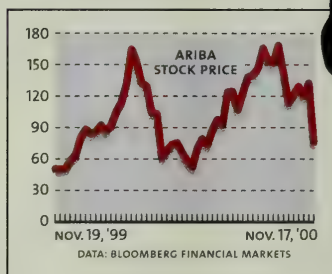
\$134.9 million, up 687% over a year ago

MOST RECENT QUARTERLY NET INCOME:

\$1.1 million, vs. a \$4.6 million loss for the same quarter last year

ANNUAL REVENUES AT FIVE YEARS: For 2001, estimated to be \$550 million, 7,000% better than Microsoft at that point

PROSPECTS: Ariba leads in the B2B software market; if it can finish some tricky integration work with its partners and acquisitions, it's off to the billion-dollar revenue mark in 2002



facturing software, but it would have taken too long to create top-notch e-marketplace software. So instead, it swallowed its pride and made a deal with Commerce One. Using Commerce One's products as a starting point, the two agreed in June to jointly develop and sell e-marketplace software.

When push comes to shove, will these David-and-Goliath partnerships fall apart? Already, there are signs of fraying. In November, 1997, Oracle and i2 launched an alliance to sell software for managing orders from suppliers to large industrial customers. But a year later, Oracle came out with its own version of i2's product, and the two began feuding and poaching customers from each other. "These are two independent companies. These relationships will not last forever," says former Oracle Executive Vice-President Gary Bloom. Indeed, chronicles of the tech industry are littered with relationships gone awry. So the smart upstarts will hedge their bets—doing their own development while keeping a potential partner in reserve.

When it comes to hooking up with the large consulting companies, however, there doesn't seem to be a downside. Since the upstarts don't have armies of salespeople and consultants, they're wise to align with large consulting companies that design, in-

stall, and maintain computing systems. Experts estimate that more than half of software purchasing decisions are now made or heavily influenced by such integrators. That's why webMethods Inc., a Fairfax (Va.) maker of software for tying together disparate computing systems, forged partnerships with service giants such as Andersen Consulting and KPMG, plus 92 smaller consultancies. The impact: Thousands of consultants employed by others extend the reach of its 70 sales reps and 110 consultants.

Those linkups are paying off. In the summer of 1999, Andersen recommended webMethods to PolyOne Corp., a \$3.5 billion plastics manufacturer based in Cleveland, to connect its own manufacturing and planning software to systems used by its three largest suppliers. As a result, PolyOne has shortened the time it takes to create orders from days to seconds and reduced its inventory by 13%. "WebMethods is a very good tool, but Andersen Consulting has a deep understanding of how our system works," says David Honeycutt, director of e-business for PolyOne.

For the software upstarts, buddying up

won't necessarily overcome the advantage of the giants. Consider the power of IBM. With annual 1999 software revenues of \$12 billion, it's the world's second-largest software company after Microsoft. It has 8,000 software sales specialists, compared with just 511 for BEA. Now that IBM has wised up to BEA's market, it's gaining ground. In 1999, BEA claimed 32% of the market for e-commerce application servers, vs. 16% for IBM, according to tech research firm Giga Information Group. But by the end of this year, Giga estimates that BEA and IBM will be tied

"I worry more about three guys in the garage," says one CEO

with 24% each. Giga analyst Mike Gilman says that even though BEA's technology is at the edge, IBM's long track record reassures potential customers. "We're gonna be here 20 years from now," says Steve Mills, an IBM senior vice-president who runs the company's software division.

As mighty as they seem, the software powerhouses have some chinks in their armor.

IN CASE YOU HADN'T NOTICED,

YOUR BUSINESS HAS LEFT THE BUILDING.



WIRELESSWORKS

wireless devices

wireless solutions

networks

enterprise systems

It probably comes as no surprise that business is getting done in a whole new way. But you might not be ready for how drastically wireless technology is about to change our world. Which means that you need the right partner to help solidify your strategy. And that's where we come in. As a leading wireless systems integration firm, we're devoted exclusively to engineering solutions for a mobile planet. With senior business consultants and engineering technologists who understand the dizzying world of wireless applications, service providers,

devices and evolving networks. And experience working with both Fortune 1000 leaders and major Internet infrastructure companies. For our free wireless primer or more information, go to www.stellcom.com/primer. Or call 1-888-554-2024. We'll help take your business to a whole new place.

stellcomSM

engineering the way the world worksSM

mor. Because they already have thousands of customers, they spend a lot of their time and energy maintaining and updating old software. IBM, for instance, has to make versions of its software for at least eight different server operating systems. That slows down the release of product updates and makes it hard to break from the past and deliver innovative technology. It's one reason why companies that have had tre-

mendous success-es in one business era find it hard to replicate them in the next. IBM dominated the mainframe market but was overshadowed by Digital Equipment Corp. in the minicomputer market. DEC, in turn, missed out on the shift to PCs. "The leading companies always get toppled," warns Clayton M. Christensen, a Harvard Business School professor.

The bigger you are, the harder it is to shift course. Consider Oracle, which sold nearly \$600 million worth of database software last quarter. Its future growth rate hinges on the sales of its e-business suite of applications, which includes software for e-commerce, procurement, and online marketplaces.

But it's having trouble switching its focus. During the third quarter, Oracle's application software sales disappointed Wall Street. Application sales grew 42%, to \$156 million, from the pre-

vious year, but analysts were expecting 60% growth. Insiders say Oracle's sales force has a greater incentive to sell its core database product because they know it better—and they get bigger commissions.

Despite Oracle's hiccups, the incumbents won't give way without a fight. Kana

Communications Inc. Chief Executive Michael J. McCloskey says that heads of software companies use their clout to try to undermine the small fry. He says the CEO of a large software company, which he would not identify, recently berated a consulting firm for recommending Kana's products. Separately, that same CEO called the head of a large Kana customer to point out that the company's software was already installed on its computers. The not-so-subtle message: You depend on us for help. "They call you high in the organization and try to unhinge our deals," says McCloskey.

The upstarts fight fire with fire. Roger Siboni, CEO of E.piphany, takes advantage of his decade as a top executive at high-tech consultant KPMG to land customers. A personal plea he made to Greg Carmichael, CEO at Emerson Electric, helped E.piphany

The playing field is more level than ever before

out Siebel Systems. "Roger Siboni called me," says Carmichael. "Tom Siebel didn't." At E.piphany, CEO Sidhu went so far as to peg a portion of his fee to its ability to deliver savings. That has won him instant credibility. The company's most recently quarterly revenue was \$319.5 million, up 118% from a year earlier.

It's not enough, however, to go toe-to-toe with the Old Guard. The would-be software kings must also look over their shoulders at the up-and-coming startups. In October, Wal-Mart Stores Inc. selected the unknown Atlas Commerce Inc., a one-year-old software maker in Malvern, Pa., to prove coordination with its suppliers. A new product allows numerous Wal-Mart stores to combine orders from various suppliers into a single purchase order—the procurer's market that Ariba dominates. As a result, the retail giant can get volume discounts and trim shipping costs. "I worry less about the big guys," says Interwoven CEO Martin Brauns. "I worry more about the three in the garage building something new that has thought of yet."

When it comes to predicting who the new leaders will be, one thing is clear: It's unlikely that any single company will have the same kind of dominance of Web computing that Microsoft enjoys in the

BroadVision Inc.

CEO: Pehong Chen

FOUNDED: 1993

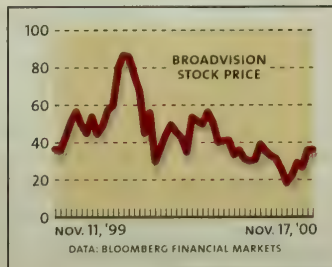
BUSINESS: E-commerce software for retailers and B2B marketplaces

MOST RECENT QUARTERLY REVENUES: \$120.2 million, up 303% over a year ago

MOST RECENT QUARTERLY NET INCOME: \$13.6 million, up 202% over the year-ago quarter

ANNUAL REVENUES AT FIVE YEARS: In 1998, \$50.9 million, 690% more than Microsoft at the same juncture

PROSPECTS: BroadVision hit a bump in 2000 because it didn't adopt Java technology, but it is still No. 1 in e-commerce software, and looks to surge again with tech improvements early next year



WE'RE HELPING SEGA GIVE MILLIONS OF GAMERS A VOICE.



WHAT CAN OUR IP VOICE INNOVATION DO FOR YOU?

Who would have thought you could talk to other gamers around the world while you play over the Internet—for free? Sega and InnoMedia did and teamed up to make it a reality. InnoMedia's unique Voice-over-Internet Protocol (VoIP) technology is helping our partners deliver new ways of communicating that others have never imagined. Whether it's real-time voice interaction between gamers or providing voice to the next generation of technology breakthroughs, InnoMedia is working with leaders in various industries to deliver future communication experiences.

POWERED BY
**INNO
MEDIA**

SEGA™

Are you ready to take your product to the next level and revolutionize an industry? Find out how through our vision brochure and explore the possibilities. www.innomedia.com/vision



realm. While some of these young companies rule their markets, a total Net monopoly isn't likely since no one company can own the operating system of the Net, as Microsoft did with personal computers. "There's more of a level playing field than there has ever been," says Dave Winer, who runs the popular software-developer Web site, DaveNet.

Ironically, that level playing field may

not be the best thing for the software upstarts. There are some advantages to having one company call the shots. A single standard-bearer can get the whole industry moving in sync, minimize incompatibilities between technologies, and assure customers that they're making smart investments. These days, many in the software industry hope that Internet standards can fill the role that Microsoft plays in the

PC realm and that IBM plays in mainframe. But there's still a lot of work to be done to assure that Internet software knits together. It's vital to the upstarts that these complex systems don't devolve into a computerized Tower of Babel. Otherwise, corporations and consumers alike may end up wishing that Microsoft remains king of the software hill.

Contributing: Jay Greene

Microsoft's Little Bro'

Mark B. Hoffman remembers a time when Microsoft Corp. CEO Steven A. Ballmer barely gave him the time of day. Never mind that Hoffman's Commerce One Inc. was a partner of the software giant. When the companies first joined forces in 1996, Commerce One's software for running business-to-business e-commerce was a niche within a niche.

Not anymore. The market for e-marketplace software is expected to grow from \$428 million this year to \$2.1 billion in 2003, according to Banc of America Securities. And Commerce One's fortunes have mushroomed along with the market. First Union Securities Inc. expects sales at the four-year-old upstart to hit \$390 million this year and more than double in 2001, to \$829.3 million. You'd better believe Ballmer chats with Hoffman now. "For four years, I didn't talk to Ballmer," Hoffman says. "In the last six months, I've talked to him pretty often."

The reason? As mighty as it is, Microsoft needs Commerce One. It can't be the king of software unless it replicates its dominance of the PC world on the Web. So far, on the Net, Windows remains an also-ran to various flavors of the Unix operating system, such as Sun Microsystems Inc.'s Solaris. Most of the hot young e-commerce software companies sell more applications for Unix than for Windows. Some bypass Microsoft altogether. Not Commerce One. Its software runs exclusively on Windows, making it a poster child for Microsoft's e-commerce efforts. But even Commerce One is hedging its bets. In response to requests from customers, it plans a Solaris version of its software next year.

It's too early to tell if the newest version

of Microsoft's server operating system, Windows 2000, will be powerful enough to change customers' minds. Microsoft claims the update, launched in February, can handle the most demanding tasks. And it predicts that sales of its corporate software and services, consisting largely of Windows 2000 server sales and its SQL Server database software, will grow about 20% per quarter, up from 9.3% last quarter. Add to that Microsoft's ability to bundle software that manages databases, tracks orders, and runs applications—all for a modest cost relative to the competition—and you have Microsoft's recipe

for becoming the e-commerce technology of choice. "That's our mission," says Ian Rogoff, vice-president in charge of Microsoft's partner programs.

It just might be mission impossible. Many corporate customers remain skittish about trusting their most important electronic business to Microsoft. And even low prices can't change perceptions. "They'll bite bits and pieces of the e-commerce software market off," predicts Carl Lenz, research director at Gartner Group Inc. "But Microsoft won't even be the preferred operating system for B2B commerce."

Never? That's a rash prediction when you're talking about Microsoft. But it's safe to say that the company has its work cut out for it. Just ask Unix convert Hoffman at Commerce One.

By Jay Greene

Still King of the Hill

Microsoft remains the world's largest software maker. Here are key pieces of its strategy for maintaining dominance as technology shifts to the Web:

OPERATING SYSTEM SOFTWARE: Many companies say Microsoft's Windows operating system can't handle the biggest Net jobs. Its new, industrial-strength Windows 2000 software could make it a viable choice.

NET STANDARDS: Microsoft is changing its proprietary ways to back the open standards of the Net. It promotes programming language XML, which links products, prices, and other info.

PARTNERS: The software giant has persuaded such hotshot Web software companies as Commerce One to develop their e-commerce applications on Windows.

PRICING: Microsoft bundles several software products together in moderately priced packages, which is tough for rivals to compete with.



 dot common sense

www.amdahl.com

AMDAHL

a Fujitsu company

© 2000 Amdahl Corporation. All rights reserved.

by

WILLIAM ECHIKSON

Nestlé: An Elephant Dances

The Net promises to make the lumbering giant one nimble operation

The tranquil town of Vevey, Switzerland, perches among the vineyards above glimmering Lake Geneva. Wealthy retirees take in Alpine vistas as they pass their afternoons strolling along the peaceful waterfront. The most exciting

event is the annual grape harvest. Silicon Valley and the hubbub of high tech seem worlds away.

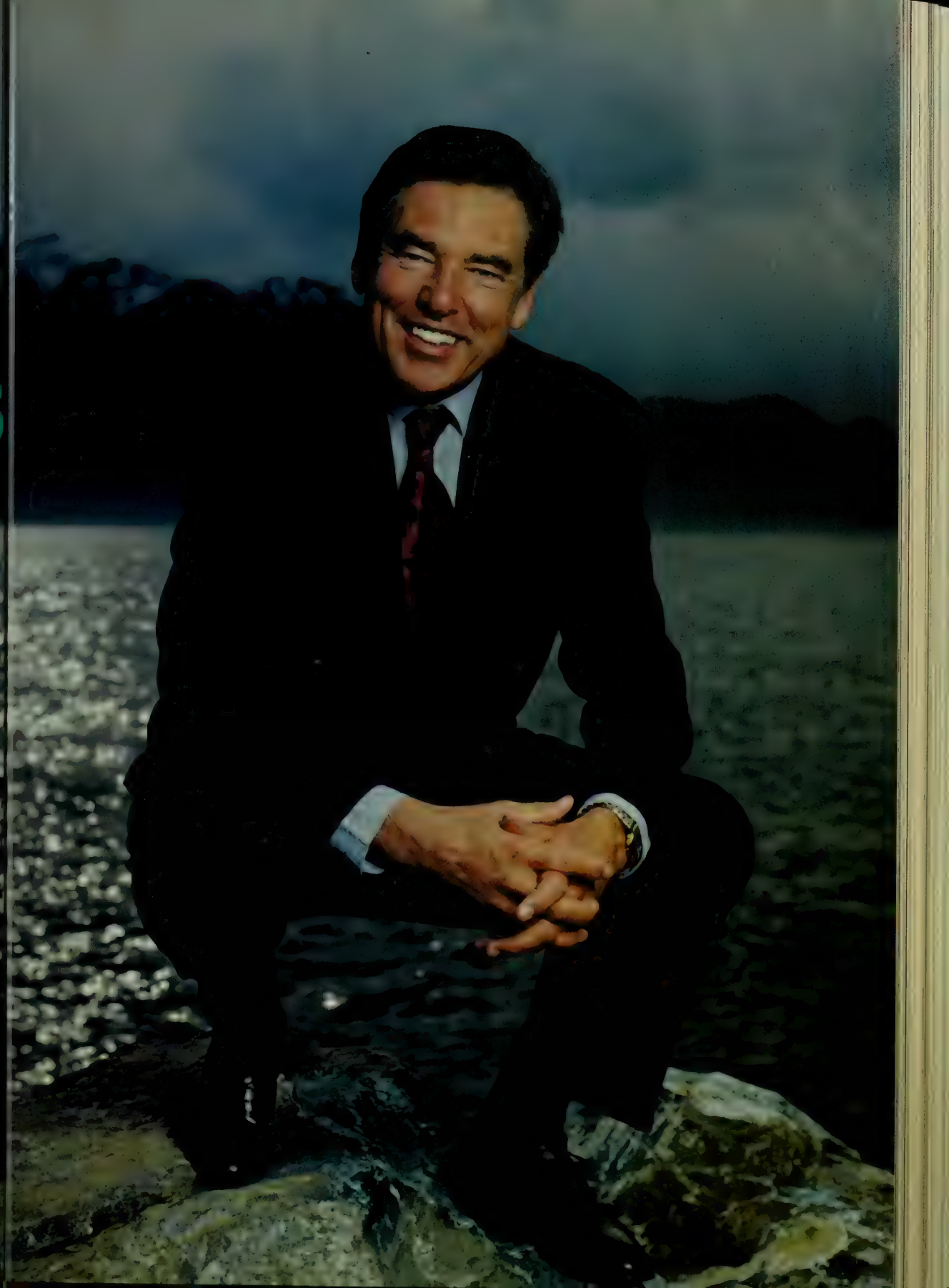
But this bucolic setting is the epicenter of one of Europe's most ambitious Internet initiatives. At the town's edge stands the glass and steel global headquarters of the world's largest food producer, Nestlé—which plans to invest as much as \$1.8 billion over the next three years to become one of the world's Web-smart elite. The venerable company wants to overhaul everything from buying raw materials such as cocoa beans to producing, marketing, and selling products such as KitKat chocolate bars and Nescafé instant coffee. Peter Brabeck-Letmathe, Nestlé's chief executive, calls the process “an e-revolution”—albeit one that will take several more years to fully bear fruit. “This might sound slow for Silicon Valley, but it's very fast” for a company like Nestlé, Brabeck says.

New dot-com companies capture the headlines, but Europe's real New Economy litmus test will come from slow, old-line multinationals striving to transform themselves into



CEO Brabeck prefers mountain-climbing to Web-surfing—but he's gung-ho to wire Nestlé

GEORGE TOTT





Buyer Pietro Senna visited a hazelnut plant in Turkey—and spread his findings to colleagues via the Net

e-businesses. It's a Herculean task. The Continent's giants suffer from elephantine structures and weighty management traditions. The 134-year-old Nestlé, for instance, booked \$46.6 billion in revenues in 1999. It employs 230,000 people and runs 509 factories in 83 countries, producing 8,000-plus different products, ranging from Friskies cat food to Perrier bottled water.

The Web promises to make this lumbering behemoth more agile—and put a serious dent in the cash Nestlé lays out for everything from supplies to marketing. "For big companies like us, the Internet is particularly good because it shakes you up," says Mario Corti, Nestlé's chief financial officer and head of its Internet offensive. Early results are promising: Because of new e-commerce initiatives as well as oth-

er restructuring efforts, Nestlé's net profit rose nearly 35% in the first half of this year, to \$1.7 billion. After years of stagnation, its shares have outperformed the top 300 European stocks by about a third this year, rising some 30% to more than \$2,100 per share. Says analyst John Keele of BNP Paribas in London: "Brabeck is really pushing Nestlé into the 21st century."

The Swiss giant isn't the only European industrial titan attempting to become a nimble New Economy sprinter. Old-line Continental conglomerates from the Swedish-Swiss group ABB Asea Brown Boveri Ltd. to Germany's Siemens are planning ambitious Internet investments. Unlike ABB's power stations or the trains and electronics that Siemens builds, though, food remains a local product. As Brabeck says:

"You can't sell a Bavarian soup to a Taiwanese noodle-lover." So Nestlé must practice a delicate balancing act: wielding the Net to gain economies of scale, while catering to a variety of cultural preferences.

Quick response. Because the task is daunting, the experiment is being watched across the globe. "This is about taking the world's largest elephant and making it dance," says Thomas Baur, a vice-president at software maker SAP. Nestlé inked a \$200 million contract last June with SAP, the German company's largest sale ever, to streamline its technology operations and give far-flung employees quick access to information from across the globe. That should speed up financial reporting more than a month. And it will let Ne-

ow, for the first time, how much it buys from various suppliers around the world. Information flows more smoothly, Brabek says underperforming business units should be detected sooner—and responses formulated faster.

Although Nestlé is a consumer-driven company, most of the changes will be invisible to diners sipping Perrier or kids munching Nestlé Crunch bars. But behind the scenes, the way Nestlé buys, manufactures, and delivers its products is going digital. The company is a founder of online food-supply marketplaces Transora and eMarket.com, which aim to use the Web to streamline purchasing. The emphasis, though, won't be on slashing raw-material costs or eliminating distributors. Instead, Nestlé wants to link its disparate operations, partner with suppliers to cut waste, and move its food products more quickly from farm to factory to the family dinner table. "This isn't about squeezing suppliers much as about increasing our own internal productivity," says Brabek.

Nestlé's reinvention is a work in progress. The company's margins, while improving, remain a third lower than those of competitors H. J. Heinz, Cadbury, or Procter & Gamble. The giant SAP deal is at least three years away from giving all Nestlé employees access to information from other countries' divisions. Transora and eMarket.com are only

much of the company's growth for its first century. Then 20 years ago, Nestlé launched a \$40 billion buying spree, acquiring Friskies in 1985, saucemaker Buitoni in 1988, and Perrier in 1992. Suddenly, Nestlé was the world's No. 1 food and beverage company—but one of the least efficient, with lousy returns and a stagnating stock price. "Brabek must concentrate on im-

"For big companies like us, the Internet is ... good, because it shakes you up"

now beginning operations, and online marketplaces in many other industries are encountering severe teething problems.

Baby steps. Still, the Internet represents a key lever in bringing order to an unwieldy organization. Henri Nestlé founded the company in 1867 to market the baby formula he had developed. In 1938, Nestlé scientists were the first to produce instant coffee. The two products fueled

proving efficiency," says analyst Kieran Mahon of Schroder Salomon Smith Barney.

That's where the Web comes in. The first order of business has been linking to retailers. Since July, store owners in the U.S. have been able to order Nestlé chocolates and other products online at NestléE-ZOrder.com. The company hopes the system will eliminate the 100,000 phoned or faxed orders it gets annually from mom-and-pop shops. The benefit for Nestlé: The system cuts out expensive manual data entry and slashes processing costs for each order from \$2.35 to 21 cents. Similar initiatives are on tap for other countries, which could trim as much as 20% from the company's \$3 billion in yearly worldwide logistics and administrative costs.

The Net helps cut inventories, too. In the past, when Nestlé held promotions it had to guess at demand. By linking up electronically with its retail partners, it can now adjust production fast. In Britain, supermarket chains Sainsbury and Tesco send in daily sales reports and demand forecasts over the Web to Nestlé headquarters, while Nestlé managers check inventory levels on the supermarkets' computer systems. "It's been a revolution in the way we work together," says Tom McGuffog, director of e-business at Nestlé UK.

Nestlé is seeing similar results from sharing information online inside the company. Pietro Senna, a buyer for Nestlé Switzerland, recently was having trouble getting kosher meat. He posted a message online, and a colleague in the U.S. found him just the right supplier—in Uruguay. The time savings are immense. Each country's hazelnut buyer, for example, used to visit processing plants in Italy and Turkey. Hazelnuts, a key ingredient in chocolate bars, are prone to wild price swings and uneven quality. But after Senna stopped

Putting order in Nestlé's technology house

Today Nestlé uses a chaotic muddle of different technologies. With the Web, it plans to create a coherent global information system that will help Nestlé better leverage its size by tying together long-independent national tech-fiefdoms.

BEFORE E-REVOLUTION

AFTER

Technology mishmash: The company runs five e-mail systems and 20 versions of accounting, planning and inventory software. Country operations use different computer codes for the same products so it's hard sharing supplies and data.

Standardized software: Nestlé is moving to one software package. The Web-linked program creates a single set of product codes, allowing buyers in one country short on, say, corn powder to get supplies from other Nestlé divisions.

Bad communication: Most employees have no access to production and sales figures from countries other than their own because they're not linked. A planner in France can't see data about KitKat bars being made for him in a German plant—making it tough to adjust his order.

Centralized data: Nestlé is building up to a half-dozen data centers so employees can get quick access to info via the Net. For the first time, Nestlé will know how much it is buying from suppliers with far-flung operations. That will let it negotiate better contracts, centralize production, and buy more across borders.

DATA: NESTLÉ

by some Turkish plants, he posted his report on the Web—and within a week, 73 other Nestlé buyers from around the globe had read it, saving them the trouble of a trip to Turkey. “For the first time, I get to take advantage of Nestlé’s size,” he says.

When leveraged, that size can slash procurement costs. Until recently, Nestlé had 12 buyers throughout Europe, dealing with 14 suppliers of lactose, an ingredient in infant formula and chocolate bars. By linking via the Net, the company has been to cut its suppliers to just four. “We can only do this because of online information,” Senna says. Lactose costs have come down by as much as 20%.

Nestlé’s Web charge is being led by its

verted dairy farm in Carnation, Wash., Nestlé’s U.S. CEO Joe Weller asks workers how to unify Nestlé. The answer: e-business. If the U.S. division leads, the rest of the giant is likely to follow. The sheer weight of the U.S. operation has wallop: It booked more than \$10 billion in sales last year, nearly a quarter of the company’s total.

If the U.S. division is quarterbacking the effort, Brabeck is its chief cheerleader. Sure, he doesn’t have a computer in his office—e-mails have to go through his secretary. And far from passing his leisure time surfing the Net, 56-year-old Brabeck spends his weekends climbing the Alps that tower over Vevey. But he was an early backer of e-tailing experiments the company participated

in. Those trials were eventually shelved but Brabeck says they demonstrated the power of technology and the Net. “They opened my eyes,” he says.

Nestlé’s disparate Internet ventures present a mountain of opportunity that will require all the strength and savvy Brabeck can muster. He doesn’t underestimate the challenges ahead. But he doesn’t see any fazed either, as he looks out his office window at the snow-capped Alpine villages across Lake Geneva. After all, he’s used to long and difficult climbs. He scales the peaks every weekend.

Contributing: Arlene Weintraub

e.biz online

For a Q&A with Nestlé CEO Peter Brabeck, go to ebiz.businessweek.com

E-Chocolate

Here’s how Nestlé is harnessing the Web to more efficiently make and sell chocolate bars, from KitKats to Butterfingers:

1 Taking Orders

HOW IT WORKS

Since July, U.S. store-owners have had the option of ordering Nestlé chocolates and other products via a new Web site, NestléEZOrder.

THE BENEFIT

Nestlé hopes to eliminate most of the 100,000 phoned or faxed orders a year from mom-and-pop shops. That would reduce manual data entry and cut processing costs by 90%, to 21 cents per order.

2 Getting Ingredients

HOW IT WORKS

Nestlé buyers have purchased cocoa beans and other raw ingredients on a country-by-country basis, with little info about how colleagues were buying the same products. Now they share price info via the Net and pick suppliers that offer the best deals.

THE BENEFIT

Nestlé has reduced the number of suppliers by as much as two-thirds and cut procurement costs by up to 20%.



3 Making the Chocolate

HOW IT WORKS

Nestlé has traditionally processed its own cocoa butter and powder and manufactured most of its own chocolate. The Web lets Nestlé better communicate with suppliers, making outsourcing a more viable option.

THE BENEFIT

Last year, outside contractors in Italy and Malaysia won orders to produce raw chocolate. Expect more such deals: Nestlé plans to sell or close a third of its 86 chocolate plants in coming years.

4 Cutting Inventories

HOW IT WORKS

In the past, Nestlé guessed at how many KitKat or Crunch bars it might be able to sell in a promotion. Today, electronic links with supermarkets and other retail partners give Nestlé accurate and timely information on buying trends.

THE BENEFIT

That lets Nestlé trim inventories by 15% as it adjusts production and deliveries to meet demand.

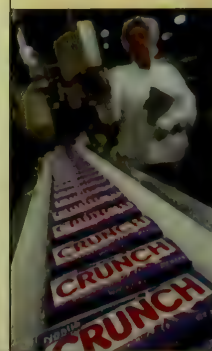
5 Marketing the Candy Bars

HOW IT WORKS

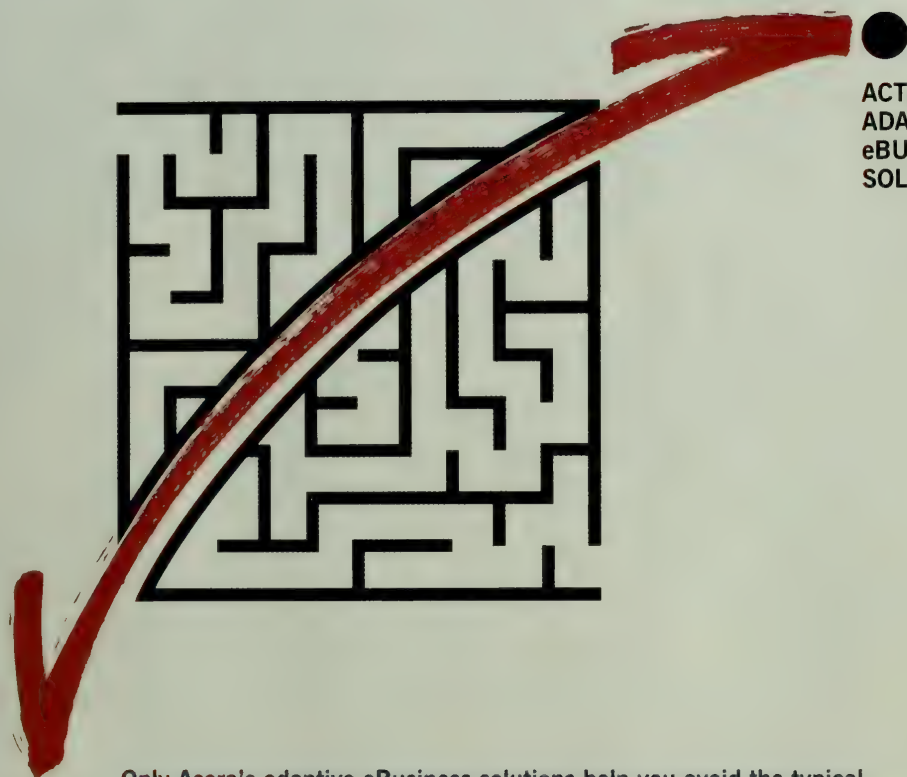
Nestlé spends \$1.2 billion on advertising through traditional print and TV ads. Within two years, more than 20% of that will go online.

THE BENEFIT

New marketing approaches include a chocolate-lover’s Web site with advice, recipes, and paeans to the pleasures of chocolate. Nestlé has similar sites for coffee, Italian food, and infant nutrition.



We've thrown standard eBusiness a curve.



●
ACTIVATE
ADAPTIVE
eBUSINESS
SOLUTION

●
PART eBUSINESS
IMPLEMENTATION

Only Asera's adaptive eBusiness solutions help you avoid the typical constraints, wrong-turns and dead-ends of the same old software solution.

The Asera™ eService™: adaptive eBusiness solutions delivered as a managed service. Powered by a breakthrough platform, the Asera eService integrates best-in-class software applications with your existing systems to deliver an eBusiness solution that works the way your business works and changes when you need to change.

The powerful combination of Asera's platform and service delivery allows you to activate only the eBusiness functionality you need, pay only for what you use, and remain insulated from the cost and complexity of technology change. Only Asera enables you to rapidly activate an eBusiness solution that adapts to the unique needs of your business and evolves as your business needs grow.

Asera

Sure, we've thrown the industry a curve.
But with the Asera eService you've got the confidence and power to hit the home run.
www.asera.com | 1 877 992-7372



Integrate, adapt and evolve your eBusiness.



The **agility** to perform in synchrony.

The **stability** to dominate when others are tossed by the currents.

Your business software can now be integrated and upgraded with the latest technology, and reside in an ent

www.agilera.com

new on your desktop, tailored to job responsibility. Application hosting services from

Agilera

Run with the swift. Stand with the strong.

by

AMY BARRETT

He Pours Gas On the Fire

Can Joe Galli's super-intensity turn VerticalNet into a raging Internet success?

Joseph Galli Jr. sure knows how to work a crowd. Back in 1992, he gathered the Black & Decker Corp. sales team in Florida to launch the new line of DeWalt professional power tools. Dressed in a bright yellow DeWalt shirt, he roamed a hotel stage with his microphone, ticking off five vital customers who had agreed to carry the products: Home Depot, Lowe's, HomeBase, Hardware Wholesalers, and Ace Hardware. That triggered a hearty round of applause. Then he listed a further five. More applause. And another five. He ultimately rattled off 110 customers—all from memory, recalls Charles M. Brown, a former Black & Decker executive who is now president of Aqua Glass Corp. “By then,” he says, “it was a feeding frenzy.”

Galli's job these days is to stir up the same kind of frenzy at onetime Wall Street highflier

STEVE BALANCE



Galli has a feel for
the businesses
VerticalNet caters to

VerticalNet Inc. The 42-year-old Galli took over as chief executive officer at the Hershman (Pa.)-based company in July. His challenge is to find the right formula for VerticalNet, which runs online business communities for 57 industries, from auto manufacturing to water treatment. While he

change, which operates primarily by phone and old-fashioned electronic trading. And he is pushing to sell more e-store software to corporations to do business online.

Early results show improvement. Revenues hit \$74 million last quarter, up 38% from the previous quarter. And the quarterly

"If you told him it couldn't be done, he'd say 'watch me'"

has never run a company before, Galli's boss figures he's the man for this job. "VerticalNet needed additional gasoline poured on the fire," says Chairman Mark Walsh. "And Joe is gasoline."

Already, Galli is turning up the heat. He quickly reorganized the company into three divisions and set goals for each. First, he aims to boost e-commerce on VerticalNet's community Web sites, which provide news, job listings, and discussion forums for small and midsize companies. VerticalNet now relies on ads for nearly one quarter of its revenues. But Galli wants to boost transaction revenues by setting up more individual "E-commerce Centers"—essentially cybershops—so participating companies can sell products and services online. Second, Galli is accelerating the move to the Web by VerticalNet's big electronic components ex-

loss, excluding non-cash items such as amortization, shrank slightly, from \$18.8 million to \$17.7 million. According to Merrill Lynch & Co., fees from e-commerce transactions on the community sites jumped from nearly zilch a year ago to 12% of revenues.

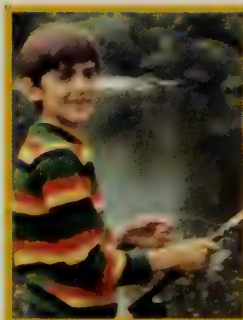
Thanks to Galli's upbringing in blue-collar Pittsburgh, he has a natural affinity for the sort of basic industries that VerticalNet caters to—machine tools, sealants, adhesives, and the like. Galli grew up in a house overlooking his father's auto-salvage yard, where he spent summers working—often hauling gasoline tanks or car batteries by hand. He's not afraid to get his mitts dirty. And he relishes the chance to help these underdogs. "We will enable these companies, which maybe aren't large enough, or are intimidated by the Web, to move their businesses online," he vows.

How driven is this guy? When he was co-captain of the wrestling team at the Uni-

versity of North Carolina at Chapel Hill, he won more than 100 bouts. To make weight once, he ran 10 miles and then jumped rope for an hour by a steamy indoor pool. "If you told him it couldn't be done, he'd say: 'Watch me,'" says his coach, William C. Lam. And when Galli lost, he was harder on himself than his opponents had been. His worst defeat: a 15-3 wipeout during the national wrestling championships in his senior year. "He beat me like crazy," Galli says. "While it was demoralizing, it was also motivating, because I knew I'd wrestle the best possible opponent."

Galli will need the same kind of grit as he tries to whip VerticalNet into shape. He's got some breathing room. The company had \$145 million in cash and equivalents at the end of the third quarter, and a sweetheart deal with software powerhouse Microsoft Corp. that will generate \$17 million in revenue over three years. Microsoft will pay for storefronts in VerticalNet online communities for one year for some 80,000 small and midsize companies. In exchange, VerticalNet will use Microsoft software to build out those sites.

Even with Microsoft on VerticalNet's side, the new CEO has a plenty of fixing to do. VerticalNet was a pioneer in establishing Web sites for specific industries. But after its stock hit a high in March of 148, the share began a sickening slide to about 18 today. Investors are fretting over how quickly the company's e-commerce operations will take



JOSEPH GALLI JR.

Education: B.S. in business administration from the University of North Carolina, 1980. MBA from Loyola College in Baltimore, 1987.

Career highlights: June, 1980, to April, 1999, held sales and marketing positions at Black & Decker, rising to president of the Worldwide Power Tools & Accessories Div. From June, 1999, to July, 2000, President of Amazon.com. July, 2000, to present, CEO of Internet startup VerticalNet.

Claim to fame: At Black & Decker, he led the 1992 launch of the DeWalt line of professional power tools, which now racks up \$1.4 billion in sales. Among his innovations: sending "swarm teams" of salespeople to construction sites to show off DeWalt products.

Competitive streak: A fierce wrestler in high school, he

would immediately run three to four miles if he lost—no matter how late the hour. He was co-captain of his college wrestling team his senior year. "Those he couldn't beat, he outworked," says William C. Lam, head wrestling coach.

Early business lessons: Grasped the importance of hard work in his father's automotive scrap yard in Pittsburgh, where he helped move piles of metal.

Management philosophy: He demands discipline. He has ranked VerticalNet's 57 industry communities from best to worst and is calling on the managers of the lagging sites to come up with a concrete plan for improvement.

Hobbies: Running, salmon fishing, reading histories and biographies. Has devoured 10 books on Napoleon alone.

Family: Divorced and remarried. Has three children: two girls, ages 13 and 10, and a boy, 7.



QUALITY DATA

STARTS WITH
DISCIPLINE.

Hundreds of people have diligently whipped up an incredible database. Updating. Telephone verifying. Perfecting information on millions of consumers and businesses. No other company comes close. And this data can be customized for your business. Build traffic. Strengthen customer relationships. License world-class data, exclusively from infoUSA.com.

*info*USA.com

LICENSE QUALITY DATA NOW! CALL TOLL FREE 1.866.GROWBIZ (476.9249). OR LICENSE@INFOUSA.COM

off in a cyberworld jammed with rival sites. Analyst Bruce D. Temkin of Forrester Research Inc. expects a shakeout in the next year and predicts that many of VerticalNet's communities will fail. Compounding the challenge is the company's concurrent move to bring its electronics exchange onto the Web and its efforts to expand its software business. "The three pieces are very different," Temkins says of VerticalNet's operations, "so that makes it tough to manage."

Galli's no stranger to uphill battles. A 19-year Black & Decker veteran, he had watched the company lose ground in professional power tools for years. Galli was part of a team that came up with the DeWalt professional power-tool line. He's credited with innovative sales tactics, including "swarm" teams that demonstrated the products on construction sites. The result: DeWalt sales went from virtually zero in 1992 to \$1.4 billion in 1999. Gary T. Di-Camillo, chairman and CEO of Polaroid Corp., who headed Black & Decker's power-tool business in the early 1990s, calls Galli "the best sales and marketing executive who ever reported to me."

But Galli's hard-charging nature had a dark side. Several former Black & Decker executives say he favored managers that had the same intense, high-energy style he did. In fact, Galli's troops were known as "Joe-Boys." Huffy Corp. CEO Don R. Graber, who worked at Black & Decker at the time, says Galli discouraged dissent. "If you weren't a Joe-Boy, you were out," he says. For his part, Galli says he cared only about performance: "It boiled down to results. People said I didn't like them because of style. And I said no, it was because you missed your numbers."

In the end, Galli's ambition ended his career at Black & Decker. When he was just 35, he was made president of the North American power-tools business. Analysts say he was impatient to move into the top job, but Black & Decker CEO Nolan D. Archibald, who was only in his 50s, was in no hurry to leave. The two clashed. So in April, 1999, Galli left the company.

After a bizarre incident where he accepted and then reneged on a job offer from PepsiCo Inc., Galli landed at Amazon.com as president under whirlwind CEO Jeffrey P. Bezos. He recruited seasoned managers to improve financial discipline. Still, like many other Net stocks pounded by impatient investors, Amazon's share price declined markedly during the 13 months Galli worked there. And while his departure raised questions about possible tensions be-

sional e-mail if she comes across a word she likes, suggesting he add it to his vocabulary.

It was assumed Galli would one day run his father's business. Even as a high schooler, he cooked up plans to create a chain of salvage operations. But as a college freshman, he changed his mind and called up his father to say he wouldn't be following in his footsteps. Instead, upon graduating with a degree in business ad-



Joe Jr. and Sr.: The son picked up his negotiating skills from watching his father strike auto-salvage deals

tween Bezos and Galli, he insists that isn't so. The two had "healthy debates" over new ventures, he says, and he left only because he was eager to run his own show.

VerticalNet seems like a better fit. Galli's roots are intertwined with the kind of companies he deals with—smallish outfits that back on to cloudy rivers or inhabit graceless industrial zones. He learned hard work from watching his father, Joseph Galli Sr., who still works six days a week at the salvage business. He also learned negotiating skills watching his father strike deals on selling parts and metal.

His parents pressed him to succeed. His mother, Lucille, who was hospitalized with an infection when he was just four, insisted the doctors let her out early after she detected her son was picking up the broken English spoken by her Italian immigrant in-laws. She often went over his lessons with him and, to this day, drops him an occas-

ministration, he took a sales job at Black & Decker. "I was raised to achieve, and I had to go out on my own," he says.

These days, Galli, who is divorced and remarried and has three children, spends most of his downtime at his 26-acre farm an hour and a half drive from Horsham. He's planning to take up fox hunting, although he acknowledges it's an odd choice for a guy from the Iron City. "There's an elegance and pageantry that appeals to me," he explains. Galli loves to read history books and has pored through 10 volumes on Napoleon alone. He's fascinated with the rapport the emperor created with his troops. "Obviously, he made some tremendous mistakes. All leaders have things you can learn from and things you learn not to do," Galli says. With Napoleon, his lesson is not to get a false sense of invincibility. That doesn't seem like much of a threat to Galli at VerticalNet. ●

DIGEX and J.P.Morgan

**We manage Web servers,
They manage wealth.**

Together, we do e-Business.

For more than 160 years, J.P. Morgan has been helping affluent clients realize their financial dreams. Now, Morgan OnLine offers millionaire investors access to trusted, integrated wealth management services via the Internet. At Digex, we may not know much about financial asset management, but we do know what it takes to run a successful e-Business.

We supply the hardware, software, and pre-engineered platforms that include best-of-breed technology to get your site up and running – fast and reliably. Digex's world-class data centers and networks are optimized for performance and availability, so your site is online 24x7x365. We provide the administration, monitoring, and security services necessary to make sure your site remains secure.

J.P. Morgan works for its clients.
Digex works for J.P. Morgan.

digexSM

Digex keeps e-business in business™

www.digex.com/jpmorgan
www.morganonline.com

1-800-455-2968 ext. 223
1-877-576-6616

© 2004 Avaya Inc. All rights reserved.
All other marks are trademarks of their owners.

AVAYA
communication

Does

The background of the advertisement features three large, stylized hands. One hand is blue and points towards the right. Another hand is green and is positioned in the upper right corner. A third hand is orange and is located in the lower right corner. The overall background is a solid orange color.

Communication without boundaries

Imagine a network that thinks.

That knows who's there. Understands your

company's relationship with each customer.

And sends them where they need to go.

Immediately. Automatically. No matter which wire

(or wireless) they came in on. Avaya solutions

don't just move communication around,

but treat it intelligently. Extracting, adding, and

using information about each contact. So you can

handle every customer like your best customer.

Visit avaya.com or call 866-GO-AVAYA.

your communication network make the most of every contact?

by

ELLEN LICKING

Curing an

*The first wave of "e-health" tripped up.
Can the second wave do better?*

The great info-tech revolution has bypassed most of the medical profession. In a world where a 13-year-old can trade Graffiti tips with her grandmother on a Palm, most doctors still write out prescriptions by hand.

Which calls to mind the old joke about the doctor's hastily scrawled prescription. The patient used it for two years as a railroad pass. Twice it got him into Radio City Music Hall and once into Yankee Stadium.

O.K., the joke isn't so funny. But neither is the fiasco that has resulted from efforts to graft health care onto the Internet—a pursuit known as e-health. Most of the well-known medical ventures that have been hatched

MICK WIGGINS



Industry's Ills

in cyberspace are now in critical condition. On Nov. 2, the Nasdaq de-listed Caredata.com Inc., a glitzy Internet company that helps doctors track patients' blood sugar and other vital signs online. Six days later, vitamin and health supplement retailer MotherNature.com Inc. announced that it was closing up shop. Other e-health stocks are trading in e-hell, including former highfliers DrKoop.com Inc. and WebMD Corp. They are down 4000% and 600%, respectively, from their all-time highs and are struggling to regain investor confidence.

These debates don't undercut the fundamental logic of e-health: The whole health-care sector is in dire need of a high-tech overhaul. But the first wave of e-health outfits took the wrong tack. They were intent on applying the cool Web technology that spawned Yahoo! and Amazon.com to health care. But they weren't diligent

in figuring out who would pay for it. "Management teams and investors got caught up in a broader Net euphoria. They started drinking their own Kool-Aid and ignored reality," says analyst Robert Rouse of Lehman Brothers Inc.

Internet technology, with its ability to streamline and standardize communications among doctors, patients, insurance companies, and pharmacies, can surgically remove bureaucratic tangles and reduce the number of medical errors. But for e-health companies to succeed as businesses, they must first succeed as health-care companies, solving problems that either doctors, hospitals, insurance companies, or

In This Report

An Rx for Drug Trials	66
The Rise of E-hospitals	70
Medicine's Future	77
Who's Prying Now?	80



consumers will pay money to see fixed. "The first round of e-health companies made a fatal error," says analyst Benjamin M. Rooks of CIBC World Markets. "They didn't follow the money."

The second wave of e-health startups won't make the same mistake. These companies are focusing on services aimed straight at physician offices, pharmaceutical companies, or pharmacies. Some will connect doctors to medical databases via wireless links. Others will make money on technology to monitor patients 24 hours a day. Still others will cash in by streamlining the complicated steps in the drug-testing process. "Over the next few years health

care will change dramatically," says Daniel S. Messina, chief financial officer of Aetna U.S. Healthcare Inc. "The companies that help make that happen will be the new health-care leaders." Adds Eve Kurtin, a venture capitalist with Pacific Venture Group in Encino, Calif.: "This second wave is poised to succeed where the first one failed."

Here is a bird's-eye view of the \$1 trillion U.S. health-care system, which smart e-health companies will keep in sharp focus. Health care is the modern-day equivalent of a medieval patchwork of fiefdoms, with doctors, hospitals, and insurance companies allied to form local—not national—power structures. It is the only sector of the economy where the consumer does not pay for the services she chooses—and is outraged at the very thought of financial responsibility. It is an industry populated by entrepreneur-physicians and clinicians who are trying to break even in what has become a high-volume, low-margin

business. In short, medicine is riddled with inefficiencies, outrageous costs, and outmoded technology. And this whole composite of fragmented cottage industries is under crippling financial pressure as medical spending continues to skyrocket. Already, health care accounts for 14% of the nation's gross domestic product, and that's expected to climb to nearly 20% by 2005.

1999, 24.8 million adults, or 43% of adult Internet users, searched the Web for health info—a 45% increase from 1997. By 2002, growth of this group will outpace that of general Internet users by 60%.

A golden market opportunity, right? Not so far. The founders of DrKoop.com and hundreds of other consumer health sites forgot to ask one simple question: Who's going to pay for this content? Strike one: Consumers don't like to pay. They are used to insurance policies that are heavily subsidized by the government, by their employers. And Net surfers don't generally pay for the information they take. Strike two: Pharmaceutical companies can easily step in with subsidies. Should they sponsor medical Web sites, they could take the discussion that occurs there. Strike three: In general, doctors are so strapped for cash that they don't have the wherewithal to advertise their services on e-health sites.

WebMD rivals DrKoop as a poster child for the e-health bust. Nearly two years ago

Patients want health information directly from their doctors....

DESIRED INFORMATION SOURCE	PERCENT OF RESPONDENTS
Own doctor	62
Hospital	58
Insurance co.	45
Drug co.	43
Internet co.	42

DATA: U.S. BANCORP PIPER JAFFRAY, MODERN PHYSICIAN

...But most most doctors don't deliver the goods online...

63% of doctors polled by *Modern Physician* are using the Internet in their practice, but it isn't to talk to patients.

Fewer than **17%** report using the Net to communicate with patients.

...So what are physicians doing on the Internet?

ACTIVITY	PERCENT OF DOCTORS
Accessing clinical information	91.5
Continuing medical education	68.3
Exchanging e-mail with specialists	34.5
Communicating with patients	16.6
Consultation and referrals	12.7
Prescription ordering and refills	4.6
Avoiding anything to do with the Net	2.2

DATA: MODERN PHYSICIAN

► In 1999, 24.8 million adults searched the Web for health info

business. In short, medicine is riddled with inefficiencies, outrageous costs, and outmoded technology. And this whole composite of fragmented cottage industries is under crippling financial pressure as medical spending continues to skyrocket. Already, health care accounts for 14% of the nation's gross domestic product, and that's expected to climb to nearly 20% by 2005.

Simple question. To succeed, newbie e-health companies will have to find lessons in the struggles of the floundering first wave—beginning with the most famous: DrKoop.com. The company was founded on the premise that patients want easy-to-understand information about diseases, procedures, and medicines. And that premise isn't wrong. A recent survey by Cyber Dialogue, a market-research firm that tracks Internet health-care trends, found that health-care information is one of the three most popular topics on the Net, after money and sex. In

the company's stock soared from \$40 to \$125 on bullish forecasts that it would slash inefficiencies in health care by linking doctors and hospitals to insurers. But the company had trouble convincing insurers to join up, and, without the insurers, doctors weren't buying into what was perceived as a cumbersome service. "It didn't really help me solve my problem," declares Dr. Peter Basch, a Washington (D.C.) internist. The stock is now trading in the \$12 range.

In addition, WebMD failed to consider that nearly half of the nation's 600,000 physicians work in small practices outfitting with one or two doctors. These businesses took a big hit in 1997, when the Balanced Budget Amendment pared back already slim reimbursements from HMOs and Medicare. Many of these small businesses can't afford the cash outlay—typically thousands of dollars—required to link up to the Internet. "Only if the technology can improve the economics of a practice will doctors adopt it," says Dr. Bruce Hochstein, an analyst with Thomas Weisel Partners. But who has time to figure that out? In a one-doctor practice there is no chief financial officer to evaluate the potential



YOU build relationships
that uniquely define your business.

**A software vendor
shouldn't define how you manage them.**

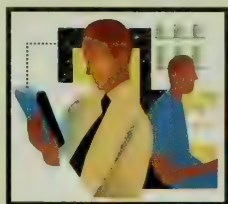
Software vendors try to force their "best practice" solutions on you and re-engineer your business processes. We find this as counterproductive. That's why YOUcentric® offers eBusiness Relationship Management solutions that are mass customized to adapt precisely to your business — with the speed and cost effectiveness we all need in the new economy.

Call 1-888-885-6410, or visit www.youcentric.com

youcentric
built around you

cost savings. Doctors generally have scant expertise in running a small business and little time to bone up on technology.

Most hospitals aren't much better off. Few have resources to spend on what Dr. Russell J. Ricci, general manager of IBM Global Healthcare, derisively terms "Intergalactic, Big Bang health-care solutions" of the sort that WebMD was pitching. More than 80% of today's hospitals are either government-owned, not-for-profit, or for-profit but losing money. In a financial



startups have focused on handheld devices that allow doctors to send wireless prescriptions, order lab tests, check for adverse drug reactions, and dictate notes. Because these devices can improve the way a doctor practices medicine and don't re-

quire hundreds of thousands of dollars to set up, physicians appear interested. According to an October article in *Modern Physician*, more than a quarter of doctors own handhelds. Of those, 22.2% have replaced their

clinical activities performed by doctors or other health-care professionals. According to Synergy Medical Informatics, a private, owned company that develops medical software, the average physician with an annual billing of \$650,000 is currently losing between \$35,000 and \$100,000 a year in claim denials. These lost claims occur because the doctors do not have adequate documentation for their patient encounters or have billed incorrectly for their services.

Charge-capture software addresses the problem by helping doctors choose the appropriate fee schedules and diagnostic codes—showing, for instance, that a patient was seen for possible strep throat, not a pelvic exam. That's something that appeals directly to a doctor's bottom line, says Thomas Weisel's Hochstadt. He is betting that doctors would be willing to spend \$100 a month for handheld services that could recoup thousands in lost revenue.

Not all the new companies have hitched their fates to handhelds. Pacific Venture Partners likes companies that actually deliver care, as opposed to information. Pacific is an early investor in LifeMasters, one of the leading online services that helps people deal with such chronic diseases as diabetes and asthma. Because the LifeMasters program can dramatically lower medical costs, insurers in Florida, Oregon, Washington, and California have signed their members up for the service. These patients will log into a secure web site daily and enter critical information about their condition, blood pressure, blood sugar, or breathing rate. To date, LifeMasters has attracted at least \$40 million in venture-capital funding and its revenue each year has tripled over the previous year's level.

There is also growing evidence that patients want information directly from the doctors. Companies that tap this demand will probably be rewarded—even in the early days of e-health. Although it's too soon to predict the ultimate winners, the first wave of e-health companies will be succeeded by a second, and then a third. Surely and inevitably, these companies will improve the quality of medical care. It could be the best prescription yet for patients and physicians. ■

► Charge-capture software may help doctors recover tens of thousands of dollars in lost claims

crunch, most hospital administrators will shell out for new MRI and CAT-scan machines before considering a complicated new scheme from the likes of WebMD.

Hand-holding. So what are the legitimate goals that the second wave of e-health companies should set? And how will they be rewarded in the marketplace? Many

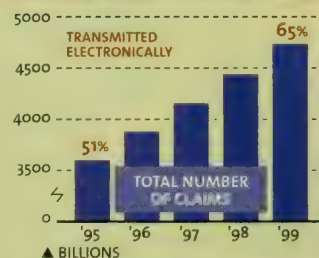
prescription pads with these gadgets.

Already, dozens of companies are competing to put these devices into the hands of the country's doctors. The vanguard includes startups such as ePocrates, iScribe, Parkstone Medical Information Systems, and Allscripts. Some appear to be positioned for takeoff. Allscripts Inc., a startup in Libertyville, Ill., has signed up more than 2,000 doctors to use its Palm and PocketPC software. By acquiring a rival called ChannelHealth Inc., it will soon reach an additional 118,000 physicians.

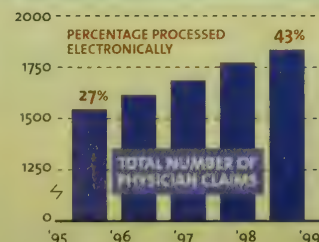
For most of these ventures, the ideal client is a tech-savvy professional like Dr. Charles F. Shaefer Jr., an internal and critical-care specialist at University Hospital in Augusta, Ga., who whips out his Palm about 20 times a day. An incident last March explains why he's addicted. A teenager visited his office, complaining of a miserable cold and heavy congestion. Shaefer was about to prescribe an antibiotic but then remembered the young man's dermatologist had prescribed acne medicine. Shaefer checked his Palm, which was loaded with a prescription-drug reference program made by ePocrates Inc. of San Carlos, Calif. "Lo and behold, the drug I was going to give him could have caused increased pressure on the brain," which can be life-threatening, Shaefer says. "I have made better decisions because I have consulted the ePocrates program."

Bottom line. Many wireless e-health ventures will soon roll out a service doctors have been clamoring for: so-called charge capture. This is software that accurately documents and classifies the hundreds of

Hospitals and pharmacies are processing more health claims electronically...



...And doctors' offices are finally starting to catch up



e.biz online

For a Q & A with Dr. Peter Basch about what it will take for e-health to be widely adopted, go to ebiz.businessweek.com

Go Ahead. Host Your Web Site With Another Company. It's Your Money.

Making Money On The Web Begins By Not Wasting Money On The Web.

Unless you've got money to burn, Interland is the way to go. Our complete solutions include everything from shared hosting to dedicated and high-availability hosting to Web site design, all at an unbeatable value.

That's why we're rated #1 by *PC Magazine* and *Windows NT Magazine*. So whether you're already on the Web or ready to get started, call us to learn how we can make the Web work for you today, and grow with you well into the future.

The Interland Standard

- Unconditional 30-day, money-back guarantee
- E-mail accounts for your Web site
- 150 MB starting at \$19.95
- 24/7 toll-free support
- 99.9% uptime

Call Today Toll Free
877.782.5391
www.interland.com

NASDAQ: ILND

interland
We make the Web work for you.



October 1, 1999 September, 1999

Copyright 2000 Interland, Inc. All rights reserved.

by

JOHN CAREY

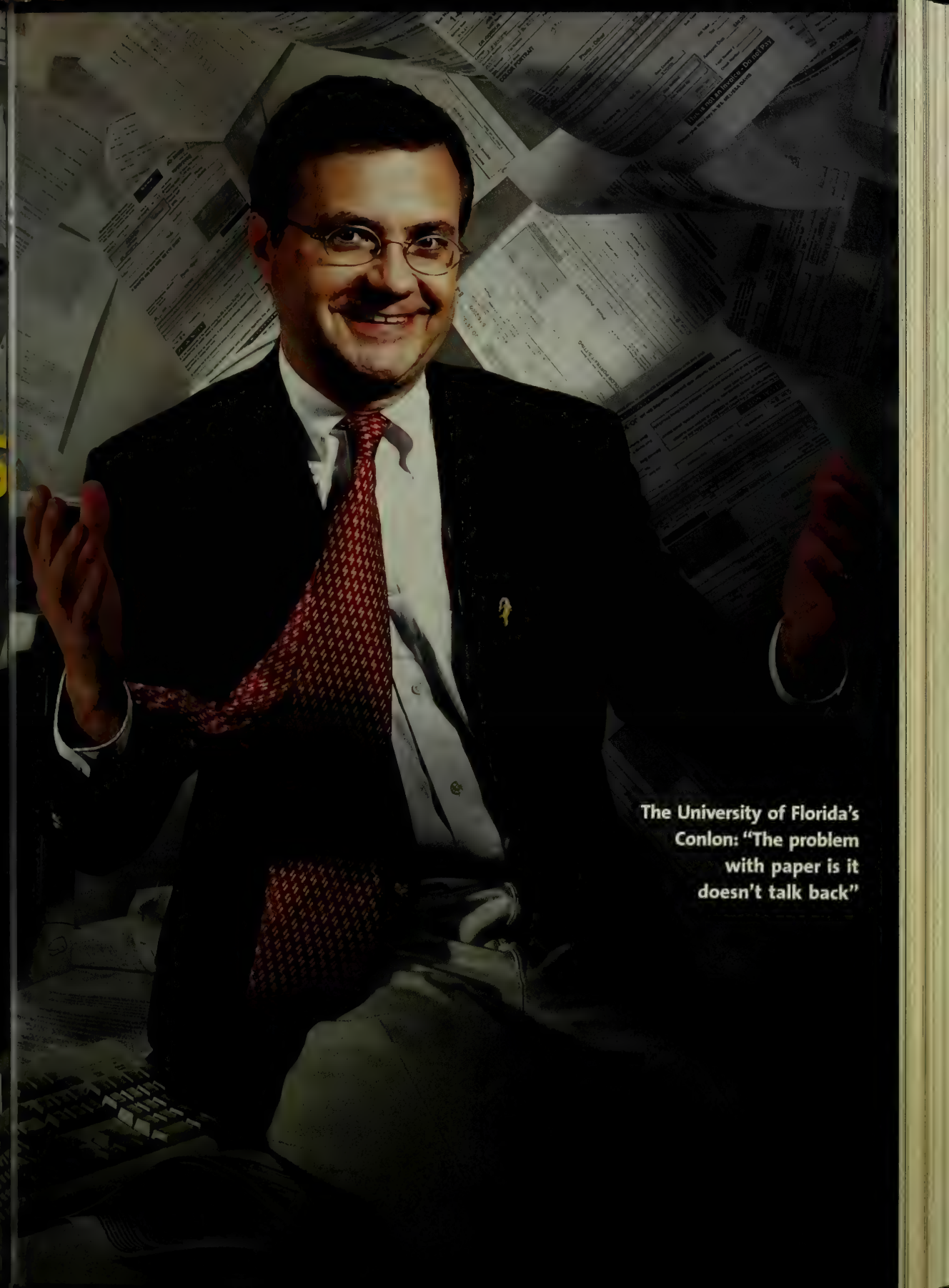
An Rx For Drug Trials

Drugmakers waste millions on antiquated methods for testing new products. The Web is changing that

The specially built floor-to-ceiling shelves covering the wall in Edna Hutchings' office are crammed full of binders. Hutchings, a registered nurse at the University of Alberta Hospitals, has conducted some 60 clinical trials on new pharmaceuticals in the past decade. Most of them were done the old-fashioned way: clinicians laboriously recording clinical data on paper forms. One of Hutchings' current trials involves 20 patients, and by the time it is done, she says: "I will have 60 binders per patient."

Antiquated as this pen-and-paper approach may be, it is still used for 95% of the thousands of clinical trials started each year. It gobbles up time and money as well as shelf space. Drug-development experts figure that just cleaning up the mistakes in those binders takes up to six months. And for drugmakers, the process costs a million dollars in lost sales for every day of delay in getting an important new drug on the market. That's why a growing band of entrepreneurs and drug company researchers

SHARON SHAW



The University of Florida's
Conlon: "The problem
with paper is it
doesn't talk back"

think there must be a better way. "We believe there is tremendous power in the Internet to change the clinical-trial process," says Dr. Robert J. Spiegel, chief medical officer at the Schering-Plough Research Institute.

Drug giant Schering-Plough itself has teamed up with Waltham (Mass.)-based Phase Forward Inc. on systems that allow clinical investigators to enter patient data di-

rectly onto a Web site. By eliminating the time-consuming error-checking of paper records, "we can shave one to two years off getting a drug to market," says Phase Forward CEO Shiv Tasker. Scores of other trials are now under way with technology from Cleveland-based Datatrak International Inc. and PHT Corp. in Boston, two more leaders in the field. One of the beneficiaries is the University of Alberta's Hutchings. She is doing trials online for arthritis and osteoporosis drugs using Datatrak's software, which reduces her writer's cramp and makes her life a lot easier, she says.

Conlon, the chief information officer at the University of Florida Health Science Center, ran into this problem when he and statistician Ronald G. Marks were setting up a huge heart-drug trial with 17,000 patients and 800 physician sites in 10 countries. "The Web was the easiest part," recalls Marks. "It was the contacts with humans that were the hardest."

When it does work, the Internet offers dramatic savings. Recruiting patients over the Web can cost \$35 per patient, compared with the \$350 per person now spent on telephone calls, and other means, says First Co-

TESTING DRUGS AT WEB SPEED

Information technology can't yet shorten the time it takes to test a new medicine in humans. But the Web can dramatically cut costs and hasten the process of setting up trials and analyzing the results. Here's how:

► FINDING PATIENTS

AND DOCTORS: Recruiting patients—and doctors to test drugs on them—is a major hurdle. But victims of disease can use the Web to find relevant trials and learn if they are eligible. Drugmakers also can tap vast databases to help locate patients with certain conditions, or doctors able to run trials.

► COLLECTING DATA:

Doctors can post data directly on Web pages equipped with software that spots mistakes, including contradictory data. Since the company sponsoring the trial can monitor the data on the Web, there's less need to send overseers to the clinical trial sites.

► GETTING FDA APPROVAL:

Electronic data records cut weeks or months off the time needed to learn if a drug works. New software also helps drugmakers write up the results simultaneously for multiple regulatory agencies, speeding review. Earlier approval can mean more than a million dollars of extra revenue per day for companies with key drugs.

► The average clinical trial generates enough paper data to fill an 18-wheeler

Datatrak's metrics show that the online approach cuts the total trial time by 30%.

Despite the potential, however, online trials such as Hutchings' still represent a tiny fraction of all trials, on which drugmakers spend about \$20 billion each year.

"There is not really a market yet," says Datatrak CEO Dr. Jeffrey A. Green. "There are no companies that are profitable yet, with revenues over \$5 million."

Why? Blame a conservative industry. "It's often said that the pharmaceutical industry is 15 years behind in the uptake of technology," says Anne Wiles, executive vice-president of e-Business at Quintiles Transnational Corp. in Durham, N.C., which does drug development for the pharmaceutical industry. It's not for lack of interest, adds Quintiles CEO Dennis Gillings. "But it's a bit chicken-and-eggish," he says. "Everyone wants to see it work before they change."

This conservative stance may be partly warranted. For one thing, developing workable technology isn't easy. The early systems required drugmakers to ship out dedicated laptops, often with cumbersome software, to every doctor in a trial. The Internet helps, but designing software that's speedy and intuitive is still a challenge. "Everyone is waiting for a Quicken for clinical trials," says analyst C. David Hardison of the First Consulting Group.

Big savings. And even the best software won't work if clinical investigators can't or won't get on the Web. Michael



Conlon's Hardison. And online trials are under way, recording the data online can save months of effort. Paper records typically contain numerous recording mistakes—blood pressure recorded on the wrong line, mysterious weight gains between patient visits. These are

spotted until representatives from the trial sponsor make treks to each site. "The problem with paper is that it doesn't talk back," says Conlon. That's why it takes more just to clean up the paper data.

In systems such as the one designed by Conlon and Marks, the software automatically checks the information being typed in, catching most mistakes. "This is the wave of the future," says cardiologist Carl J. Pepine of the University of Florida, lead investigator of the 800-site trial using Conlon's software.

To be sure, the Web can't speed everything. After all, says Spiegel, "if you treat cancer patients and need to find how many survived after two years, you need a two-year study."

But even that could change as scientists learn enough about biology to accurately simulate the effects of an experimental drug in the computer. In some cases, preliminary trials could then be done in a few hours instead of taking months in people. As the tide of new information technology begins to finally change the stodgy pharmaceutical industry, Hutchings may have to find something else to put on her shelves.

Contributing: Ellen Lieberman

LYC

Merrill Lynch

Xdrive

fileTRUST

LifeFX

essential.com

!annuncio

Your Logo Here

PORTERA

icarian

aD
ARSENITA

CrossCommerce

skydriver.

QUOVA

Bluetrain.com

enmed

experience.com

revenio

These companies
have been freed from
the resource drain
of data storage management.

Their competition
has our sympathies.



StorageNetworks
POWERED™

Neither your competition nor new market opportunities will wait for you to add data storage capacity, hire the right people to productively employ that data, or to complete data backup and restore. That's why StorageNetworks™ provides an on-demand data storage infrastructure, network and software solutions that ensure secure, scalable and accessible data storage, and, of course, the expertise to make it all come together. This way, we save you from the distracting and costly task of storing, protecting and managing your data. In fact, we do this better and more cost-effectively than you ever could yourself. Allowing you to focus on leveraging your information and honing your competitive edge. To learn more about our secure, scalable, "easy-to-access" approach to data storage, as well as the marketing benefits available to you under the StorageNetworks Powered™ Program, call us at 1-800-463-7105. Or visit www.STORAGENETWORKS.com.

by

WILLIAM SYMONDS

How E-hospitals Can Save Your Life

When hospitals computerize patient care, they drastically reduce errors—and cost

Last December, Sheryl S. Alderton checked herself into Brigham & Women's Hospital in Boston for a lumpectomy, a common surgical procedure for breast cancer. Like all patients, Alderton didn't want to stay in the hospital longer than necessary. Thanks to a novel program run by cancer surgeon Dr. Yvedt L. Matory, she didn't have to. Two days after the procedure—arranged two days earlier than normal—Matory sent Alderton home, equipped with a Sony Vaio computer complete with a video lens and speaker phone.

Twice during her first week home, Alderton booted up the Vaio and checked in with trained breast-cancer nurses, who looked at the incision while talking to her. When an infection developed during a bad

snowstorm, Alderton set up an online appointment with Matory, who prescribed an antibiotic. Without the Vaio, Alderton doubts Matory would have been able to examine her at all, since she lives in a small town 2½ hours from Boston, and all the major roads were blocked. "This took a lot of stress off the surgery," says Alderton. "I got more rest at home, and if anything,

they were more responsive to my needs." The hospital hopes to set up similar programs for patients with congestive heart failure, asthma, and colon cancer.

Most of the world's medical centers are still technologically challenged compared to banks, manufacturing plants, and department stores. But a few hospitals, such as Brigham & Women's and its sister hospital, Massachusetts General, are leading the way.



At Brigham's
digitized X-ray images
are instantly available



CAN YOU HANDLE IT? STORAGE NETWORKS, INC., THE DATA STORAGE SERVICES PROVIDER (SSP) FOR THE E-ECONOMY, IS CHANGING THE WAY COMPANIES ACQUIRE, IMPLEMENT AND MANAGE THEIR DATA STORAGE INFRASTRUCTURES. BY SATISFYING A CRITICAL NEED FOR DATA STORAGE SCALABILITY AND PROTECTION, STORAGE NETWORKS™ HELPS INFORMATION-INTENSIVE COMPANIES LEVERAGE CORPORATE DATA AND CARVE OUT A COMPETITIVE EDGE. AND FOR THE FIRST TIME, THEY CAN DO IT ON A "PAY AS THEY GROW" BASIS.



CURRENTLY, WE HAVE POSITIONS AVAILABLE FOR PROFESSIONAL SERVICES, OPERATIONS, SOFTWARE DEVELOPMENT, MARKETING, BUSINESS DEVELOPMENT AND SALES. IF YOU ARE AN ENERGETIC, MARKET-DRIVEN PROFESSIONAL, ESPECIALLY ONE WITH STORAGE EXPERIENCE, AND YOU WANT TO WORK IN AN ENTREPRENEURIAL ENVIRONMENT THAT ENCOURAGES NEW IDEAS, STRESSES TEAMWORK AND EMPHASIZES FUN, EMAIL YOUR RESUME TO RECRUITER@STORAGENETWORKS.COM OR VISIT OUR WEBSITE AT WWW.STORAGENETWORKS.COM.

STORAGE NETWORKS AND STORAGE SERVICES FOR THE E-ECONOMY ARE SERVICE MARKS OF STORAGE NETWORKS, INC. ALL OTHER COMPANY, BRAND OR PRODUCT NAMES CONTAINED IN THIS AD MAY BE TRADEMARKS OR REGISTERED TRADEMARKS OF THEIR RESPECTIVE HOLDERS.

chusetts General Hospital, boast staffs of doctors and clinicians who are using information technology to revolutionize medicine. Here, the paper records that were the hallmark of medicine are giving way to electronic medical records, which are instantly accessible and constantly updated. Doctors are entering their orders, from prescriptions to lab tests, into a computer system loaded with software that instantly catches errors. In the radiology department, old-fashioned films that can easily be lost

best hospitals. Yet even here, information technology has produced astonishing improvements. It has cut the frequency of serious medication errors by 55% and the number of overall medication errors by 81%, says John P. Glaser, chief information officer for Partners HealthCare System Inc., which owns the two hospitals. The Institute of Medicine has reported that such medical

While such use of technology is hardly unusual in the business world, the hospitals "are way ahead of the state

U.S. medical practice," says Erica Drazen, a medical informatics expert at First Consulting Group. Some 95% of the nation's physicians are more than 90% of hospitals still rely almost exclusively on inefficient paper systems. "It is an outrage," says



► In a study of 379 consecutive admissions at an urban hospital, 10,070 medical orders were written by hand, resulting in 530 mistakes

are being replaced with digital images. Perhaps most striking, the Internet is being used to extend care far beyond the hospitals' walls, from Martha's Vineyard to Indonesia.

The Brigham and the General, as they're known, are the cornerstones of Harvard Medical School and rank among the world's

errors kill at least 44,000 Americans a year—more than the number who die from AIDS or breast cancer. And because medical mistakes are so expensive, Glaser figures the order-entry system alone saves the Brigham up to \$10 million a year—a 10-to-1 payback on its annual cost.

Russell J. Ricci, general manager of Global Healthcare. "If an airplane crash every day because maintenance records were kept on paper, the government would insist operations be computerized. But because 'it is too emotionally unsettling' to recognize hospitals are unsafe, he argues, 'the issue of how to use information technology to [improve] health care has not been [widely] addressed.' To be sure, the cost and difficulty of converting to computer-based systems has slowed adoption.

THE ELECTRONIC HOSPITAL

Two famed Boston hospitals—Brigham & Women's and Massachusetts General—are using information technology to revolutionize medicine. Here's a look at some of their most important initiatives:

Electronic Medical Records

Replace cumbersome paper medical records and the multiple charts kept on most patients, with a single electronic record.

Benefits: Organizes information in a consistent fashion, while avoiding the delays that occur when paper records are misplaced or can't be found.

Digital Radiology

Replaces old-fashioned, film-based system with digital imaging and Web ordering and scheduling.

Benefits: Avoids film loss, allows multiple doctors to view the same image simultaneously, and cuts costs by saving on film storage.

Electronic Order Entry

Doctors enter orders for prescriptions, X-rays, lab tests, etc., into a computer system, which instantly checks the order for possible problems—such as drug interactions or allergies.

Benefits: Has cut the number of serious medication errors by 55%, and produced 10-to-1 financial payback by suggesting less expensive drugs.

Telemedicine

Uses the Net and videoconferencing to help specialists care for patients far beyond Boston.

Benefits: Dramatically expands the hospitals' reach and cuts costs by allowing many patients to receive an opinion without traveling to Boston.

One file apiece. The Brigham saw potential more than a decade ago and began building its own internally designed system. In the early '90s, it started using a computer system to keep patient records and issue doctor orders for its 720-hospital, which annually cares for 40,000 inpatients and 700,000 outpatients. When the Brigham merged with the General in 1994 to create Partners, this system was extended to the other hospitals and physicians affiliated with Partners. It now includes 30,000 workstations in 150 different locations. Even so, because it was introduced incrementally, "It has hardly broken the budget," says Glaser, who figures Partners devotes only about 3% of its outlay to information systems.

The foundation of this system is the creation of an electronic medical record for every patient. Although the average U.S. patient has 11 medical charts, Partners ultimately hopes to have just one record for each of its roughly one million patients. And by February, "we hope to be able to access all of these records over the Internet," says Dr. Robert C. Goldszer, vice-chairman of the

iProcure.com

Connecting industrial buyers and suppliers.



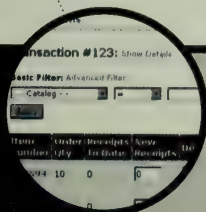
The premier Internet marketplace built for industrial supply.



"Procurement in industrial operations is more complex."



"iProcure is the smartest way to satisfy industrial buyers."



**INDUSTRIAL
STRENGTH
PROCUREMENT**

Providing instant access to millions of industrial parts and supplies, iProcure reduces the administrative costs of purchasing and leverages your buying power – saving time and money on costly industrial purchases. Visit www.iprocure.com.

iProcure
Powered by Datastream
(NASDAQ: DSTM)

the department of medicine at the Brigham. The resulting gains in efficiency are enormous. While paper records are constantly misplaced and often poorly organized, the electronic record is both easier to use and always available. To protect patient confidentiality, users must enter an ID and password—plus a 6-character code that changes every 60 seconds—to gain access to records.

That makes a huge difference in the Brigham's bustling emergency room, which sees 56,000 patients a year and has electronic records for 80% to 90% of them, says Dr. Ron M. Walls, chairman of the emergency department. He recalls a woman who arrived by ambulance alone, unconscious, and suffering from a high fever. With paper records, it would have been impossible to get the woman's history quickly. With an electronic record, "we got a pretty complete picture in just two minutes," says Walls.

The real power of the electronic record becomes apparent when it's combined with the Brigham's order-entry system. Computer-generated allergy warnings alone now change 60 orders a day at the Brigham. And that's just a small piece of how the system improves care. For starters, it eliminates the need to decipher doctors' notoriously bad handwriting, a major source of mistakes. It speeds care by immediately paging doctors when a lab test spots a dangerous condition. "Before, I might not have seen the patient until the next morning," says Goldszer. "But now I have a much better chance of head-

partment many tests are now scheduled over the Web. In part, that's made possible because Brigham has the nation's largest digital system for ordering, viewing, and archiving images. Thanks to the Web, it takes only 15% as long to schedule tests as it did previously, says Dr. Ramin Khorasani, head of information management for Brigham's radiology department. What's more, "up to 30% of the radiology exams ordered by doctors are not appropriate," says Khorasani. Brigham's system slashes that by prompting doctors to follow its



Breast cancer patient Alderton stayed in touch via a laptop link

clinical rules. If a doctor orders an X-ray to investigate abdominal pain, for instance, the system would suggest a CAT scan as a better choice. And once the exam is done,

ease so rare that the average doctor sees just one case in a career. Epler has long drawn patients from all over the world. But to reach even more, Epler is setting up a Web site that gives patients information, helps them monitor their symptoms, and offers a chat room—"Booptown"—where they can talk with other victims.

Turkey shoot. Partners Telemedicine is a similar but far more ambitious initiative to sell the services of specialists to 30 countries from Latin America to Southern Europe and the Persian Gulf. The program allows doctors in foreign countries to submit cases over the Net and then obtain an expert opinion. In a recent case, a hospital in Istanbul submitted X-rays of a young man who had broken his leg. While the Turkish hospital had been planning to put the leg in a cast, a radiologist at Massachusetts General spotted a rare form of bone cancer, and brought the man to Boston for surgery. Without that "he would have lost the use of his leg," says Dr. Joseph Kvedar, director of the program, which will handle 1,000 cases this year, up from 500 in 1999.

Unfortunately, Partners can't actively market this service in most of the U.S. State laws prevent physicians from practicing across state lines, and insurance companies are loath to reimburse for telemedicine. Other barriers, from high costs to the conservative mindset of physicians, have slowed adoption of electronic medical records and order-entry in many hospitals. "But after 30 years in this business, I think we are finally turning a corner," says Partners Consulting Group's Drazen.

She predicts that the rate of adoption of e-health practices will accelerate. One reason: the business community is demanding it. In mid-November, a group of 60 businesses, including heavyweights such as Ford Motor Corp. and General Electric Co., announced they'll send their workers to hospitals using computerized systems like those found at Brigham and the General. The two Boston pioneers may still be exceptions. But before the decade is out, health-care experts, doctors—and patients—are hoping they become the norm. ●

► Health-care analysts at U.S. Bancorp

Piper Jaffray estimate that medical errors cost more than \$3 billion annually

ing off severe complications." And by suggesting equally effective but less expensive drugs, the system has held annual increases in the Brigham's drug costs to "less than 5% a year for the last five years, vs. 13% to 15% at some health plans," says Brigham President Jeffrey Otten.

Similarly, in Brigham's radiology de-

the digital image can be viewed instantly by every involved doctor, without the delays and danger of loss that come with film. "The Internet is profoundly changing the way we practice radiology," says Khorasani.

It is extending the reach of other specialists as well. Take Dr. Gary R. Epler, the world's leading expert in Boop, a lung dis-



Routine
has its reasons.

Change isn't one.

A dynamic network is how business manages change.

You are now able to link your internal systems and your automated business processes across the Internet with customers, vendors, and partners. And in turn, with these businesses' customers, vendors, and partners. This is how businesses manage change—a dynamic network, a limitless network of business connections, all powered by the ebusiness platform from Vitria.



VITRIA



iAsiaWorks

Global Technology. Asian Focus.



When it comes to Internet Data Centers and Hosting in Asia

iAsiaWorks for you. Internet business in Asia can be complicated with uncertain standards in connectivity

network infrastructure and in-country support. iAsiaWorks' Pan-Asian footprint of world-class data centers provide the highest quality speed, peering relationships and local expertise in 11 Asia-Pacific countries in the USA, giving you the opportunity to host right where your customers do business. iAsiaWorks can get you up and running quickly and easily throughout the region with tailored services that reflect the needs of your business. And with 24 x 7 x 365 support and expert on-site technicians, you can rest assured that your online presence is secure with us.

www.iasiaworks.com

by

ELLEN LICKING

'This Is the Future of Medicine'

blazing trails on a vast frontier called electronic care management

Vivometrics, a Southern California startup, wants to put a shirt on your back. But the company's lightweight, stretchy garment is not your average muscle-T. Embedded in the fabric are four black bands equipped with electrodes and physiological sensors designed to record more than 40 vital signs, including fluid in the heart, breathing rate, and oxygen consumption.

gigabytes of data stream from the sensor to a handheld computer discreetly located in a hip pocket of the shirt. Standard, one supposes, for Captain Kirk and the rest of the Enterprise crew. But Vivometrics says you will be able to order its Shirt within a year or two.

Vivometrics is blazing trails on a potentially vast frontier of e-health known as electronic care management. The first examples were fairly crude devices such as bathroom scales that could help heart-re patients keep accurate records of weight. But like everything in the land of silicon, fiber optics, and radio communications, patient-care devices have shrunk in size, soared in IQ, diversified in application, and become so cheap that the parsimonious HMO will soon consider them a bargain. As a result, gadget makers are swooning in on a wide range of diseases, monitoring the blood sugar of diabetics, tracking the heart-attack survivors, and the breathing rates of asthmatics. "This is the future of medicine," says William W. Ge, chief executive of Medtronic Inc. Ultimately, electronic care will save money and lives. The Institute for the Future reckons that some 120 million Americans—about 40% of the total population, will be living with a chronic disease by 2010. These patients will incur \$600 billion in medical costs that year—a 16% increase over today. But Net-capable devices could curb that escalation. Cost-effective "virtual office" exams could ease the bur-

den on beleaguered hospitals, while improving the quality of care.

More than 50 companies are competing in the business of keeping patients out of the hospital. They are startups with names like Alere Medical, LifeMasters, and Health Hero Network. Old Economy players such as CorSolutions and Accordant Health Ser-

vices Inc. also have jumped in with Web versions of their traditional telephone-based medical services. Meanwhile, both Medtronic, the Minneapolis device maker, and Agilent Technologies Inc., the semiconductor spin-off of Hewlett-Packard Co., are developing their own Internet-ready monitors.

Patients like Bryan Bellanger can attest



Life Shirt records and sends vital signs

to the benefits of remote care. Suffering from heart failure, the 49-year-old from Louisiana must keep a close eye on his weight. Even a couple of extra pounds can add so much strain that he becomes short of breath and dizzy. So when his weight skyrocketed last March, his doctor asked him to step on Alere's high-tech scale. Now, when Bellanger checks his weight every morning and evening, the readings are instantly transmitted via a modem to a computer server at Alere's headquarters in San Francisco, where a team of company nurses keeps an eye on him. The remote monitoring makes him try harder—and indeed, since he began using the scale, Bellanger has dropped 60 pounds and hasn't experienced any more problems with his heart.



the Net to the video screen. A few clicks of the teal buttons, and the patient sends her answers back to the nurse who is monitoring her remotely.

Implantable devices such as Medtronic's Chronicle may also play a role in electron-

More good news for e-care businesses: Patients seem to recuperate more quickly when they know that a nurse or doctor is aware of their condition around the clock. Based on this insight, a Baltimore startup called VisiCU is targeting intensive-care units at community hospitals. Typically, such units are staffed at night by nurses, not physicians. But recent studies have shown that ICUs can cut mortality rates 55% simply by having a doctor on site 24 hours a day. So VisiCU developed a system for wiring hospital ICUs so that an off-site doctor can monitor patients in real time—and in an emergency, run a videoconference with the attending nurse. The company already is monitoring ICU beds in two Virginia hospitals and hopes to expand to 175 beds in five hospitals in the next year.

Managed-care executives are responding to these remote monitoring systems because they can reduce medical costs. Accordant, based in Greensboro, N.C., has signed up F

mana, Oxford Health Plans, and Blue Cross/Blue Shield of Colorado as clients by showing that its program can reduce yearly claims costs by about 20%. As medical expenses rise and doctor's visits continue to shrink, services like those provided by LifeMasters, Accordant, and Vivometrics will only become more valuable. Soon, a life shirt a day may keep the doctor away. ●



► More than 50 companies are competing to provide virtual care, thus keeping patients out of the hospital

For greater interactivity, Alere and Health Hero Network of Mountain View, Calif., have designed simple Internet appliances that monitor the symptoms of heart failure patients. Health Hero's gadget, called the Health Buddy, is a toaster-size appliance with a video screen and several half-dollar-size teal buttons. Every day, when a patient turns on her "buddy," questions about her condition zip over

ic care. In collaboration with Microsoft Corp. and IBM, Medtronic plans to spend more than \$200 million to develop an implantable heart monitor that will automatically beam its recordings to a patient's doctor wirelessly. The first prototype appeared in 1999, and a commercial device could be on the market in several years.

NET CARE

Nifty gadgets that actually improve medical care are coming online. Here are some promising devices and the companies that make them:

DEVICE	COMPANY	FUNCTION
Vital signs monitor	Agilent	Wireless device to take daily measurements of blood pressure and heart rhythm, and zap the information over the Net to the doctor
Alere scale	Alere Medical	When this scale spots an irregularity, such as weight increase indicating fluid retention, it sends a message to a computer manned by nurses
Health Buddy	Health Hero Network	This toaster-sized device uploads daily information about a patient's illness, such as spikes in blood sugar, to the physician's PC
Life Shirt	Vivometrics	This shirt comes with enough sensors to track 40 bodily measurements 24 hours a day. A handheld device can download the data over the Web
Chronicle pacemaker	Medtronic	This device will automatically communicate with doctors via the Net if the heart develops an abnormal rhythm

DATA: COMPANY RELEASES

MANAGE THEM ALL WITH ONE COMPREHENSIVE E-BUSINESS SOLUTION.

e-Fulfillment
exceptions
Order Management
Extraprise Transactions
logistics pick-pack-ship
Virtual Inventories
supply chain
Returns



Yantra is the web-based e-business engine that successfully manages high volume transactions.

To build a successful e-business, you must flawlessly manage thousands, maybe millions of complex transactions on the internet. Yantra is the powerful e-commerce engine that seamlessly manages all of them across your enterprise and extraprise. Our best-of-breed solution

delivers simplicity to even the most complicated e-businesses with flexible business rules, scalability, and 90-day implementation. No one solution does more to build and retain satisfied customers than Yantra. The future success of your business starts by contacting us today.



YANTRA

The engine of e-business.

www.yantra.com

1-888-292-6872

by

MARCIA STEPANEK

Who's Prying Now?

Hospitals and Web sites sell health records online—compromising patient privacy

When Jamie Smith was admitted to Brigham & Women's Hospital in Boston in 1993 for a rare ectopic pregnancy disorder, she discovered that about a half-dozen hospital workers had reviewed her records without her permission. So just before Smith left the hospital, she requested in writing that her records remain confidential. As a precaution, she also requested that the hospital maintain an audit trail of her file, so that she could track who accessed it over time.

Smith says she forgot about the incident until last spring, when she was thinking about applying for new insurance. She then asked the hospital if she could see her records and the accompanying audit trail—and was shocked by what she found. Since she demanded confidentiality seven years ago, more than 200 people—including medical insurers—had requested and received access to her documents without her permission. “Why were all these people accessing my file if I expressly denied them the permission to do so?” Smith asks. Hospital spokespeople declined to comment on Smith's case, citing confidentiality.

As health care goes digital, even the best hospitals face increased pressure to profit off of patient health data. In some cases, they may sell it to marketers, or position it as a key asset as they negotiate mergers or partnerships. Whichever route hospitals choose, they will place the privacy of all their patients at risk, and that's particularly troublesome because at one point or another, everyone is a patient.

Hospitals are simply the most visible offenders. Consider what passes for medical ethics on the Web. In a recent study of 21 prominent health sites, Janlori Goldman, director of the Health Privacy Project at Georgetown University in Washington,

D.C., found that 19 had privacy policies. Of those, 15 notified consumers about when and how their information was collected—but “mostly in language that was hard to find on the site, and confusing,” Goldman says. “And none of [these]

These are not idle fears. The past year alone produced a parade of embarrassing privacy breaches. Global HealthTrax, which sells health products online, inadvertently posted the names, home phone numbers, bank accounts, and credit card information

of thousands of customers on its Web site. Kaiser Permanente mistakenly directed e-mail responses to queries of almost 900 members to the wrong people. And the University of Michigan accidentally made thousands of patient records available to the public on its Medical Centers Web site.

Privacy clauses in a new set of federal medical regulations known as the Health Insurance Portability & Accountability Act of 1996 (HIPAA) may address some concerns. But HIPAA is no privacy panacea. The regulations, which should come into law in two years, may cover patients whose care providers submit paper claims, or who choose to pay out of pocket. And patients will no longer be able to choose

will—or who will not—be allowed to access their medical records. Worse, says Goldman, HIPAA “may create the illusion of protection where none exists.”

The term health privacy doesn't have to be an oxymoron. We need to strengthen the laws that cover offline and online medical Web sites. There must be severe legal consequences for the people who ignore those laws. Anything short of this will endanger the privacy of all Americans. Just ask Jamie Smith.

Stepanek covers privacy



sites actually did all of what their privacy policies promised.”

The public is not pleased. In a survey released on Nov. 26 by the Washington-based Pew Internet & American Life Project, 86% of Net users expressed concern that a health-related Web site might sell or pass on information about what they did online. Eighty-two percent were concerned that insurance companies might raise their rates or deny them coverage because of a health site they visited, and 51% worried about their employer finding out.

"I registered my rocks"

www.auctionjeweler.com



Ruud Verstandig, founder of Auctionjeweler.com, registered his domain name to put his business online at www.register.com. Visit us at www.register.com or call us at 1-800-7-WWW-NET, and we'll help you register your domain name right over the phone.

register
● **com**

the first step on the web

Can a new digital appliance solve home delivery dilemmas?

Leave It

It was the kind of logistical nightmare that busy professionals dread. One night last spring, tech-support staffers were still fiddling with Jeff Stonerock's laptop computer when the Washington, D.C., lawyer had to rush to a dinner meeting. Stonerock needed his laptop for a business

trip the next day, so his office hired a courier to take it to his Vienna (Va.) home after the work was finished. Trouble was, neither Stonerock nor his wife would be there to receive it. And leaving a \$2,000 laptop containing sensitive client files on his doorstep was unthinkable.

Luckily for Stonerock, he had a Brivo Systems Inc. Internet-linked lockbox next to his garage. With the proper entry code, the courier could leave the laptop in the secure box. Sure enough, in the middle of dinner, Stonerock's pager buzzed with a message from Brivo saying his laptop had made it. "It was a real relief," he says.

Stonerock is one of 100 consumers testing Brivo's Smartbox, a steel-and-plastic container about the size of a travel trunk with a wireless link to the Web. By building a box that notifies users when packages are dropped off or picked up, Brivo aims to take the hassle out of delivery for harried professionals, online shoppers, and small businesses. After trials in the Washington metro area and Silicon Valley, Brivo will start selling its service in January in those areas for a monthly fee of \$10 to \$20, plus several hundred dollars for the box.

It's a market that other entrepreneurs are eyeing, too. In December, San Francisco's zBox Co. will begin promoting a similar service in the Bay area. Unlike Brivo, its box isn't linked to the Web. Instead of sending an e-mail, an indicator light on the box shows when a package has arrived. "We don't believe that immediate notification via e-mail is something consumers are willing to pay for today," says Tina Shah, co-founder and CEO of zBox.

If such services catch on, they could

make shopping online next holiday season less frustrating for millions of cybershoppers—and help boost sales for e-tailers. For small businesses, the lockbox could make it cheaper and easier to ship and receive documents, supplies, and other urgent materials. In one measure of the potential market,

Forrester Research estimates that 34% of homes in North America are "digital dense," or online households where someone may telecommute or run a business.

Delivery dilemmas aren't new. Every year, catalog shoppers peel millions of "sorry we missed you" sticky notes from their front doors. The problem is getting worse, though, as e-commerce explodes. Forrester expects the number of packages shipped to homes to jump to 2.1 billion by 2001, more than double the number last year.



Stein and Griffin's lockbox combines logistics and consumer market

in the Box

doorstep lockboxes "fill a need," says John Nolan, deputy postmaster general at the U.S. Postal Service. Pickups and deliveries by Brivo and zBox units have so far been a breeze for mail carriers. "Our people took it readily," says Nolan.

Here's how Brivo's system works. Say a customer buys a DVD player on Amazon.com. At the site's checkout page, the customer clicks on the Brivo pop-up window, types in a user name, a passcode, the item purchased, and the merchant. Brivo instantly sends back a purchase code that the customer adds to the Amazon address field,

which is then included on the shipping label. The courier enters the code to open the Brivo box, which then sends a wireless message to Brivo, which instantly alerts the customer via e-mail. The shopper uses the personal code to open the lockbox. "You can send and receive packages whenever you want from wherever you are," says Carter H. Griffin, Brivo's co-CEO.

Still, analysts question whether enough consumers will be willing to pay for a lockbox service on top of delivery charges. "We get calls every day from consumers and companies saying they want to buy it," says Griffin. Initially, the company will aim its marketing at upscale consumers who are heavy catalog or online shoppers, and later pursue small- and home-office workers who send and receive products daily and travel extensively.

Griffin also plans to move the technology beyond the lockbox and into commercial and industrial applications. For example,

a Brivo-ready garage-door keypad could let online grocers deliver food to refrigerators in customers' garages at any hour. Small businesses could use the Brivo system for nighttime deliveries to loading docks or mini-warehouses. Says Griffin: "Our system isn't just a solution for Amazon purchasers ordering books."

Griffin and co-founders Mark A. Stein and Timothy J. Ogilvie didn't start out with such grand visions. Or any vision at all. The three left the Washington, D.C., office of consulting firm Kaiser Associates in May 1999 without a specific business plan. They had all worked in consumer marketing and logistics, so they planned to use that expertise on the Internet. A month later, they had their idea when they noticed that the medical clinic next door kept metal boxes outside for pickups of blood and urine samples and hazardous materials.

The trio sought out IDEO Product Development, the Silicon Valley industrial-design powerhouse responsible for the Palm V organizer, to design the 90-pound Smartbox. But in July, 1999, they almost had to ditch the idea when they learned that a Kansas City inventor had patented a lockbox. Instead, they bought the rights to the technology for an undisclosed sum.

With patent in hand, Brivo reeled in more than \$20 million from investors. Of that, \$17.5 million came from Duchossois Technology Partners, a Chicago venture-capital firm. Though initially doubtful about the founders' consulting backgrounds, Duchossois senior investment officer Dan Phelps has become a believer. "These guys have done a great job of executing a business plan," Phelps says, referring to strategic partnerships like the one with IDEO, which also is a Brivo investor.

"You can receive packages whenever you want"

Brivo hopes to link soon with a major home-appliance firm that would make and help market the Smartbox through retail outlets. But at \$10 to \$20 a month, its service will cost at least double what zBox will charge. Shah says that zBox's market testing showed that "above \$10 a month, demand drops off significantly."

Some analysts agree. The Brivo system "is an interesting solution, but consumers have repeatedly demonstrated that they're more sensitive to cost than convenience," warns Jupiter Communications analyst David Schatsky.

Not all consumers, though. "I'd definitely pay for this," says Stonerock. He has come to view his Smartbox as another household appliance. Now Brivo has to convince thousands more like him that a doorstep lockbox, like a dishwasher, is something no home should be without. ●

BRIVO SYSTEMS

Location: May, 1999, in Arlington, Va.

Founders: Mark A. Stein, Carter H. Griffin, and Timothy J. Ogilvie, all engineers from the Washington, D.C., office of Kaiser Associates, corporate-technology consultants.

Funding: More than \$20 million, with the lion's share from Chicago venture capitalist firm Duchossois Technology Partners.

Product: A Smart Box that lets you receive packages when you're not home, for \$10 to \$20 a month. The box, which sends you an e-mail when a package arrives, is being tested in 100 households in Silicon Valley and the D.C. area. Commercial service is planned early next year.

Inspiration: The trio thought of the idea when they noticed that the medical clinic next to their office had multiple metal boxes outside for labs to pick up blood and urine samples. Why not a box for deliveries to homes?

Strategy



Our VP of Business Development wants to sell to 5 B2B eMarketplaces

Reality



Which 5: TBD

Solution



The sell-side @dge

Different eMarketplaces, same strategy. It's not only important to hook up to several B2B eMarketplaces – it's imperative. That's why with OrderFusion's sell-side eCommerce platform, you don't have to limit what eMarketplaces you sell through. You can hook up to any one or every one. Now wherever your customers go – you go too.

Everything can change tomorrow. Your customers and eMarketplaces can merge, change and part again. All the while, electronic and human sales channels need accurate and consistent information to sell effectively. With OrderFusion you'll know who's browsing, who's buying and every detail in between.

I've got it all under control. From customer-specific catalogs and pricing to quotes and advanced order management, Orders of Magnitude™ delivers. By linking to your existing systems and providing total synchronization between all your sales channels, this system looks as good from the inside as it does from the outside.

There's no time like the present to implement the eCommerce platform of the future. Visit www.orderfusion.com today and download *The Keys to Sell-Side eCommerce Success*. Or for more information on OrderFusion and Orders of Magnitude call 888-653-8096.



OrderFusion
The sell-side @dge

N ELGIN

Let's Reinvent The Company

Online consumer sites are embracing a business-to-business model in desperation

On a mild New York City afternoon in late October, dozens of employees crowded into the-globe.com Inc.'s 22nd-floor recreation room. The somber mood was a far cry from November, 1998, when the popular Internet

community site rocketed to fame with the st-rising initial public offering ever. ping-pong table was folded up in a er and the pool table was covered.

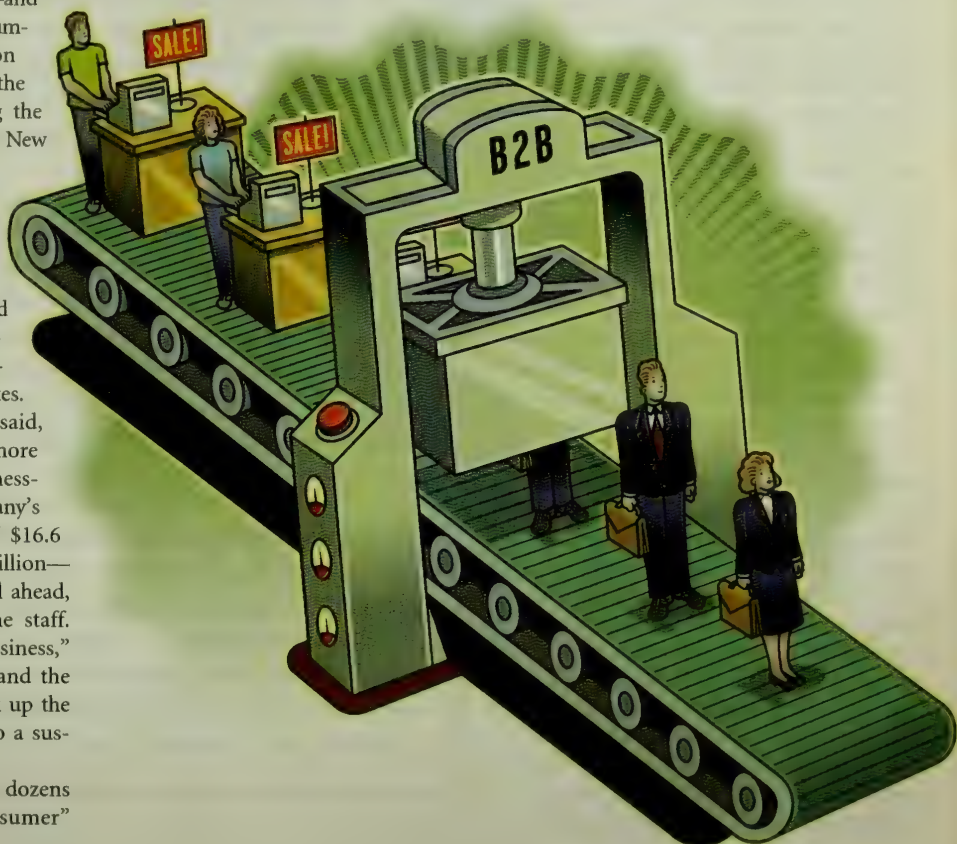
executives wore grim faces—and just because the stock had plummeted 98% from those halcyon , to 80¢ a share. They faced the umental task of reinventing the pany they had thought was a New omy star.

Using matter-of-fact Pow- int slides, newly hired f Executive Chuck Peck out the details of the pany's recently launched egy: moving beyond con- ers and providing Net com- ity services to other Web sites. massive restructuring, he said, ld slash costs and line up more arces behind the new business- siness push. But the company's -quarter results—a loss of \$16.6 on on revenues of \$6.7 million—red the toughest job was still ahead, iding laying off 41% of the staff. ve had to overhaul the business,” says. Now, it's up to him and the emaining employees to pick up the s and reassemble them into a sus- ble business.

's a scene now playing at dozens ruggling “business-to-consumer”

dot-coms. In a bid to survive, they're exclaiming, “B2C? Not me!” Instead of trying to attract advertisers for fickle Webhead consumers, theglobe.com is

offering concrete, useful services to real, paying businesses. In recent months, the flow of consumer companies toward B2B has turned from a trickle to a fire hose. The migrants range from Web delivery service Urbanfetch, which recently shuttered its consumer-oriented video-and-munchies service to become a business courier service, to publicly-held search engine Ask Jeeves Inc., which is drastically reorganizing its business to fo-



cus on providing search services to other sites. Even e-commerce software makers such as Vignette Corp. and InterWorld Corp. are veering away from selling to consumer sites in favor of courting mainstream businesses.

Clearly, one big reason for the switch is that some of those business models never worked and probably never will. Indeed, much of the movement appears born of desperation, as wounded dot-coms try to leap on the next hot trend. Problem is, even that doesn't always work: Skeptical investors have pummeled some B2B wannabes, such as software seller Beyond.com, computer reseller Outpost.com, and online auction house Bid.com International—pushing each of those stocks below \$3 a share. "Selling Internet ad space is an entirely different ballgame than selling services to businesses," says Bryan Kester, a project leader with venture-capital firm Redleaf Group Inc.

Grand visions. Still, the redemptive power of the Internet is that it's a ready-made place to quickly reach and serve new kinds of customers. With the rapid pace of change on the Net, business-model mutations are not just possible, but virtually required to stay ahead. "Most Internet companies are changing their business models three or four times each year," says Patricia B. Seybold, CEO of market watcher Patricia Seybold Group. In the end, the success or failure of this massive business-model migration may well determine how powerful the Internet is as a tool for corporate change.

The toughest challenge for companies trying to make the shift is determining where to jump. It's often difficult to discern between vibrant business opportunities and flavor-of-the-month Internet fads. When AskMe Corp. CEO Udai Shekawat launched his knowledge-sharing software company in August, 1999, he was intent on creating great software. But when the AskMe knowledge-sharing Web site began seeing a significant jump in traffic and resulting advertising revenues, several company insiders—including Shekawat—began harboring grand visions of becoming an online megaportal. "For a brief time, we were going to take on Yahoo!," he says.

But after execs hunkered down over

spreadsheets of revenue and market projections, they quickly came to their senses. Shekawat pulled in the reins last January and refocused his techies on writing software. Corporations began requesting AskMe's knowledge-sharing program for their corporate intranets. Today, just six months after garnering all of its revenues from online ads, AskMe gets 90% of its sales from corporate customers. The privately held company projects it will turn a profit in six months.

Once companies make their decision, they can't waste any time. The penalties for waiting too long are severe. Theglobe.com, for one, couldn't decide how

fast to move into B2B services, so even as its online ad revenue stalled, the B2B side didn't pick up the slack. Now, with a severely trimmed workforce and less than \$24 million in cash, theglobe.com's future looks iffy. Beyond.com also short-circuited its push to sell to businesses thanks to a management squabble that kept it from running full-bore with the new plan. One camp wanted to move exclusively into B2B, but CEO Mark Breier, a consumer brand maven, wanted to stick with consumers. After mounting losses and executive departures last year, the company finally ditched the consumer push, but not

Presto, Change-o: How

DO



► Choose a new strategy that fits the company:

Avoid jumping on the newest fad. AskMe flirted with challenging Web portals like Yahoo. After examining its expertise, execs junked the idea to sell knowledge-sharing software. After just nine months, 90% of its revenues come from software, and AskMe expects to turn a profit by the second quarter of 2001.

► Keep staffers in the loop:

Map out where the company is going and why each division is important to the new vision. When Paula Jagemann, CEO of consumer site OnlineOfficeSupplies.com, wanted to add business services such as Web hosting, she called several all-hands meetings.

Few employees quit, and she expects the new business to pull in \$15 million in revenues this year.

► **Get financial backers' support early on:** Changing business models can take a lot of new capital, often pushing back profitability targets. Support from investors is crucial. HomePortfolio.com, which runs a consumer home-furnishings site, realized they'd do better if they ran an online marketplace for furniture makers to sell to retailers. It broached prospective investors such as Excite@Home—helping it raise \$48 million in May.

stock languishes at 63¢ a share. By contrast, moving quickly to latch onto B2B opportunities while they're ripe for the picking pays big dividends. Ask Netscape: It first began licensing its software to corporations in 1998, two years after it went public. Now, about half of Netscape's 750 employees are dedicated to supporting its B2B efforts, which pulled in \$13.2 million, or 45% of Netscape's revenues last quarter. The company expects to be profitable overall by mid-2001, with the B2B side turning a profit by the end of 2001. Given the need for speed, it's crucial

for companies to get their staff behind the changes fast. When Paula Jagemann decided last February to spin off a company to provide business services such as Web-site hosting from her consumer-focused OnlineOfficeSupplies.com site,

she expects the new business, part of her holding company, E-Commerce Industries Inc., to pull in \$15 million, or half its overall revenues, this year. Says Jagemann: "You almost have to behave like a politician, delivering the same message

"Selling Internet ad space is an entirely different ballgame than selling services to businesses"

she gathered over 120 employees for several all-hands meetings to spell out her plans. That helped prevent a mass exodus of talent, limiting its attrition rate to about 1% annually. Jagemann

over and over to your employees."

Sometimes they have to behave more like the Grim Reaper. Companies that assume their current staff can adequately address an entirely new market are flirting with failure. OpenTable Corp., for example, cut its teeth as an online restaurant-reservation service for consumers. But after tepid results, executives realized there was a much bigger opportunity in providing Net-based reservations systems and customer analysis tools to restaurants and hotels. So last summer, the company overhauled its management team, including a new CEO and several top lieutenants. But a handful of employees didn't like the moves or the ensuing cultural transformation that made the company less cool. So new CEO Jeffrey B. Edwards fired the malcontents. "We couldn't let that negative attitude linger," he says. Brutal, sure, but that helped persuade investors to kick in an additional \$42 million last month, a hefty sum in the current dot-com drought.

Tricky maneuvers. Since changing business models isn't cheap, it's just as key to get financial backers on board early. For instance, HomePortfolio.com, which boasts a consumer home furnishings site as well as a B2B services business for furniture manufacturers, needed a cash infusion earlier this year. Execs made no bones about the fact that their true moneymaker would be the B2B business, and that their consumer business would fade. Investors bit, helping HomePortfolio.com raise \$48 million in May. "This isn't the summer of VC love anymore," says HomePortfolio.com CEO Dale Williams. "You've really got to keep these people in the loop."

Jettisoning the old business, however, remains one of the trickiest maneuvers. When you're starving for cash, it's tempting

Morph a Web Business Model

DON'T

► **Wait too long to switch gears:** On the Net, excessive caution can be just as deadly as reckless speed. TheGlobe.com, the Web community site, saw its stock plummet from a post-IPO peak of \$39.50 a share in April, 1999, to just \$1 this past September. That's when it refocused on building community features for Web portals. Too late: Its stock now trades at about 75¢.

► **Be afraid to drop the ax:** If staffers can't rally around the new strategy, part ways. OpenTable CEO Jeffrey Edwards, who is expanding from online restaurant reservations to selling Internet customer-management tools for restaurants, faced this dilemma. When a few employees expressed disdain, he fired them. Brutal? Sure. But OpenTable has since built momentum, raising \$42 million in venture funding in October.

► **Mix divergent business models:** Balancing several different strategies can be a killer for a small company. Take Beyond.com, which pumped up its online software superstore last year with TV ads of a naked guy buying software on the Net. When it began courting business and government customers last year, many were turned off by the ads, and it hasn't been able to gain traction on either model. Its stock now trades near 50¢ a share.





OpenTable's Edwards
had to change staff
to change direction

to try to feed from two different troughs. But it's often tough to juggle two divergent business models aimed at both consumers and businesses. Even while starting to court business buyers last year, Beyond.com spent more than \$20 million on consumer-oriented television ads featuring a naked man who was happy he could order from his clothing-optional home. But button-down business buyers may hesitate to make purchases from a company whose icon is a guy with no pants. Says Michael Dunn, CEO of Prophet Brand Strategy, a brand-consulting firm: "Associations with the consumer brand can often be a liability going forward."

Crossing the chasm. Indeed, there's no telling which of these transformations will be sustainable and which will prove to be yet another harebrained dot-com scheme. Some companies that have tried to switch have utterly failed: After doing an about-face from a failed strategy to take

on Amazon.com Inc., for instance, Value America Inc. tried to offer order-entry and fulfillment services to other businesses after filing for Chapter 11 bankruptcy protection in August. Too late. On Oct. 20, its assets were acquired by tech-

tailers to offer the custom-bag service consumers as well—providing a new revenue stream.

Mainly, the key is hiring flexible people. Some Net companies ask job candidates questions that focus on

The companies best able to change prepared themselves from the beginning

nology products distributor Merisel Inc.

The companies best prepared to cross the chasm from consumer to B2B e-commerce, say management experts, are those prepared for inevitable change from the beginning. For one, that means building e-commerce systems that can adapt to changing requirements. Timbuk2 Designs of San Francisco, for instance, had a computer system that allowed consumers to design their own backpacks. But analyst Seybold points out that it was flexible enough for re-

they would react to turmoil and certainty. As the rapidly changing Internet economy continues to force changes in strategy, companies need to know how to roll with the punches and run with the new opportunities. "That's where a lot of change-management situations fall on their butt," says Jeeves President Adam Klein. "You've got to have people who put the company mission first." Even if that mission changes almost as often as employees change their T-shirts. ●

Companies are constantly being 'pinged' by black hat hackers. A client who processes millions of on-line transactions was concerned about such attacks. We built a hacker early warning system, utilizing tools and techniques commonly used by hackers — and some they don't even know about."

— Ted DeZabala, e-Business Services



For e-business services
the answer is the people of Deloitte & Touche

**Deloitte
& Touche**

Assurance & advisory, tax services and consulting

www.us.deloitte.com

©2000 Deloitte & Touche LLP. Deloitte & Touche refers to Deloitte & Touche LLP and related entities.

NET WORTH

Business Week e.biz

by

LINDA HIMELSTEIN

Going Back To Dot-coms

Do these venture capitalists know something you don't? Could be

Veteran venture capitalist C. Richard Kramlich is one of the last people you would expect to be sinking money into a new consumer dot-com. The man who backed such communications equipment highfliers as Ascend Communications Inc. and Juniper Networks Inc. has stated openly that venture investments over the past three years in e-tailers and other consumer offerings have been largely faddish and lacking in business fundamentals. In fact, Kramlich, the founding partner of New Enterprise Associates,

RICHARD MORGENSTERN





Kramlich put
\$8 million
into eyestorm

vowed to stay out of the retail sector forever after a spate of disappointing investments his firm made some 20 years ago.

So much for old vows. In September, Kramlich put \$8 million into his first—and only—consumer Internet startup, eye-

Redpoint Ventures agreed to invest \$10 million in LivePlanet Inc., a multimedia entertainment site started by Hollywood actors Ben Affleck and Matt Damon.

Do these venture capitalists know something you don't? Maybe. The con-

merchant. "This isn't a repeat of 'Let's give free services to anyone or do ad-based models,'" says Kleiner Perkins Caufield & Byers partner Vinod Khosla, adding that Kleiner is currently considering funding new consumer upstart. "These are good opportunities based on good business propositions, not on hype."

They had better be. Dot-com layoffs and outright bankruptcies are accelerating, and they're only expected to get worse. Since last December, more than 22,000 jobs have been cut at Net upstarts, with more than 275 of these companies shutting down, says outplacement firm Challenger, Gray & Christmas Inc. Even companies such as Pets.com Inc., Garden.com, and Kibu.com, backed by the most elite venture money, haven't been able to make a go of it. "This is the perfect storm," says Gary E. Rieschel, a partner at Softbank, which has backed dozens of consumer Web ventures. "If you were trying to pick the worst-case scenario for Internet-era companies, this is that time."

Belly-up. Most VCs are battenning down the hatches. The number of venture-backed consumer Net deals is down 33% to 90, for the first nine months of the year, compared with the same period in 1999, according to San Francisco-based searcher VentureOne Corp. In that same time frame, money going into consumer Web startups is down, too, from \$2.4 billion to \$1.8 billion. And most of the

"These are good opportunities based on good business propositions, not hype"

storm.com, an online site that sells modern and contemporary art as well as photography. Kramlich is quick to point out that his deal is vastly different from most others. Eyestorm, he says, is operated by experienced executives who know how to make a business successful. Kramlich adds that the company is on track to book \$5 million in revenues this year and turn a profit sometime next year. "This is a business with real traction," says Kramlich, an avid art collector. "It's not like selling pet food."

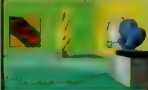
That Kramlich is bucking the overwhelming trend away from anything having to do with consumers and the Internet is contrarian, to be sure. But he is hardly alone. Softbank Venture Capital recently pumped an undisclosed amount of money into guggenheim.com, a yet-to-be unveiled site that will bring the Guggenheim art collection online. On Nov. 9, Active.com, a participatory sports site, took in \$21 million from a group of investors including ABS Ventures, the venture arm of Deutsche Banc Alex. Brown Inc. And on Nov. 13,

trarians, most of whom have been burned at least once by troubled Net upstarts, are convinced that the time has never been better to enter the beleaguered business-to-consumer sector. They say the thrashing Internet stocks have taken from Wall Street coupled with the virtual evaporation of any chance to go public in the near future has made many of these deals relatively cheap. Several venture capitalists say they spend up to a third less now for the same equity stake in startups than they did at the beginning of the year.

What's more, these financiers believe that the previous failings have given them the knowhow to discern what works and what goes awry online. None of the new upstarts come with bottomless marketing budgets. Their founders don't blithely say they have little idea when or how they will reach profitability. Nor do they sell commodities online, such as furniture, that can be purchased just as easily from a local

Try, Try Again

Although consumer e-commerce sites have fallen out of favor with investors, some venture capitalists are putting money into new consumer Net ventures.

COMPANY	MARKET	INVESTOR
eyestorm.com 	The London merchant sells paintings, photography, sculpture, and other art by established artists.	New Enterprise Associates put more than \$8 million into the company in September.
 guggenheim.com	This yet-to-be-unveiled site will bring the Guggenheim art collection online.	Softbank Technology Partners invested an undisclosed amount.
 LivePlanet	The site, launched by Ben Affleck and Matt Damon, provides multimedia entertainment on the Net.	Redpoint Ventures plunked \$10 million into the company in November.
 Kick.com	The company offers personalized content and commerce to users based on the digital music they listen to.	Utah Ventures and Sony's 550 Digital Media Ventures invested \$6 million in November.



LOOK AT SALES.

LOOK AT INVENTORY.

LOOK AT PROFITABILITY.

REALIZE YOU HAVE
THE POWER TO
OWN THE MARKET
AND ACHIEVE GLOBAL
DOMINATION.

LIE IN WAIT.

COGNOS®



ou live for this moment. When your business vision becomes sharply focused and you find a new source of value staring you in the face. At Cognos, our mission is to deliver this moment again and again. We call it The Cognos Moment. And it happens in thousands of companies every day, driving their e-business strategy and success. Our world-leading business intelligence software solution gives you an immediate, enterprise-wide view of your business. Which everyone in your organization can use to create strategic business value, instantly. If you'd like to see how to experience a Cognos Moment, visit cognos.com/moment today. After all, the world is out there for the taking.

deals don't involve the creation of startups. Rather, they are largely follow-on financings for existing companies. Ron Conway, a partner at Angel Investors, says his Internet-focused firm is doing almost no

better as broadband technology and the speed of home Internet access improves—leading consumers to spend more of their income on the Web. Certainly, online spending projections support some opti-

the right to put millions into the star-studded multimedia company. The appeal, they say, is that Damon and Affleck plan to integrate every media form—from television to the Internet to film—into every

Several of Silicon Valley's top venture firms jockeyed for the right to fund LivePlanet

new deals. Roughly 8% of the firm's portfolio, or 18 companies, have gone belly-up. So Angel Investors has earmarked \$50 million to finance companies already backed by the firm. "We are going through a market cycle where business-to-consumer companies are simply out of favor," says Conway.

No argument there. But that hasn't stopped Kramlich and others from putting to work what they think they have learned about consumers and the Internet. For example, the latest crop of e-tailers are fiscally disciplined businesses that offer either unique merchandise or services, or are run by entrepreneurs who have successful track records. Zoza.com, which launched in October, is an upstart that sells its own line of apparel and is operated by the couple who founded Banana Republic. Guggenheim.com is banking on its worldwide reputation and proprietary art collection to draw in customers. Eyestorm.com relies on an exclusive pool of more than 70 international artists for its merchandise. And Kick.com Inc., which raised \$6 million in venture money in November, claims to be defining a new market by delivering personalized content to listeners of digital music. "If you have a good business model backed up by great technology, it's not as hard to raise money as people might think," says Kick.com's communications manager Michael Lattig.

Beyond being more discriminating, today's dot-com backers argue that the best is yet to come for consumers and the Internet. They say the online shopping and entertainment experiences will only get



Damon and Affleck: Have they found the right formula?

mism. Researcher Jupiter Media Metrix Inc. estimates that consumers will fork over \$86.3 billion to Net companies by 2003, up from just \$17.3 billion in 1999.

That may be why the recent venture competition over funding LivePlanet was so fierce. Several of Silicon Valley's top venture firms, from Sequoia Capital to Redpoint, jockeyed in early November for

project they produce. Their first, dubbed *Runner*, will air on ABC next summer and features a single person vying for \$1 million by trying to cross the country in 30 days without being identified by viewers. Clues and games about the runner will be posted on the Web while the reality-based series airs. "This wasn't a no-brainer given the current environment," says Redpoint partner Geoffrey Y. Yang, who landed the deal. "Even though the markets are in the tank, we still really believe in the convergence and integration of traditional media and Internet media."

Against the grain. That's not to say that the idea isn't fraught with risk. In fact, venture investors know that it may take a while for this new crop of consumer Net sites to take off, which may be why the contrarians that have stepped forward are among the largest and best-known funds in the country. New Enterprise Associates just raised a record-setting \$2.2 billion fund in September, while Redpoint and Softbank's U.S. arm both sit atop more than \$1 billion. "If you have branded capital, you can go against the grain," observes analyst David Wright of the Aberdeen Group Inc.'s private equity services division.

They will most certainly need that dough to keep their new Web babies thriving if the public markets continue giving dot-coms cold shoulder. But, asks Softbank's Rieschel, "if you have guts and have capital, how can you not be optimistic about the consumer market? He might want to ask the ex-employee of Pets.com about that. ●

e.biz online

For interviews with Dick Kramlich, Geoffrey Yang, and other venture capitalists now investing in B2C companies, check out ebiz.businessweek.com

When it comes
to deploying
a B2B Internet
auction solution,
there's the pricey,
six-month,
never-ending
consultant
fest.

Or, there's
Commerce One.

COMMERCE ONE AUCTION SERVICES

Now, you could be running your own B2B Internet auctions in as little as 10 short days. With Commerce One, there's no equipment to buy, and no systems to install or support. A secure online environment within your own auction site or anywhere throughout the Global Trading Web, a network of over 72 vertical and regional e-marketplaces that offer a world of new buying and selling opportunities. And browser-based, point-and-click functionality that makes it all so easy, affordable, and comprehensive, that there's no need for the mandatory consulting service and ongoing support required with other solutions. When you need us, our professional services group and consultants are available to help. But only when you want it. On your terms and at the right price.

See for yourself with our online demo:

www.commerceone.com/auctions/bw2

or call: 877.261.8516

COMMERCE
ONE 

MANY MARKETS. ONE SOURCE.™

When Good Options

Issuing special stock options to keep staff may not be the best answer

Joseph H. Howell, chief financial officer of EMusic.com Inc., agonized as he watched the stock price of his Internet music retailer tumble this year. Although he fretted about the California company's diminished worth on Wall Street, he was even more bothered by the prospect of massive defections among his 180 employees. Most of the workers held stock options priced at about \$16 a share

and, by spring, EMusic's stock was trading at about \$2. So in June, he decided to grant his workers a new batch of options priced at \$2. "We're trying to make sure that our employees are receiving a good compensation package in an extremely competitive market," says Howell.

His anxiety is shared by plenty of other executives. Throughout the 1990s, stock options were perceived as an enlightened way to compensate employees and to bring their interests in line with those of shareholders. The National Center for Employee Ownership estimates that more than 10 million people are receiving stock options today, up from 1 million in 1992. While all of this worked wonderfully during the eight-year bull market, the crash in stock prices during the past six months is exposing the dark

Corp. staffers tumbled 40% to \$4.5 billion.

The price of the losses is measured in more than dollars. A steep drop in the value of stock options can wreak havoc on morale and send workers fleeing for the exits. Suddenly, chief executives across the country, particularly at tech companies, are struggling to find effective ways to recruit, motivate, and retain employees. "People were counting on what wasn't real," says Steve Ballmer, Microsoft Corp.'s CEO. "I think that that is really a tough situation."

He knows the difficulties of inflated expectations and deflated stock options on too well. In April, Microsoft gave all of its 35,000 employees a special, one-time options grant equal in size to the options they had received as part of their 1999 performance reviews. That followed a drop in the software giant's shares from nearly \$120 in December to about \$66 in April. Net retailer Amazon.com Inc. granted employees new stock options in August, after its stock had tumbled from \$113 in December to \$30.75. At Sprint Corp., after the stock fell 65%, to \$24, during the past year, employees could decide whether to trade in their existing options for new ones that will be priced at the market value of Sprint's shares in May. "Employees are



"It's a case of 'heads I win, tails I win,' and that's completely unacceptable"

side of options. Employees at über-portal Yahoo! Inc. saw the value of their options drop by 60% to \$13.2 billion between June 30 and Nov. 16, according to UBS Warburg economist Jeffrey A. Palma. The value of options held by workers at Dell Computer Corp. was cut in half to \$8 billion over the same period. And the options of Intel



by
PALLAVI GOGOI

Go Bad

a premium in a difficult hiring market, and we have to be competitive," says E.J. Holland Jr., vice-president for compensation, benefits, and labor relations at Sprint.

While hanging on to employees is exceptionally tough in the tech sector, companies across the board are hardly immune. More than a dozen companies have priced options or given special option grants this year—with about one-quarter of those in companies outside the tech sector. They run the gamut, from retailer Toys

‘Us to management consultant Navint Consulting to Franklin Covey Inc., a professional-services firm whose vice chairman, Stephen R. Covey, wrote *The 7 Habits of Highly Effective People*.

Twisted logic. All these new option awards may sound nice for companies and their employees, but they're making institutional investors furious. Why? Existing shareholders are the big losers when workers get special option grants. Each new share granted to employees leaves old stockholders with a smaller piece of the company. "The choppiness in the marketplace, along with the tight labor market, is not a good enough reason to award additional options," says John F. Son, investment director of small company stocks at the State of Wisconsin Investment Board, a pension fund with \$70 billion in assets. "That's not the type of logic that we'd like to see for any type of compensation."

Investors think the logic is twisted in another way, too. While options were supposed to align the interests of employees and shareholders, the recent special awards repricings do the opposite. Workers are rewarded when the stock price drops,

while investors suffer. "It's a case of 'heads I win, tails I win,' and that's completely unacceptable," says Nell Minow, the Washington, D.C., editor of *The eCorporateLibrary.com*, an online corporate-governance think tank headquartered in Portland, Maine. "Until the day shareholders' holdings are repriced along with the options, the employees shouldn't have theirs [repriced] either."

Companies feel as if they have little choice. Tech players, in particular, attracted the best and the brightest—not just with the promise of changing the world but also with the allure of dizzying riches. Without potentially lucrative stock options, these companies may lose MBAs and other top-notch recruits to traditional sectors such as consulting and financial services. "The notion that money grows on trees and stories of people getting rich overnight has lost most of its credibility," says Ilya Talman, president of Roy Talman & Associates, a Chicago



recruiting firm. "People are much more conservative now."

The scenario is grim—but experts on corporate governance say this is only the beginning. They expect a wave of repricings and special options grants in the next few months as companies take steps to halt a potential exodus of employees. "The longer the tech stocks and dot-com prices are [down], the more of this we're going to see," says James E. Heard, chairman and CEO at Proxy Monitor, a New York advisory for institutional investors. "I expect to see a flood of it in the next few months."

Some compensation experts take the side of companies that argue that they've redone option plans simply out of necessity. "High-tech companies can either give the new, lower-priced options to their existing employees or to the newer recruits who replace them," says Robert J. Salwen, a principal at Executive Compensation Corp., a New York-based compensation consulting firm. In such a

scenario, both the company and shareholders would benefit from awarding the same options to existing employees.

Of course, options aren't the only way to compensate employees. Many companies are boosting salaries and handing out extra-fat bonuses to keep workers happy. One example is the The Knot Inc., a New York firm

employees receive total compensation that the company figures is above market rates.

Many tech workers may end up wishing they had received cash instead of a new round of options. Consider Garden.com Inc., an online seller of plants, flowers, and garden supplies. Back in May, CEO Clifford A. Sharples handed out 1 million new

"The longer the tech stocks ... are [down], the more of this we're going to see"

that runs a wedding-planning site called TheKnot.com. When the company started in 1996, it paid employees much less than they could earn elsewhere. But now it has been forced to boost salaries in the aftermath of its stock plunging 90%, from \$21 to \$2. "My COO and CFO took 50% to 80% pay cuts when they came on board, but now we've adjusted to the marketplace," says David Liu, the company's CEO. Besides granting new options, EMusic also has bumped up salaries and is handing out bonuses so that

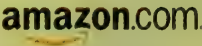
options to his 200 employees because more of their existing options had become worthless—the company's stock had slid from \$10 to less than \$2. But Garden.com's decline didn't stop in May. As losses continued to pile up, shares dropped to 25¢. Then on Nov. 15, Sharples announced that the company was closing its doors.

A raft of new options may shore up morale for a while, but it's no guarantee of corporate success.

Contributing: Louis Lavee

Tech Companies Consider Their Options

With the meltdown in tech stocks, many stock options granted in the past are now worthless. Some companies are making special options grants so employees will take more of an interest in their company's performance. Here are a few examples:

COMPANY	DETAILS	WHY
Amazon.com 	Granted employees new stock options in August with an exercise price of \$30.75 after the stock had dropped from \$113 in December.	To retain valued workers whose existing options had lost most or all of their value.
Microsoft 	Granted workers new options in April with an exercise price of \$66 after the company's stock had dropped from nearly \$120 in December.	To retain employees after a federal judge's ruling that the company had violated U. S. antitrust law.
Sprint 	After the stock fell 65% from its peak to \$24, the company allowed employees to decide in November whether to take new stock options at the market price on May 11, 2001.	To compensate workers who received options at prices inflated by the expectation that WorldCom would acquire the company.
Theglobe.com 	The Net community gave employees new options in May priced at \$1.59 after the stock tumbled from more than \$40 last year.	The plan has had troubles: The stock slipped below \$1 and the company is cutting 41% of its workforce.
The Knot 	In July, the wedding planning site increased the number of options it can grant to employees by 435,000 shares after its stock fell to less than \$2 from \$21.	The options will be awarded to recruit new employees and provide a financial incentive to existing workers.

DATA: COMPANY REPORTS, BUSINESS



Some of the biggest names in the game come up short when it comes to building digital marketplaces.

Building B2B marketplaces is making some industry giants look small. The truth is, if you hand the ball to one of those so-called "dream teams," you'll be up against a sizable integration challenge.

VerticalNet Solutions will help you get your online marketplace together far more effectively—and faster. Our eMarketplace Suite provides a comprehensive set of tools required to develop a high-liquidity digital marketplace. All within one marketplace, our suite delivers content, community, and commerce transaction modules, including auctions, catalogs, exchange, RFP/RFQ, structured negotiation, and a broad range of e-procurement and e-distribution services.

Over the past five years, VerticalNet has built 57 online communities where buyers, sellers, and third parties meet to enjoy greater business efficiencies. Each combines content, community and commerce modules to satisfy the specific needs of the industry served.

Ready to seize an advantage in the competitive B2B game? Visit www.verticalnetsolutions.com right away or call 866-263-6040.

 **VerticalNet Solutions**



BY PETER ELSTROM

peter_elstrom@ebiz.businessweek.com

The End of Fuzzy Math?

Regulators should force e-tailers to report costs like mainstream retailers

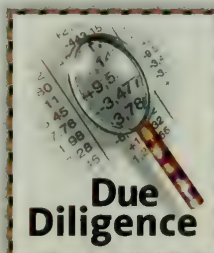
Poring over Amazon.com Inc.'s financial books is getting to be as intriguing as zipping through the latest Elmore Leonard thriller. On Oct. 24, the company disclosed that the Securities & Exchange Commission has made "informal inquiries" into how the company comes up with the revenue figures it gives to investors every quarter. It turns out the company counts as revenue stock that it receives in other

Net players in exchange for promoting them on Amazon's Web site. Although the practice is permitted under standard accounting rules, experts say the SEC could ultimately determine that Amazon is being overly aggressive. "It seems more like an investment than revenues," says analyst Sirine Hafez of the Center for Financial Research & Analysis, an independent research organization. The SEC declined comment.

There's another controversial accounting practice at Amazon and other online retailers that has received less attention so far. The issue is how companies should account for fulfillment costs—the expenses involved in buying and maintaining warehouses and paying employees who receive supplies and package orders for shipment. E-tailers' closest cousins, catalog companies and direct marketers, tend to put these expenses into a line on the income statement called cost of goods sold. But Amazon, drugstore.com Inc., and some other online retailers put fulfillment costs into selling, general, and admin-

istrative (SG&A) expenses. While the practice doesn't affect the bottom line, it does make e-tailers' gross margins look fatter than they otherwise would. Execs who pay attention to this sort of topic think there's no good excuse for this kind of accounting. "They have lousy businesses and they're trying to hide it," says Patrick Byrne, chief executive of OverStock.com Inc., an e-commerce site that buys merchandise from troubled e-tailers and then sells it online.

The issue is particularly critical this Christmas season. While investors used to focus myopi-



cally on revenue growth at Net companies, they now looking for companies that are on their way to profitability. With the capital markets closed tighter than a drum, people want to know whether Amazon, drugstore.com, eToys Inc., and others are going to be able to generate cash from their own businesses. Gross margin is one of the key measures whether a business has potential or not. The traditional accounting theory is that SG&A expenses should be largely fixed so that as revenue and gross profit

increase the company moves toward profitability.

Any variation in accounting practices can have an impact on gross margins. Amazon's gross margin will be about 24% this year, but it would be about 14% if it changed the way it counts fulfillment costs, according to analysts' estimates. Drugstore.com's gross margins would fall from 5% to negative 15%. And eToys' gross margins would drop from 20% to negative 7%. Understanding the effect on margins is critical, because "fulfillment costs in this business are much higher than any-

one else expected," says Lehman Brothers Inc. analyst Holly Becker.

Securities regulators have tried to get the issue cleared up. In 1999, the SEC's chief accountant, Lynn E. Turner, asked the Financial Accounting Standards Board to figure out how to standardize the way companies keep their books. "There is diversity in practice that should be eliminated," Turner wrote. This summer looked like FASB was close to a decision that would help investors. Douglas Reynolds, a practice fellow at the board, said he reached a "tentative conclusion" in May that fulfillment expenses

AMAZON'S BOOKS

As part of its operating expenses in 2000, Amazon will report about \$265 million in fulfillment costs, excluding customer service and credit card processing fees. Some experts think those charges should be included in the cost of goods sold, which would make its gross margins substantially smaller.

(in millions)	CURRENT ACCOUNTING	ALTERNATIVE ACCOUNTING
Net sales	\$2,795	\$2,795
Cost of goods sold	\$2,132	\$2,397
Gross profit	\$663	\$398
Gross margins	24%	14%
Total operating expenses	\$986	\$721
Loss from operations	\$323	\$323
Net loss	\$1,166	\$1,166

DATA: LEHMAN BROS., BUSINESS WEEK

NOW PLAYING EVERYWHERE.

There'd been talk for years.
Talk of a wireless Web.
Now it's more than talk.

WAKEUP CALL

IT'S HERE: THE WIRELESS WEB, AN INCREDIBLE OPPORTUNITY TO DELIVER RICH NEW SERVICES ON NEW DEVICES. BUT THIS SHIP COULD LEAVE WITHOUT YOU UNLESS YOU HAVE A HIGHLY EVOLVED NETWORK AND SERVICES INFRASTRUCTURE. LIKE THE ONE SUN™ HAS ENGINEERED FOR THE WIRED INTERNET. SUN'S PLATFORM INCLUDES JAVA™ TECHNOLOGY—TO LET YOU TAKE WIRELESS SERVICE TO THE OUTER LIMITS ON ANY DEVICE—IPLANET™ APPLICATIONS—TO HELP YOU DELIVER QUICKLY WITHOUT REINVENTING YOUR ARCHITECTURE—AND TELECOM-INSPIRED SERVERS AND ULTRA-AVAILABLE STOREDGE™ ARRAYS—TO DELIVER THOSE SERVICES WITH DIAL TONE-LIKE RELIABILITY. SUN IS THE DE FACTO STANDARD FOR SERVICE DELIVERY THAT LEADING WIRELESS OPERATORS AND NETWORK EQUIPMENT PROVIDERS RELY ON TODAY.

IT'S ALSO THE FUTURE-PROOF PLATFORM TO KEEP YOUR BUSINESS MOVING AT WARP SPEED TOMORROW.

To learn more, visit:
www.sun.com/wireless



What can we .com for you?

SUN, SUN MICROSYSTEMS, INC. ALL RIGHTS RESERVED. SUN, SUN MICROSYSTEMS, THE SUN LOGO, THE JAVA COFFEE CUP LOGO, JAVA, IPANET, SUN STOREDGE, AND WHAT CAN WE .COM FOR YOU? ARE TRADEMARKS OR REGISTERED TRADEMARKS OF SUN MICROSYSTEMS, INC., IN THE UNITED STATES AND OTHER COUNTRIES.

CRITICAL NUMBERS OF THE MONTH**Now and Then**

The once-optimistic projections for how much consumers would buy over the Internet are becoming more conservative with the growing troubles of online retailers. These are Gartner Group's revised estimates.

YEAR	FORECASTS MADE IN 1999 (in billions)	FORECASTS MADE IN 2000 (in billions)
1999	\$22.4	\$16.8*
2000	\$46.5	\$29.3
2001	\$79.0	\$48.7
2002	\$115.9	\$77.7
2003	\$163.9	\$107.4

*ACTUAL

DATA: GARTNER GROUP

Look Who's Selling

Here's a look at the top executives, directors, and other insiders who have sold stock at several major tech companies over the past three months.

COMPANY	NET SALES BY INSIDERS (NO. OF SHARES)	SELLERS
Microsoft Corp.	13,994,960	CEO Bill Gates, co-founder Paul Allen, and others
Portal Software	2,167,650	CEO John Little, venture capital backer Accel Partners, and others
Network Appliance	1,358,000	CEO Daniel Warmenhoven, President Thomas Mendoza, and others
Integrated Device Technology	1,296,165	CEO Jerry Taylor, CFO Alan Krock, and others
Clarent Corp.	1,259,348	CEO Jerry Chang, COO and CFO Richard Heaps, and others

DATA: FIRST CALL/THOMSON FINANCIAL

Little Cash to Burn

As it gets tougher to raise new capital, many technology companies are running low on cash. This is a sample of companies in a pinch.

COMPANY	CASH ON HAND SEPT. 30 (millions)	CASH USED LAST QUARTER (millions)	DAYS TO DEPLETION AT CURRENT BURN RATES
Wavo Corp.	\$0.6	\$6.0	8.3
The Phoenix digital media company sold off assets to raise about \$12 million in cash, although it's not clear how long that will last.			
Prodigy Communications	\$4.9	\$11.0	40.2
The Internet access provider is pursuing new financing and is lowering its cash burn by making customer acquisition payments to shareholder SBC over three years instead of immediately.			
Ziplink Inc.	\$3.251	\$4.2	70.3
The provider of Internet connectivity to Internet service providers closed down on Nov. 17 after not being able to pay a debt to WorldCom.			
Beyond.com	\$14.5	\$18.2	71.4
The Santa Clara, Calif. e-commerce company announced in October that it had reached an agreement for \$40 million in new financing.			
US Search.com	\$11.4	\$8.8	116.5
The Los Angeles online search company restructured operations in November and decided to lay off at least 45 people to try to become profitable more quickly.			

DATA: COMPANY FILINGS, BUSINESS WEEK, STANDARD & POOR'S COMPUSTAT

should be included in cost of goods sold.

But that never happened. This fall, FASB reversed its decision and essentially punted. It said that companies could put these expenses into the cost of goods sold—or they could put them someplace else on the income statement. If companies put the expenses someplace else, they need to break out the exact costs and quantify them in a footnote. Ultimately, FASB decided that companies were accounting for these expenses in so many different ways that it was too complicated to create a universal standard.

So how many online retailers are going to change their accounting practices with the new rules scheduled to take effect for most companies this quarter? Few, if any. Amazon, for example, will "continue with our current practices," says Tim Stone, director of investor relations at Amazon which has been breaking out its fulfillment costs. Drugstore.com and eToys don't plan to change their accounting, either.

FASB and some others argue that th

Trying to hide their "lousy businesses"

ruling provides investors with additional clarity. But this smacks of hypocrisy. If a group of professional accountants decide that it's too complicated for them to figure out a standard, it's simply not realistic to expect your average investor to deduce costs from accounting footnotes. "It's not a good solution," says Roman L. Weil, a professor of accounting at the University of Chicago's Graduate School of Business. "It's a stop-gap." The SEC has not formally objected to the FASB decision, but the securities regulator thinks the ruling is not ideal. "To have two companies account for the same thing differently cannot be the best thing for investors," says Scott A. Taylor, a professional accounting fellow at the SEC.

Regulators have gone out of their way to help New Economy companies with pledges of no taxes and light regulation. That's sound public policy. But with investors putting billions of dollars at risk to help finance technology companies, essential for regulators and accountants to do everything they can to make sure the companies' financial books are fair and understandable. So far, on the issue of fulfillment costs, that's not the case. ●



How business becomes e-business.™

The great e-business shakeout is well under way. For those who didn't make it, our condolences. At least the end was quick.

For those who have made it, who broke the code and figured out how to build a truly viable e-business, our heartiest congratulations.

As it turns out, many of these successful companies—including the majority of the Fortune e-50—have built their e-businesses on an exceptionally strong foundation.

The BEA WebLogic® E-Business Platform.™

This award-winning set of innovative software and services is uniquely designed to help businesses rapidly develop and launch advanced e-commerce initiatives. It's an end-to-end solution that includes rich personalization and complete B2B integration.

In fact, it's now the global standard by which all e-commerce software is measured.

Which explains why it's BEA's market-leading platform that powers Chase Manhattan, FedEx, Amazon.com, United Airlines, Wells Fargo, E*TRADE and over 6,500 other successful e-businesses. Find out how we can help yours. Visit us at www.bea.com.



www.bea.com

©2000 BEA Systems, Inc. How business becomes e-business and BEA WebLogic E-Business Platform are trademarks and BEA and WebLogic are registered trademarks of BEA Systems, Inc.

by

STEVE HAMM

The Wired Campus

How CMU is aggressively adopting Net technology to pioneer e-education



O

n the banks of the Monongahela River in Pittsburgh, where Andy Carnegie's fire-breathing Homestead Steel Works once stood, you will now find a vast parking lot dotted with islands of commerce. Among them: Target, Giant Eagle, and a gaudy 23-screen movie palace that looks like it was snatched off the Las Vegas strip. In its prime, the steel mill employed 20,000 people and was the very image of American industrial might. Now, all that is left are a half-dozen tall brick chimneys poking out of a sea of asphalt. Homestead's fate symbolizes how violently economic currents can shift, sweeping away icons that had stood immutable for a century.

Two miles away stands another institution established by the old robber baron—Carnegie Mellon University. These days, universities face their own set of challenges. Many are frightfully expensive. Others are diploma mills—unimaginative and inflexible. Those institutions that won't or can't change are in danger of being eclipsed by

PHOTOGRAPHS BY DOUGLASLEVERE.COM

more nimble competitors. In this case, though, Carnegie's offspring isn't sitting around waiting for a trip to the scrapyards. Instead, CMU is aggressively adopting the latest Internet technology and experimenting with new ways of tech-assisted teaching.

It's Digital U—the No. 1 wired campus in the country, according to a ranking by the magazine *Yahoo! Internet Life*. Practically every student has a PC. This fall, CMU installed the first wireless network on a university campus. Students can now take notebook computers or handhelds wherever they go and connect with professors or fellow students via e-mail, log on to class Web sites, and visit libraries with the click of a button. Project teams hold virtual meetings at any time of day or night. And professors create interactive Web sites that replace rote learning. Ex-

ample: a virtual chem lab for freshmen that lets them learn about mixing solutions without the danger of explosions. "We're at the edge of possibilities in collaboration and the use of technologies. We're redefining fields and discovering new and different ways of communicating and do-

the future looks like for the campus-based university, that's it," says John G. Sperlin, chairman and chief executive of Apollo Group Inc., which operates distance-learning powerhouse University of Phoenix. With 14,000 students now studying online, and the number growing at abo-

While the CMU staff has lots of evidence that e-teaching works, skeptics abound

ing cross-disciplinary teaching," says history professor Daniel P. Resnick.

Indeed, the doings at CMU could become a model for universities across the country. The school is in the vanguard of a wave of technological and cultural change that could transform higher education in ways that can't be fully imagined. "If you want to know what

50% a year, the University of Phoenix is the bogeyman for colleges and universities that don't aggressively adopt new technologies and innovative teaching methods.

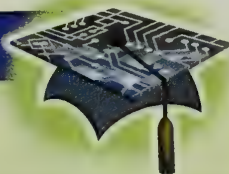
A massive tech-fest on campuses seems likely to spill over into business and the economy, too. Not only are universities pushing innovations in software and networking into the mainstream but they're producing armies of graduates who are comfortable with the latest gear and trained to use it on the job. Wired universities beget a wired nation.

Beefing up. At CMU, though, they may not find that networking the campus was as easy a part. Now, the university has to figure out how to take advantage of technology without giving up what's best about a traditional education—face-to-face contact between teacher and student. Even CMU President Jared L. Cohon has conceded about going off the digital deep end: "We love our technology edge, but we've gotten soft on the corners," he says. His top priority is cross-pollinating science with humanities. Beefing up technology comes second: "We do a great job of training students, but I worry that we don't do as well as we can at educating them."

While CMU faculty have gathered evidence that this stuff works, there are plenty of skeptics elsewhere. Academics worry that e-learning is so much silicon soil rather than an elixir for higher education. David Noble, an outspoken history professor at Toronto's York University, is anti-technology that he doesn't even use e-mail. He decries what he calls the "tomation" of higher education. "He went against fast and wide adoption of technology for distance learning before it even had been fully explored."

In spite of such warnings, universities everywhere are experimenting with the latest technologies. And it's not just the

DIGITAL U.



Carnegie Mellon University is a pioneer at harnessing the Web to improve learning. Here is a sampling of its projects:

► The Network

In 1986, CMU was the first U.S. college to build its own campus-wide computer network. Today it connects more than 15,000 computers, and there's wireless access.

► Building Virtual Worlds

This course brings together science, design, and humanities students to learn about teamwork by creating virtual-reality worlds that are experienced through a special headset.

► Virtual Tutors

There are more than a dozen software programs that act as tutors on topics ranging from computer programming to philosophy.

► Virtual Chemistry Lab

Freshmen mix solutions on a Web site rather than in a real lab. They predict results, then see a computer simulation of what could happen.

► The Management Game

In a livelier alternative to case studies, MBA students manage made-up companies, using the Web to collaborate, track each others' performance, trade virtual stocks, and analyze business plans.

► Team CMU

Using this Web tool, students can collaborate on projects. It provides a calendar, discussion boards, and a way to share documents.

► The Digital Library

University librarian Gloriana St. Clair is beefing up links to the latest scientific research and tapping into the electronic stacks of sister institutions in the 25-member Digital Library Federation.

IXL HEWLETT-PACKARD EZENIA! ERICSSON TRELLIX ALCATEL AUCTIONROVER.COM LANTE
PARTS J.D. EDWARDS COMMERCE ONE ICG COMMUNICATIONS FOOD.COM DELOITTE CONSULTING
EMS TICKETWEB TRELLIX MICROSOFT ECAMPUS.COM PEOPLESOF ROCKWELL SOFTWARE LANT
ZENIA! PEOPLESOF J.D. EDWARDS LANTE AUCTIONROVER.COM ERICSSON ALCATEL IBM BOOK

IBM's software is built with precision. With vision. With Rational.

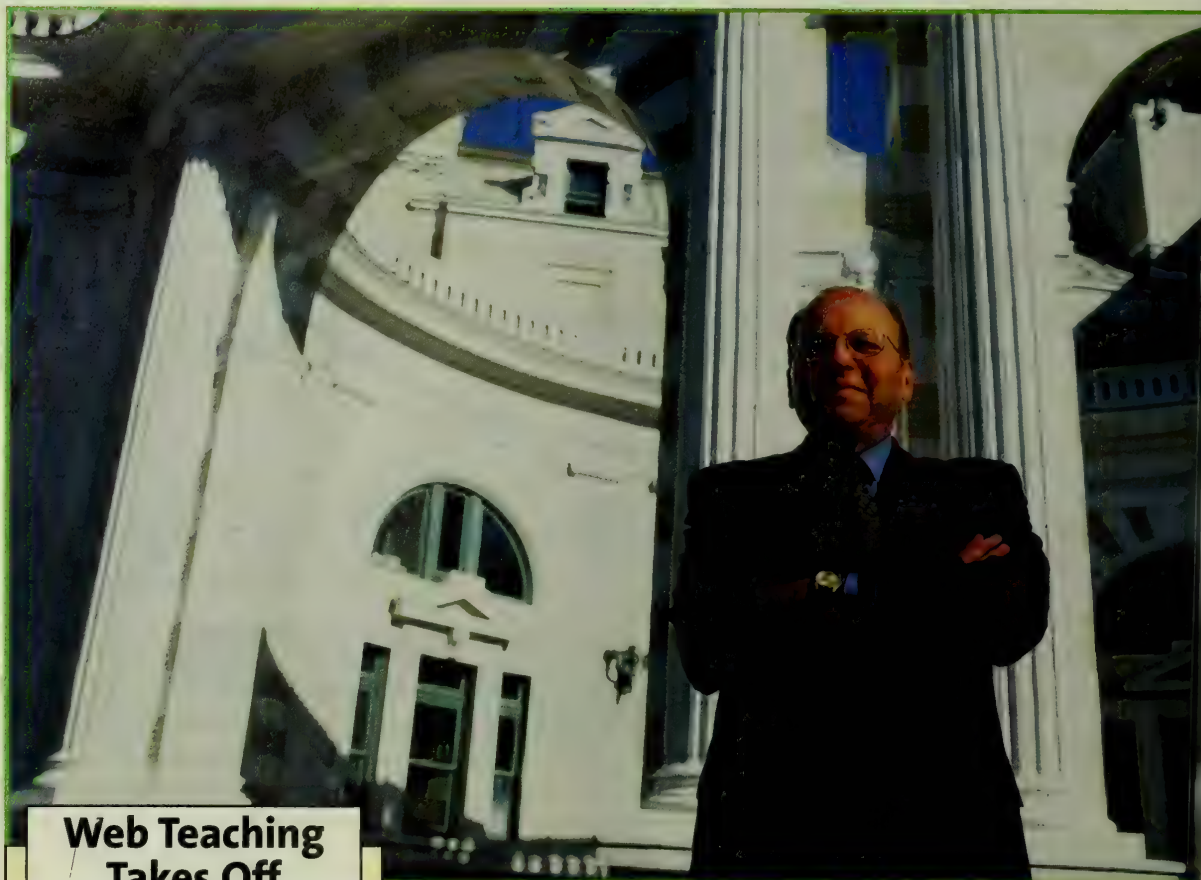
M NETWORK ASSOCIATES EZENIA! MICROSOFT FOOD.COM SUN MICROSYSTEMS ALCATEL HEW
IXL ERICSSON FOOD.COM SUN MICROSYSTEMS RECRUITSOFT.COM CALICO COMMERCE COMMER
ARE COMMERCE ONE IBM TICKETWEB MICROSOFT RECRUITSOFT.COM TRELLIX EZENIA! J.D. ED
CASE PARTS AUCTIONROVER.COM BOOKSONLINE.COM CASE PARTS CONTEXT INTEGRATION ECAMPUS

is the world's largest IT company and a leading provider of e-business software services. IBM uses Rational's e-development solutions, from visual modeling to ware testing, in conjunction with IBM's VisualAge® application development tools the WebSphere software platform. They're not alone. Thousands of companies worldwide apply Rational's software engineering best practices, unified tools and vices to increase their software development speed and quality. In fact, 47 of une's top 50 e-businesses use Rational's software. Want to build software better faster? Visit us at www.rational.com/IBMsucces1 for the complete IBM story.

Rational
the e-development company

© 2000 Rational Software Corporation. Rational, Rational logo, the e-development company, Rational Software Corporation, and the Rational logo are trademarks of Rational Software Corporation in the United States and other countries.

VisualAge, and WebSphere are registered trademarks or trademarks of IBM Corporation in the United States, other countries or both.



Web Teaching Takes Off

- ▶ **60%** of colleges and universities now offer online-learning programs
- ▶ An additional **8%** plan on starting such programs in the next 12 months
- ▶ **92%** plan on expanding their online-learning programs in the next year
- ▶ Among schools with online programs, **65%** are supplements to classroom teaching
- ▶ **97%** of college students use the Net today—**70%** of them at least daily

DATA: CHRONICLE OF HIGHER EDUCATION, WEBCT INC.

Cohon: "I love our technology edge, but we've got to soften the corners"

like CMU, Massachusetts Institute of Technology, and Stanford University. The University of Central Florida in Orlando, for instance, offers 70 courses that are delivered online. Overall, 60% of American colleges and universities offer online-learning programs, and 8% more plan on doing so in the next year, according to a survey by *The Chronicle of Higher Education*. Course software from the likes of WebCT, Blackboard Inc., and eCollege.com is gaining popularity. According to Merrill Lynch & Co., the higher education e-learning market is expected to grow from \$1.2 billion this year to \$7 billion in 2003.

CMU provides fertile ground for tech-enhanced education. It was started as the Carnegie Technical Schools in 1900 to provide training for the offspring of mill workers. Although now a university, it remains weighted toward science and engineering: 37% of 1,029 undergraduate degrees awarded last year were in these two disciplines. CMU has one of the premier computer sci-

ence schools in the world and is on the cutting edge of information technology search. It's no wonder that in 1986 it was the first U.S. university to build its campuswide computer network. The school has spent \$50 million on the project. As of this fall, more than 15,000 computers have been connected, and there's wireless access from just about everywhere. Without owning a PC is only recommended for most students, the 746 students in CMU's MBA program are required to tote laptops.

All CMU's technical prowess isn't what comes up much for teaching, though, unless education comes up with smart ways to use it. That's why Cohon last July created an Office of Technology for Education—a central bureau to support the use of technology by faculty and students. This kind of coordination is vital on the highly decentralized campus, where faculty members experiment independently. "You don't want to reinventing the wheel," says Joel M. Smith, the office's director. To avoid that, he's been

UnriValed



When business teams with technology...
VERITAS® gets you to the top.

The Data Availability Company™


VERITAS™
BUSINESS WITHOUT INTERRUPTION®

In a rocky and fiercely competitive global economy, your data is your most valuable asset.

UnriValed solutions from VERITAS give you the vital edge necessary to scale new business heights.

VERITAS, The Data Availability Company, provides you with essential, industry-leading software solutions, UNIX to NT, data center to laptop, to continuously access and protect your business critical data.

Visit us at www.veritas.com

Copyright 2000 VERITAS Software Corporation. All rights reserved. VERITAS is a registered trademark of VERITAS Software Corporation in the U.S. and other countries. The VERITAS logo and Business Without Interruption and VERITAS products are trademarks or registered trademarks of VERITAS Software Corporation in the U.S. and other countries. Other product names mentioned herein may be trademarks or registered trademarks of their respective companies.

ing a database on the Web to track all the campus projects and provide the latest information about what's being developed.

Among CMU's digerati, public enemy No. 1 is the old-fashioned lecture, where a scholar stands before hundreds of snoozing students and drones on for an hour or two. For them, the chief role of technology is to help end boredom. "In the future, learning will come from doing," predicts Professor Raj Reddy, the former longtime dean of CMU's School of Computer Science. "You abolish lectures, and you don't just read about history, you participate in a simulation of it." While that's a vision of the future, a handful of CMU projects already have created electronic tutors that their creators believe are more effective than traditional lectures at teaching students introductory or general topics.

Fun, too. These tutors operate like virtual teaching assistants. If a student makes a mistake, he or she is alerted by the software program. If students get stuck, the machine offers hints. They don't have to wait until the next class to get help. Jeff Collins, a PhD candidate in English who used a tutor to learn the Lisp computer programming language, says "it's much better than any lecture would be. In a lecture, the information flows past you. The tutor waits until you show you actually do get it." Some of the more advanced systems learn from the way students interact with them—and modify themselves to improve their effectiveness. "We're on the cusp of having a science of learning. We're learning how the brain works as well as figuring out what people need to learn," says Kenneth Koedinger, a senior research scientist in CMU's Human-Computer Interaction Institute. "What science has done for medicine, it can do for education."

Some of these programs are fun, too. Take the Jam-O-Drum. This gizmo is

shaped like a circular table and wired so when you beat on it a projector beams down colorful images onto the surface that match the sounds from the drum. Students have incentive to learn how to program so they can play games or make music together. It also teaches collaborative

If they get it wrong, they see a video of rocket exploding on takeoff. Past research at the university showed that few science majors retain much knowledge from the freshman lectures. "People were sleepwalking through these courses. We want to engage them," says David Yaron, an asso-

"People were sleepwalking through these courses. We want to engage them"



Thorpy: A student Netpreneur

skills, while stretching their thinking about what's possible. "I want kids to get crazy. You're not trained to do that in your Java programming course," says Tina Blaine, a performance artist and visiting scholar at CMU who created the Jam-O-Drum. Another example: Using a virtual chemistry lab, freshmen come up with a mix of fuel for an imaginary NASA expedition to Mars.

ciate professor of theoretical chemistry who designed the virtual laboratory.

Group projects are one sure way to get kids pumped up. CMU has a full range of wires and gadgets to improve the way teams work together. Students can borrow notebook computers or handhelds, and using the wireless network, keep track of their projects and colleagues even while they're on the move. No waiting until evening to answer a crucial e-mail. One collaboration tool, TeamCMU, provides a calendar, discussion boards, and a way to access and keep track of shared documents. Jason Vardzel, an information systems major, used TeamCMU when he led a project group last year that designed a travel Web site. "You'd get three guys together and work over the documents," he says. "At some point this would be just gee-whiz stuff, but, here, people really use it."

CMU's technology truly comes alive when it acts as a bridge between academic disciplines. The course called Building Virtual Worlds brings together computer science, art, architecture, and psychology students to learn about teamwork by creating virtual reality worlds.

are experienced by wearing special helmets and body wiring. Every two weeks, two of four are assembled to build an environment, such as the world of a bumblebee. The students divvy up duties: software coding and creating 3-D images, then work together on scripts. They learn how to work well with others—a vital skill in the real world. "There's a tendency



THERE HAS NEVER BEEN A BETTER TIME TO BE A BAAN CUSTOMER

Every business needs to drive strategic growth, improve processes, reduce operating complexity and increase corporate flexibility. And every business needs to understand how to do this through e-Commerce.

Baan is a global software player and has the expertise and products to deliver just that.

Our software is at the very cutting edge of technology and supports every facet of business processes including manufacturing, distribution, and transportation.

And, of course, we can guarantee absolute

integration across your business processes.

Added to which, we're now backed by Invensys,



Baan

listed on the London Stock Exchange with global sales of US\$11 billion.

This alignment will ensure we now have even more muscle to compete harder in today's dynamic market-place. Providing our customers

such as DARA (UK), Komatsu (Japan), Volkswagen (Germany) and Verizon (US) with even greater levels of service, and products that can drive their business performance even further.

Hardly surprising then that we believe there's never been a better time to become one of our customers.



invensys[™]
Software Systems



High Performance
Mission-Critical
Internet Site Operations

Nobody Is Better Equipped To Manage High Pressure Internet Infrastructure Operations

In case you haven't noticed, your web site is about to explode. Time-to-market issues, combined with the inability to hire scarce technical talent, have a way of putting serious pressure on existing resources. Take a deep breath and relax: SiteSmith has the tools, the people and the resources to take responsibility for your web site operations. We've taken the pressure off more dot-com customers and industry leaders, than anyone else. Say the word and we'll build your site infrastructure and run your site. You won't have to worry about scalability, load balancing, site monitoring or security — so, take the pressure off yourself. For fast relief, visit www.sitesmith.com/bw.



nt to have complete control over what
i're working on, but in a project like
s that's not possible," says Clifton For-
es, a graduate student who took the
urse as an undergrad. "You meet people
h very different values. You may not like
m all, but you develop a respect for
at they can do that you can't."

If the Virtual Worlds course provides a
e of what it's like for a team
uild something, CMU's Man-
ment Game is a five-course
il. Each year, five-person teams
MBA students run made-up
stwatch companies for 14
ks—using the Web to collab-
e, track their performance,
e virtual stocks, and analyze
ness plans. The students
ie up with a strategy and
e decisions about where to
ufacture their watches, what
kets to target, and what to
ge. The profs occasionally
w them curveballs—such as a
uct recall—and they're forced
act in real time to the crisis.
computing system calculates
omes based on how 80 teams
CMU and at universities in
n and elsewhere operate.
or some students, the game
mes all-consuming—soak-
up 20 hours a week or
e. What's so compelling?
computer simulation makes

started at age 14. When she arrived at CMU
as a computer science major two years
ago, she considered giving the one-woman
project up, fearing it would take too much
time. But Jack Roseman, a professor in the
university's entrepreneurship program,
urged her to keep it up—and offered to de-
sign her education around it.

That's just what she has done. She takes



Reshko designed a
three-wheel robot

The idea is not to make the campus vanish, but to make education richer

m real. And, since three years of busi-
activity are compressed into four
hs, they get to see and study results
ly. But it's not all virtual. The teams
real live boards of directors from
urgh businesses and negotiate labor
acts with local union leaders. "We
n't gain this kind of experience in
studies or lectures," says Hidenori
hi, a native of Japan who was "CEO"
e of the teams, Millennium Time Inc.
e only way to have a more realistic
ence would be to actually run a com-
And at CMU, that's possible, too.
Thorpy, a 20-year-old junior from
ale, N.Y., is CEO of TeenFX.com, a
unity Web site for teenagers that she

courses in Web site design, marketing, and
organizational behavior that feed directly
into her daily responsibilities as CEO. Often
she'll rush out of a class and dash off an e-
mail to her executive assistant, who works
at an office in White Plains, N.Y., updating
the site based on something she just figured
out. Example: A few weeks ago, Thorpy
learned in a class the importance of bend-
ing the rules to keep customers loyal. Pre-
viously, if kids participated in a contest
and submitted their answers after the dead-
line, they didn't get a prize. Now she hands
out awards even to kids who miss a dead-
line. All of this is paying off. TeenFX.com
has 23 employees and serves up 3 million
Web pages a month to visitors, collecting

fees from sponsors. Thorpy plans on even-
tually taking it public.

For students who can't juggle being on
campus with their full-time jobs, CMU offers
a handful of online degree programs. Near-
ly 200 students around the country are
participating in master's programs in soft-
ware engineering and information tech-
nology. Students get lectures on CD-ROMs
and access to a Web site where
they see study assignments and
reading materials and can par-
ticipate in class bulletin boards
and live chat sessions with the
professor and other class mem-
bers. "For me, going to Pitts-
burgh was not an option, but I
wanted the quality of a
Carnegie Mellon education,"
says Walden Mathews, a com-
puter systems analyst who lives
with his wife and kids in Nor-
walk, Conn., and is halfway
through a master's program in
software programming.

Eventually, CMU expects to
offer some undergraduate pro-
grams online, too. Already,
nonprofit subsidiary Carnegie
Technology Education is taking
undergrad courses developed
by CMU professors and repack-
aging them for the Web via
17 corporations and colleges—
including the City University
of Hong Kong and California
University of Pennsylvania. The

idea is to make some of the university's
expertise available to thousands of stu-
dents at more affordable prices. Students
pay tuition that is in line with the norms
at their university, and CMU takes a cut.

Most of CMU's pioneers see the Net as a
way to enrich the on-campus experience,
rather than something that would eliminate
the need for the campus itself. "The end re-
sult is not that the campus disappears. It's
that the campus is used better for human
interaction. You offload to technology the
things that technology can do," says Smith
of the Office of Technology for Education.

Even as an adjunct, though, there are
drawbacks to leaning too heavily on tech-
nology. CMU President Cohon is concerned
that a Web culture will interfere with build-
ing a face-to-face community. "My fear is
we'll have students off in their rooms doing
everything they can on the Web, and not

interacting with each other," he says. Already, some of the student body is uneasy with basic communications. About 40 students attended a seminar on how to carry on a conversation during orientation week this fall. Cohon plans to amend the current online registration process so students are forced to meet with advisers. That way the courses they pick won't be too narrowly focused within their disciplines.

Certainly some students are obsessed with technology. Take Grigoriy Reshko. The 17-year-old freshman, a Russian native, this

fall designed a three-wheel robot that's controlled by a Palm handheld. He and colleagues at CMU's Robotics Institute published a do-it-yourself recipe for the device on their Web site. Except when he's sleeping or at karate lessons, he spends his hours absorbed in software and gizmos. Eventually, predicts young Reshko, people "will have robot companions."

Does all this technology really make a difference? That's far from proven. Thomas L. Russell, a former North Carolina State University administrator who tracks such

studies, last year published a book, *The No Significant Difference Phenomenon*, which combs through studies and concludes that most show little difference between the effectiveness of traditional teaching and e-learning. "In spite of all the claims, the evidence is overwhelming that it doesn't make a significant difference in learning," he says.

But advocates of e-learning point to evidence that it can be an effective alternative to lectures, at the very least. Practically every professor at CMU who has

Net Man on Campus

It was a Proustian journey into the misty reaches of the past. My freshman-year roommate and I were back on campus at Carnegie Mellon University to see how much things had changed since we arrived there as fresh-faced teenagers 30 years go. Stan Muschweck is now an advertising bigshot in Pittsburgh. I'm a journalist in New York. We've both seen unsavory things in our lives. Still, it was a bit of a shock when we knocked on the door of our old room in Scobil Hall and met the current denizens. Sitting back-to-back at two huge computer monitors were sun-deprived seniors Marc Gioglio and Jarrod Roy. They were playing *Diablo II* on the Net. The floor of the room was covered with scraps of trash and dirty laundry, which gave off a funky smell. I exclaimed: "Didn't your mothers teach you how to live?"

Truth be told, the level of slovenliness on campus probably hasn't changed all that much—but technology certainly has. When I arrived at CMU, engineering students still used slide rules. As an English major, I didn't touch a computer until 1973, and that was a one-night stand. Once, after midnight, I played *Lunar Landing*, a crude computer game, on a PDP-10 mainframe in the then-new computer science building. My only other contact with technology was the clunky tape recorders that we campus activists carried into the dean's office when we presented

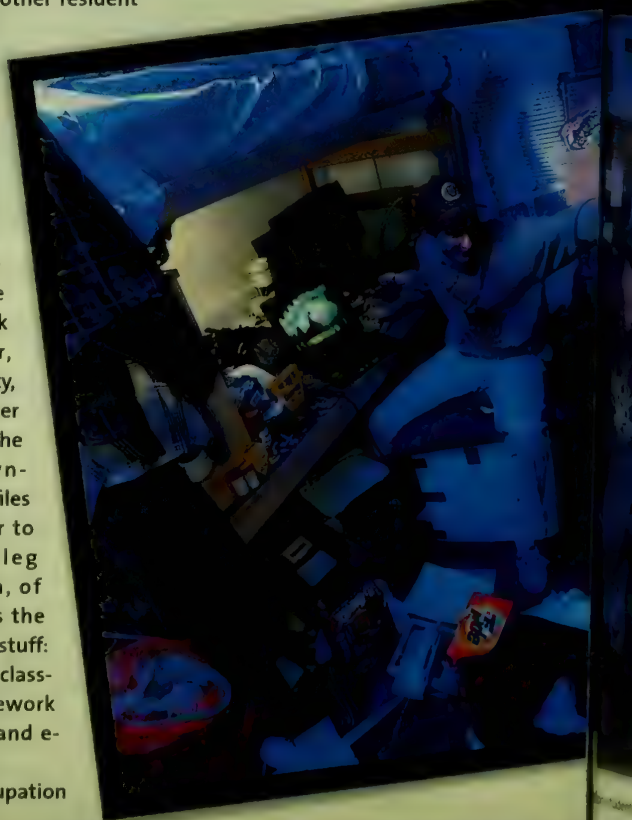
our list of 10 non-negotiable demands. CMU wasn't the most radical place, but it achieved its 15 minutes of fame when lefties pelted Republican South Carolina Senator Strom Thurmond with marshmallows during a visit.

Now, CMU is a hotbed of Netism. Gioglio, a physics major, says he spends probably two hours a day playing online games. Another resident

of Scobil Hall, freshman Richard Bohn, uses his dorm computer and the Net to conduct video-conference love fests with the girl he left back in Andover, Minn. (No nudity, he swears). Other freshmen use the Web for downloading music files via Napster or to view bootleg movies. Then, of course, there's the school-related stuff: registering for classes, filing homework assignments, and e-mailing profs.

This preoccupation

with all things digital seems to have swept aside most other concerns. There's not much going on in the way of student activism. I met two members of the eight-person Earth Club—earnest kids who are working with the administration to bolster the recycling program. "It's amazing. Our school is



perimented has at least preliminary results showing some improvement in learning and test scores. For example, Latanya Sweeney, a computer science professor whose tutoring system is used to teach basic Java programming, says people who use the software get the equivalent of a one-to-three faculty/student ratio—much better than sitting in a lecture hall with 100 other students. CMU online tutors for math have improved standardized test results by 30% for high schoolers in Pittsburgh public schools.

Professors at CMU are so convinced that

e-learning has its advantages that they're working on the next generation of technologies. Reddy, of the school of computer science, heads up something called the Aura project. He and his colleagues envision a new era of "invisible computing," where computers are embedded in the walls of buildings and attached unobtrusively to people's bodies. When you walk into a room, it recognizes you and puts all of its computer power at your command. Within a year, they hope to demonstrate how it can work in offices and labs at CMU. "The idea is to transform computing as we

know it," says Reddy. Ultimately, he hopes, the technology will be ubiquitous in businesses and homes.

Projects like Reddy's will go a long way toward establishing CMU as a laboratory for the 21st century university. If this school and other e-learning pioneers can pull it off, they may indeed change the face of universities. But it's unlikely the brick and ivy campus will disappear anytime soon. The key will be coming up with a combination of real and virtual experiences that will allow campuses to thrive—and avoid going the way of the Homestead Works. ●

supposed to be so innovative, yet it does so little," mused Matt Martin, a physics grad student studying string theory who is the Earth Club president. He wondered: Whatever happened to the tactic of throwing burning trash cans through the front windows of the administration building?

Stan and I discovered a couple of hot-button issues. There's the Napster brouhaha, of course. A couple of the students were sent to intellectual-property sensitivity training sessions after they were fingered by the recording industry for illegally copying music files off the Web. But an even bigger issue is

entirely local. When residents of dormitories download huge video files or play multiplayer games via the Web, they slow down the network in their building to a crawl. That means their fellow students don't get quite the performance they'd like on the network. Some enterprising souls devised a program that identifies who's hogging the network. These bandwidth vigilantes pay polite visits to the miscreants, patiently explaining to them the consequences of their actions and urging them to modify

their behavior. "We only get socially conscious when people take up our bandwidth," quips Bohn.

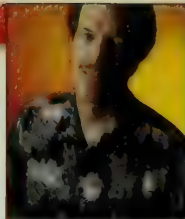
One thing that hasn't changed at CMU is the sensitivity of some people in the humanities programs to the school's tech-heavy culture. At Carnegie Tech, they sometimes feel like second-class citizens—forced to defend things like the teaching of Shakespeare and Chaucer. But Peggy Knapp, one of my English professors, hasn't given up on the notion that literature is relevant—even to engineers. "People get emotionally invested in literature," she says. "With *Beowulf* under his belt, an engineer feels more freedom to reimagine and change himself and the world he lives in."

Those kinds of personal journeys are still being undertaken at CMU. Jill Palermo, a junior from Cleveland, just switched her major from architecture to art. She decided she didn't want to slave at a computer in an architecture firm for the rest of her life. Instead, she envisions creating cultural centers in low-income communities. "I believe that technology has to coincide with the arts to make a whole," she says. "I'm the arts half. I'll need to find others to do the tech half." She may seem a bit self-absorbed. But with idealistic sentiments like that floating around, maybe things at the old alma mater haven't changed so much after all.

—Steve Hamm



Online students Gioglio and Jarrod: Don't mess with their broadband



BY ROBERT D. HOF

rob_hof@ebiz.businessweek.com

Don't Cheat, Children

In the brave new e-tail world, collusion is all too possible

With Internet consolidation in full swing, early fears that a few large companies would dominate online commerce may be coming true. That's worrisome enough for rivals of eBay in auctions, Amazon.com in e-tailing, or Covisint in automobile e-marketplaces, to name a few. But consumers like us should worry even more. The potential for collusion

is rearing its ugly head. And I see no sure way to stop it.

Here's the problem: The Internet allows for massive information to be gathered in real time. Often, that's great for buyers. But not always. If there are only a few dominant sellers, they can act on that information faster than buyers. Then, notes University of California at Berkeley Professor Hal R. Varian, they can match each other's price cuts instantly—vaporizing the extra business the price cut was supposed to bring. Eventually, that will tend to discourage them from discounting, and prices will gradually rise.

A 1999 study by one of his students, Martin Dillard, found such a pattern in the prices for a sample best-selling book sold by

Similar collusion has happened before. In 1992, the Justice Dept. sued several airlines, accusing them of temporarily posting new prices on their shared reservation system as a way to test responses of rivals and avoid fare cuts. A 1994 consent decree required them to change how they post prices on the system.

Of course, they got caught, didn't they? Indeed, it's possible that the Net might make policing easier by providing the world's most complete audit trail for regulators. But don't count on it. Early this year, officials at the online industrial auction FreeMarkets Inc., which closely monitors bid activity, caught a case of collusion: An electronics component supplier, whom they were guiding through an auction bid over the phone, was recorded discussing prices with another supplier. FreeMarkets notified the buyer, whose complaint spurred a Justice Dept. investigation of the supplier. Sighs FreeMarkets President David

J. Becker: "You've got an environment ripe for collusion."

FreeMarkets, which has seen other examples of collusion, well, has the right idea: guard against collusion by setting up detailed rules that logs all activity, and it removes offending bidders if necessary. It also has a penalty box that keeps violators from participating

For now, the FTC is letting e-merchants sort things out

Amazon.com and Barnesandnoble.com Inc. When bn.com matched Amazon's initial higher price, Amazon raised its tag even higher. But when bn.com then dropped its price, Amazon didn't follow. It held steady, and bn.com soon raised its price again. With limited competition, says Varian, "the easier it is to monitor the other firms' behavior, the easier it is to support a collusive outcome."

Now, I'm not accusing Amazon or Barnesandnoble.com of collusion. That requires proof of an agreement, says Jonathan Baker, associate law professor at American University, and I'd be surprised if their executives even want to talk to one another. But that's the point. They and other dominant e-tailers could tacitly collude without ever talking, simply by acting on readily available data—perhaps using software to automate price-matching.



in auctions for six months or more after they break any rules.

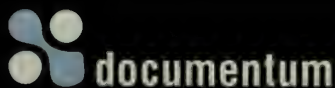
For now, the Federal Trade Commission has decided to let marketplaces sort it out themselves, and the issue hasn't yet caught up for e-tailers. The potential for complacency, though, worries some watchdogs. "The risk is collusion in the open air instead of a smoky room," says Albert A. Foer, president of the American Antitrust Institute. I don't think new laws are necessary. Cheating is cheating, online or off. But unless regulators are extra-vigilant about online collusion, the Internet won't remain the buyer's paradise everyone had hoped. ●

OUT OF CONTROL



Are you really an e-business if this is how you
MANAGE CONTENT?

Content is the linchpin to competing online. Trusted content is your e-business. Handle it wisely and you prosper. Handle it like so much surplus inventory from the old economy, and you'll see your strategic advantage evaporate. Documentum's content management platform automates the creation, personalization, delivery, and management of your vital e-business content. From a great many sources. To a great many users. Accelerate your online advantage. Visit www.documentum.com.



THE ADVANTAGE IS CONTENT.

Documentum is a trademark of Documentum, Inc., in the US and other countries. All other company and product names are used for identification purposes only and may be trademarks of their respective owners.

I CAN'T ANSWER THAT.

I'M SORRY. I WISH I COULD HELP. LET ME REFER YOU TO A COMPANY THAT CARES ABOUT ITS CUSTOMERS.

In the age of eBusiness,
one fact dominates all others: customers
are in control.

Whether through a call to a toll-free
number, a visit to a store down the
street, or the click of a mouse to Web
sites around the world, customers expect
a consistently positive experience.

For organizations everywhere and
of every size, the implication is clear:
keep your best customers 100% satisfied
or risk losing them altogether.

But keeping customers completely
satisfied is getting harder and harder. Customers
are demanding more and more—faster delivery,
broader selection, customized products and services,
better value and instant response to inquiries. In
other words, they want to do business on their
terms, not on yours.

At Siebel Systems, we make the applications that
companies need to succeed in today's ruthlessly



competitive, customer-driven eBusiness
environment.

Our applications give everyone in
your organization access to the same
real-time information. So, no matter
where or with whom your customers
interact, they feel as if they are having
one continuous and uninterrupted
dialogue.

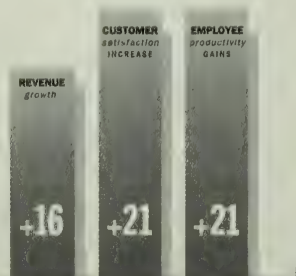
With Siebel eBusiness, you'll have
the ability to do business any way
your customers want—anytime, any-
where, in any language, in any currency,

through any communication channel.

It's called multichannel eBusiness. And it's already
working for customer-focused companies such as
IBM, Charles Schwab, and WorldCom.

To learn more about eBusiness and how it can
change your company, visit www.siebel.com/ebusiness
or call us direct at 800.356.3321. And your customers
will never have to hear "I'm sorry" again.

In a major study, Siebel solutions helped
increase revenue by 16%, customer satisfaction
by 21% and employee productivity by 21%¹
Which makes for happy shareholders. And not-
so-happy competitors.



source code 102900

SIEBEL
eBusiness

SAN MATEO CHICAGO NEW YORK LONDON TORONTO SYDNEY PARIS MUNICH TOKYO HONG KONG BEIJING-CHINA SEOUL-CHINA SINGAPORE

COMMENTARY

By Mark Hyman

PUTTING THE SQUEEZE ON THE MEDIA

Forget about winning the Super Bowl. Some NFL teams would be tickled just to finish the season with their bills paid. As franchise costs go as high as \$800 million, newly minted football owners are scrambling for fresh ways to raise revenues and meet their mortgages. Most have already squeezed the last penny out of the fans through personal-seat licenses, \$150 tickets, and \$6 hot dogs. Now, it's the media's turn to pay up.

Networks have long been underwriting leagues with the small fortunes they pay for TV rights. But there are other media veins for cash-hungry owners to mine. In Washington, Redskins owner Daniel Snyder caused a stir in October when he informed the ABC affiliate that its reporters wouldn't be permitted to do their nightly sportscasts inside the team's training facility. The parking lot outside Redskins Park would be available, though. Two other stations that have broadcast deals with the club were allowed inside for live reports.

In Dallas, owner Mark Cuban of the NBA's Mavericks doesn't nickel-and-dime news organizations as audaciously as Snyder. But he's not above pressuring the local paper for coverage to help put fannies in the seats at Mavs games. Last week, the Broadcast.com founder and Internet billionaire became a defendant in a lawsuit over a few pages of newsprint. Belo Corp., a minority owner of the Mavs and parent company of *The Dallas Morning News*, says it has a deal to sell its stake in the team to Cuban. He refuses to buy, claiming the paper failed to write enough stories about the team—as he was promised.

WAY TO PLAY. No tears for the media companies, please. Sports news helps sell papers and jack up TV ratings. Until, more and more news organizations that cover the games, attend the practices, and even breathe the name



AGGRESSIVE OWNERS: Redskins' Snyder and Mavericks' Cuban

of the local franchise are finding that they have to pay for the privilege.

Snyder, at 35 the youngest owner in the NFL, has been as hard-charging as a linebacker with steroid overload in chasing those dollars. But other owners now see the possibilities. "TV and radio stations are capable of making good business decisions, and if they are paying, it means Daniel has created the necessary value for them. More power to him," Cuban says in an e-mail.

Last year, Snyder & Co. notified several local stations that they would no longer be allowed free use of the Redskins name or logo on their pre- and post-game programs. Charging for the use of a team name on highlight shows has become standard practice in the NFL, but the ranks of such D.C. area shows as *Redskins Final*, *Redskins Report*, and *Redskins Wrap* quickly thinned. Programs that did continue using the name forked over fees that last sea-

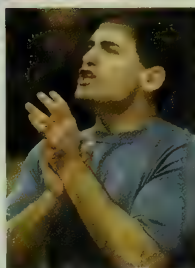
son netted the team revenue in the mid six figures.

"There's a fine line between genius and lunacy, and I'm not saying they've crossed it," says Alan Friedman, founder of the newsletter *Team Marketing Report*. "But in general, it's counterproductive to make up a grand policy that restricts coverage from being as broad as possible." Even Snyder's former public-relations man thinks the pay-for-media-access philosophy is of dubious value. "You're getting free coverage from these people. Why jeopardize it because they're not spending extra dollars with you?" asks John Maroon, who resigned from the Redskins in May after just 10 months on the job.

Then again, Cuban and Snyder are not your usual owners. Both are impatient, hands-on managers. Cuban is such an acerbic critic of NBA referees that last month, in events *The Dallas Morning News* dubbed "The Cuban Whistle Crisis," the league fined him three times in eight days, for a total of \$45,000, after run-ins with officials.

Snyder is hardly the retiring type, either. Last summer, the Skins became the first NFL team to charge fans who attend summer training sessions. On the PBS show *CEO Exchange*, slated to air in January, Snyder and Cuban chat about their teams and business outlooks. "We lost money on it... We tried too hard," Snyder says of his effort to turn training into a 10-bucks-a-pop entertainment event. "[In the future,] we just may make it a private practice... it's just not worth the heat." Good idea. Maybe the fans can wait out in the parking lot. With the reporters.

Hyman is contributing editor for Sports Business.



WHAT'S THAT SMELL?

Faced with an alleged health hazard, Appleton Papers chose to wage war

BY MICHELLE CONLIN

The two private eyes jetted in from the West Coast to do a job in the sleepy town of Hatfield, Pa. Their mission: to stake out a then 49-year-old named Bonnie Hayden who had lived in the Starbucks-less burg all her life. For about a week, the detectives waited outside Hayden's two-story colonial on a quiet country lane like FBI agents running down the local mafioso. They fol-

ubiquitously in credit-card receipts, Federal Express slips, report cards, and doctors' records.

B&G stored thousands of its CCP forms in Hayden's tightly packed office, where she and several co-workers noticed a sweet, sickly smell wafting off the paper and later began complaining of skin rashes, dry mouths, stinging eyes, headaches, and nausea. Hayden felt so sick from the fumes that she began visiting doctors, one of whom diagnosed her with formaldehyde sensitization, a potentially life-threatening condition that made her react allergically to the probable carcinogen. The physician linked Hayden's condition to her frequent exposure to CCP.

That's what led Hayden to sue Appleton, the world's largest producer of CCP, in 1986. She wasn't the only one worried about the paper. Since 1976, Appleton has faced hundreds of health inquiries and 15 personal-injury lawsuits, some of them with more than one plaintiff, from office workers employed by a diverse range of companies across the country (including a suit brought in 1982 by

eight employees of BUSINESS WEEK parent The McGraw-Hill Companies). Appleton has settled about half of these claims, including McGraw-Hill's and Hayden's, though it says these were "business decisions" and in no way admissions of guilt. The rest of the suits were dropped or dismissed.

What the plaintiffs and their lawyers—along with other critics—allege is that Appleton has mounted a fearsome political, scientific, and public-relations campaign to conceal a potential health hazard involving its most profitable product. "It's one big ugly secret," says plaintiff Rose-



Legal Affairs

lowed the soft-spoken needlepointer everywhere and tried to interview everyone she knew.

These private eyes, according to Hayden's attorney, Martin Brigham, were hired in 1989 by Appleton Papers, a \$1 billion business headquartered in Appleton, Wis., that was then owned by British American Tobacco Co. Why did Appleton want to find out everything it could about this woman? Because in her job as a clerk processing paperwork for B&G Manufacturing, Hayden had handled massive mounts of Appleton's carbonless copy paper (CCP)—also used

INTIMIDATION?

The danger of working with CCP is "one big ugly secret," says Petralia, a former NCR employee who says she became too ill to hold her job



PAPER TRAIL: A SHORT HISTORY OF CARBONLESS COPY PAPER

1954 Carbonless copy paper (CCP) debuts.

1960s Reports of symptoms associated with CCP begin surfacing.

1978 British-American Tobacco (BAT) buys Appleton Papers from NCR.

1980 BAT forms BATUS, a management and holding company of U.S. businesses, including Appleton, Saks Fifth Avenue, and Brown & Williamson.

1981 A University of Washington study finds CCP emits formaldehyde.

1987 The National Institute of Occupational Safety & Health (NIOSH) initiates its first probe into possible adverse health effects related to CCP.

1988 A *Journal of the American Medical Assn.* report concludes that CCP may cause a potentially life-threatening reaction in susceptible patients.

1988 A NIOSH senior reviewer recommends an alert notifying workers of potential health risks of CCP exposure. NIOSH later says there isn't enough scientific evidence to conclude that a relationship exists between CCP and reported health effects.

1990 Appleton Papers and Wiggins Teape, a British maker of carbonless and fine paper, split off from BAT to form Wiggins Teape Appleton.

1997 NIOSH reopens CCP review. It has yet to issue conclusions.

MARCH, 2000 The *American Industrial Hygiene Association Journal* publishes a study revealing CCP's toxic chemical components and their potential health hazards.

AUGUST, 2000 Arjo Wiggins Appleton is acquired by French holding company Worms & Cie.

DATA: COMPANY REPORTS, BW

Petralia, a former NCR business-consultant from Merrimack, N.H., became too ill to hold her job after using CCP in the early 1990s.

Plaintiffs such as Petralia, who currently has no lawyer, say they objected to what they call Appleton's protracted war on anyone who perseveres enough to haul the company into court. Plaintiffs say the company stops trying to intimidate them, amassing an army of scientists and lawyers to

discredit their medical experts and outspending their meager resources. Plaintiffs are spied on and harassed, they contend, while their lawyers are stonewalled for months in their attempts to get company documents—only to receive, in one case, 2,000 of them the night before a crucial deposition.

That's for those who can even get far enough to secure a lawyer. The company would have a lot more complaints, critics say, if weren't so hard to make

them. Since the established practice in the CCP industry is not to label the product, complainers often have to act like detectives to hunt down Appleton or any other manufacturer as the original maker—first by contacting the supplier and then by working their way up the distribution chain.

Plaintiffs say alleged victims are also forced to undergo bizarre, days-long medical exams, and, in the case of former plaintiff Nancy Rutigliano, asked

-July 2, 1981 memo from Appleton Papers product safety manager MIKE STEVE

A night photograph of the Appleton Papers building, a large industrial structure with multiple floors and windows. A sign above the entrance reads "APPLETON PAPERS". A red banner at the bottom of the image reads "Legal Affairs".

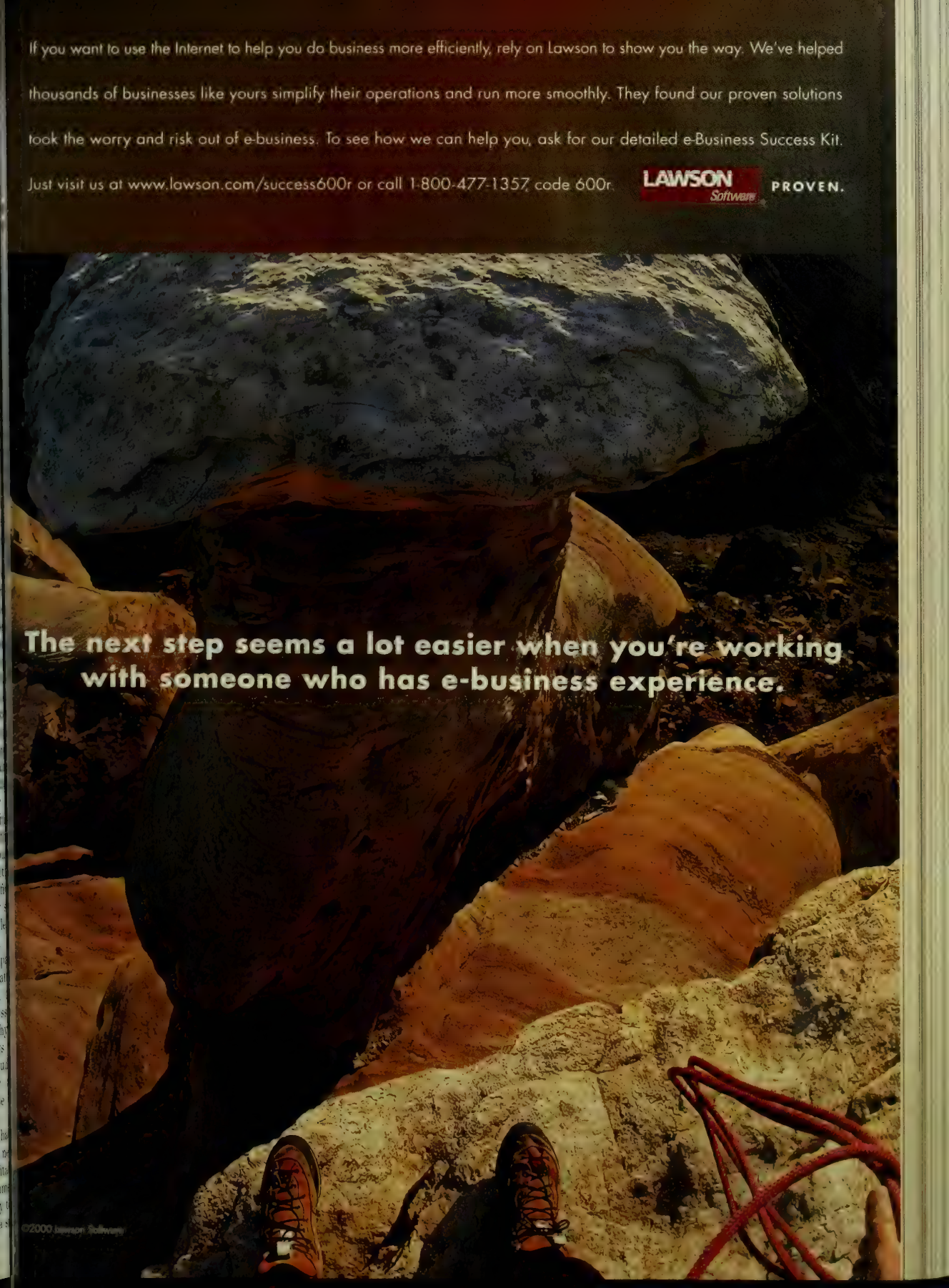
Legal Affairs

What's more, Appleton says that in its history of product testing, it had never performed tests that showed irritation in humans. Yet the court documents reveal that at least two company tests were performed in 1970 and 1983 on a series of

If you want to use the Internet to help you do business more efficiently, rely on Lawson to show you the way. We've helped thousands of businesses like yours simplify their operations and run more smoothly. They found our proven solutions took the worry and risk out of e-business. To see how we can help you, ask for our detailed e-Business Success Kit. Just visit us at www.lawson.com/success600r or call 1-800-477-1357, code 600r.

LAWSON
Software

PROVEN.



The next step seems a lot easier when you're working with someone who has e-business experience.



sample of people show that CCP did cause irritation.

Appleton discredits those tests as "primitive," "inconclusive," and lacking in "standard protocols." Says Tyckowski: "We have worked with some of the world's most competent scientists to help us come to the determination as to the safety of the product, and we are not going to be manipulated by false allegations."

But Charles Schmidt, a former researcher at the University of Florida who is now employed by San Jose

for those reviews of studies, no one else would have—and says it needs such evidence to prove its innocence.

The renewed attention to CCP comes as the Bridgestone/Firestone Inc. tire blowouts and the Food & Drug Administration's ban on phenylpropanolamine, a common ingredient in cold remedies and appetite suppressants, have thrust product liability under the public microscope. The lawsuits against Appleton are covered by the same aggressive protective orders that other companies, such as Firestone, have obtained from judges that lock up evidence far from public view. Such orders let companies such as Appleton keep every detail of the suits secret and preclude victims from ever talking about their settlements.

Appleton, like other companies, says it needs these orders to protect trade secrets, but critics such as Public Citizen and the Communications Workers of America (CWA) argue that much of what's placed under seal isn't confiden-

tial business information but details about the paper's safety that the public deserves to know. Says Hayden attorney Brigham: "What's being protected is a source of embarrassment for Appleton Papers."

The focus on CCP also comes on the heels of 3M Co.'s decision last summer to yank its popular Scotchgard fabric protector, among other products, when alarms went off about the safety of a chemical component—even though no conclusive proof existed about harm to humans. But while the St. Paul (Minn.) manufacturer, with its arsenal of products, could afford to make such a bold move, which will result in an estimated \$500 million loss in annual sales, it would be devastating for Appleton to do so. The company relies on CCP for 90% of its sales—a tough place to be in a digital world. Threatened by the spread of e-commerce and automation, the CCP market is shrinking by up to 8% a year. Appleton is a subsidiary of London-based Arjo Wiggins Appleton PLC, which is now owned by French holding company Worms & Cie. Says Arjo Wiggins Secretary Albert Dungate: "We are fully aware of the allegations made against Appleton, and we are confident that the product is safe."

But Appleton has other trouble

Along with more than 20 other paper companies, Appleton is defending itself in a lawsuit brought on behalf of alleged victims for violating California law requiring all products containing carcinogens and toxins to be labeled. In addition, formaldehyde, acco-

REQUEST DENIED

Appleton asked former plaintiff Rutigliano for a list of sexual partners. "They were trying to make me squirm."

ing to the suit, CCP contains the carcinogens benzene and toluene diisocyanate, as well as the reproductive toxin toluene.

The safety issue has also twice drawn the scrutiny of the National Institute for Occupational Safety & Health (NIOSH). Dr. G. Kent Hatfield, the scientist who led the first NIOSH investigation recommended in 1988 that NIOSH publish an alert notifying workers of potential health risks from exposure to CCP. The agency backtracked and never issued any such warning, citing a lack of definitive evidence. NIOSH reopened review in 1997 and says it will soon report its findings, though they have been delayed several times. Hatfield maintains today that "workers, absolutely, should be warned." Meanwhile, not

Legal Affairs

(Calif.)-based ThermoQuest, which makes scientific-testing equipment, published findings on CCP this year that reveal that many of the chemicals used to make the paper are toxic. As to Appleton's dismissal of the research showing CCP to be a potential health danger, Schmidt says: "Chances are, even if those other studies are flawed, there are lots of data that point to there being a problem [with CCP]. Almost all the data that say there is no problem is somehow sponsored by the paper companies." Appleton says if it hadn't paid



How do you get to the next level?

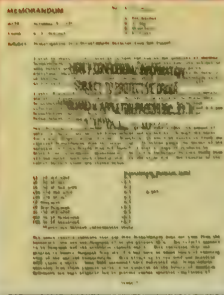
The answer is simple.

You need the right connections. And the right resources. That's why Heidrick & Struggles, the world's leading executive search firm, created LeadersOnline. LeadersOnline is dedicated to finding opportunities that best fit your talents, and help you get your career to the next level. Just 10 minutes to register online, and you'll have access to some of the best companies in the world. LeadersOnline. The next level is a lot closer than you think.

 **LeadersOnline**
A HEIDRICK & STRUGGLES COMPANY

Finding the next generation of premier executives.

www.leadersonline.com



“However, some of this non-complaining may be based upon ignorance. Once office workers become alerted to the possibility we may be inundated with irritation complaints.”

—Nov. 9, 1981 memo from Appleton Papers product safety manager MIKE STEVE

on CCP's packaging or its material safety data sheet (MSDS) gives users information about the paper's ingredients.

Finding out exactly what's in the paper requires a complicated patent review, which is what researcher Schmidt did in the mid-1990s. "What we found was alarming," says Schmidt, whose findings were published this spring in the *American Industrial Hygiene Association Journal*. "I would question if [some components] were safe."

STONEWALLED. Schmidt and other researchers found that traces of a number of the paper's minor components might elicit adverse physiological reactions in some especially sensitive individuals, particularly those who use CCP for eight hours a day. The study also says that many of the chemicals in the paper are, to varying degrees, toxic and can cause skin, eye, respiratory, and digestive irritation as well as allergic reactions. Schmidt also found hydrocarbons in the paper that can depress the central nervous system. One of Appleton's consulting scientists, Dr. Robert G. Tardiff, CEO of Sapphire Group, a Washington (D.C.) consultant to industrial companies, says he believes the chemicals reported by Schmidt are in concentrations "far too small to elicit any medical consequences."

Since it produces 500,000 tons of CCP every year, Appleton says the 777

was harmless, recalled its CCP from C&P Telephone, now part of Verizon Communications, and replaced it with a new batch. When LeGrande requested information about the ingredients in the problem paper, Appleton stonewalled him, he says. "We generally have no difficulty in getting accurate [information] from the manufacturer," LeGrande says, noting similar successful requests he has made to other companies. But Appleton, LeGrande says, wasn't "willing to provide the information."

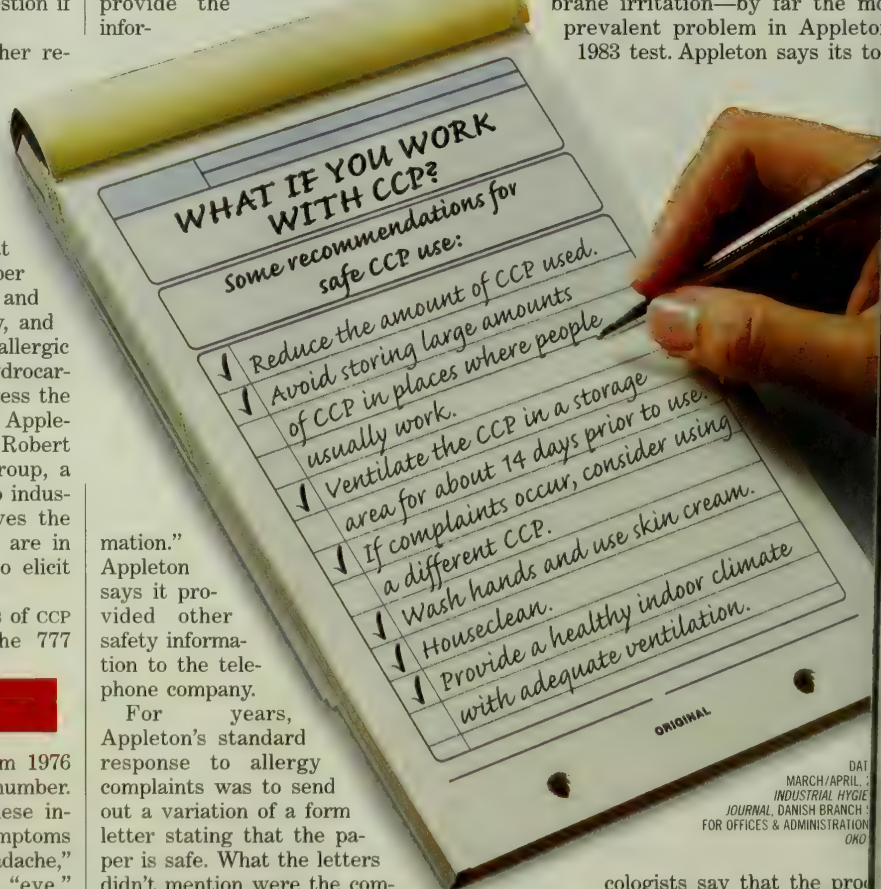
mation."

Appleton says it provided other safety information to the telephone company.

For years, Appleton's standard response to allergy complaints was to send out a variation of a form letter stating that the paper is safe. What the letters didn't mention were the company's own tests, which showed irritation in humans. Appleton says those two tests, done in 1970 and 1983 with small numbers of healthy volunteers, are inconclusive. In the 1983 test, 16 of 24 people who handled and cut the paper had "positive responses." Appleton discounts that study because 3 of the 16 people who had reactions to CCP also responded to plain paper. But 13 subjects reported mucous membrane (eye and nose) irritation from the car-

bonless paper, while only one had that reaction to the regular paper. The company says those 13 people were reacting to dust from cutting the paper and that no conclusion can be drawn as to whether symptoms resulted from ordinary exposure to the paper.

Appleton stopped performing such handling tests in favor of patch-testing the skin, citing those tests as more reliable, especially since they involve patches of about 100 people. But the patch tests do not test for mucous-membrane irritation—by far the most prevalent problem in Appleton's 1983 test. Appleton says its tox-



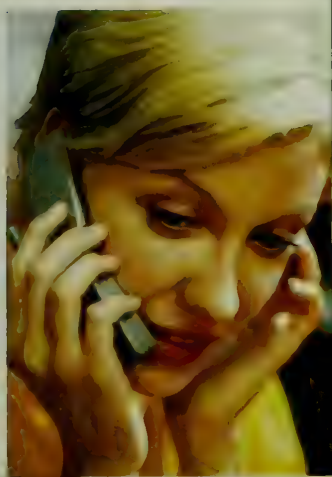
Legal Affairs

health inquiries it received from 1976 to 1986, for example, is a low number. The company kept track of these inquiries, noting the reported symptoms under the categories "skin," "headache," "nausea," "odor," "breathing," "eye," "nose," "mouth," and "unspecified" in a file prepared for the first NIOSH investigation. But despite the existence of these files, several sources who called Appleton say they were told that the company has never received any other complaints and that the product is perfectly safe, a claim the company denies. David LeGrande, occupational health and safety director of the CWA, says that in one instance in the early 1990s, Appleton, still claiming that its paper

cologists say that the product is not expected to be a mucous-membrane irritant under normal conditions of use, though that opinion is disputed.

Almost since CCP's introduction in 1954, Appleton has known that its product might pose health risks to workers. A 1958 animal test found that there was doubt as to whether or not repeated contact with carbonless paper might be harmful. Over the years, numerous other animal studies have shown that components in the paper can cause ir-

SAMSUNG



The Samsung Digital Experience

We design our products to bring joy to your world. That's why our phone includes an MP3 player. And why our super-sharp monitors and high-definition televisions glow with amazing color and clarity. It's the way our YEPP MP3 player creates the perfect soundtrack to your life. And it's how our fun features and practical solutions will make your day. Enjoy your Samsung Digital Experience. We made it just for you.



Hi-function monitor. First true TV/computer monitor that combines superior high-resolution image clarity with the contemporary style of sleek design.



The YEPP portable MP3 music player allows you to download music and enjoy a "skip free" digital experience.



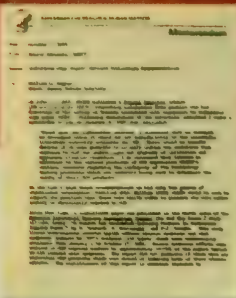
Picture perfect. The ultimate HDTV experience — superior picture definition but flatter and more compact than a standard big-screen TV.



The world's first wireless phone that allows you to download and play MP3 music files.

SAMSUNG DIGITAL
everyone's invited™

www.samsung.com



"I now recommend...that we publish an Alert which notifies workers of the potential health risks from exposure to CCP."

-Oct. 8, 1988 memo from NIOSH senior reviewer G. KENT HATFIELD

levels and do not indicate a potential harm in humans.

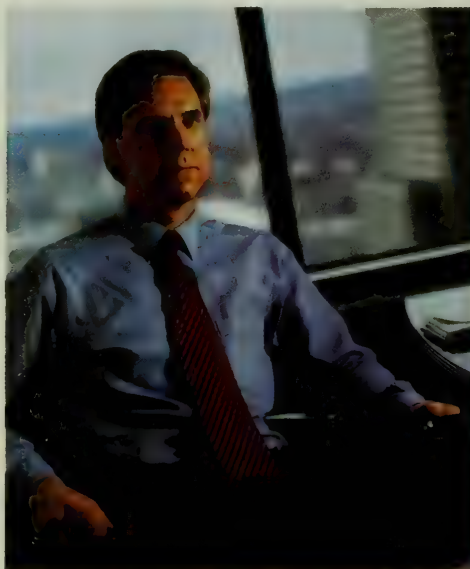
The company's product-safety manager, Michael Stevens, concedes that he had concerns about CCP when he learned of a study at the University of Washington that investigated complaints of CCP irritation by the staff at Harbor View Hospital. After developing symptoms, nurses and doctors there refused to work anywhere near CCP and threatened to leave the hospital if it wasn't removed. The resulting study, known as the Gockel report, was published in June, 1981. It found that CCP emits formaldehyde, a probable carcinogen and known sensitizer, meaning it can make people allergic.

Stevens wrote a memo to his boss: "If Gockel, et al.'s estimates are correct, we do have a real problem." Stevens, the memos show, knew that women were more sensitive to formaldehyde than men and that most of the people who used Appleton's CCP were female. Although Gockel's estimates for formaldehyde emission were below the U.S. Occupational Safety & Health Administration (OSHA) levels at the time, Stevens, the memos show, knew that sensitive individuals could be irritated at levels well below those limits.

Stevens notified his boss that the company should give full credence to the Gockel report. He immediately set about replicating the Gockel test using Appleton's own contract lab. The growing seriousness of the situation is evident in another Stevens memo, dated Nov. 9, 1981: "As to the question of whether these levels of formaldehyde are significant, I must repeat that we

tion, but the company says these tests were conducted at exaggerated

quelled. While admitting that the company tests concurred with Gockel's, such tests don't have a relationship to an office environment, says Stevens. Instead, they were performed by putting paper in a glove box and testing for chemicals in a concentrated environment. "That has nothing to do with what's in the office because you've limited the air so much," Stevens says, though S. W. "Tony" Horstman, another of the Gockel report researchers, disagrees. "It says something about that office," Horstman says, adding that once



the CCP was removed, "voila, the symptoms vanished." Stevens notes that further testing by the company indicated barely detectable formaldehyde levels in a work situation.

Meanwhile, Appleton is awaiting word of NIOSH's second investigation. The first review is controversial to some critics, who allege that the agency may have sided too much with industry. According to several sources, shortly after NIOSH senior reviewer Hatfield notified the agency in 1988 that he thought the paper should carry an alert, the CCP industry, led by Appleton, created a firestorm concerning his recommendation. Appleton retained scientists from Harvard Medical School and Brigham & Women's Hospital to review all of the research that had been done. The resulting industry review said

that the science establishing the link between worker symptoms and CCP was inconclusive. According to several sources, Hatfield was then pressured to back off his opinion. Shortly after that, NIOSH issued a finding that it could not conclude whether CCP was a danger or not. "It was the agency's decision," says Hatfield, who is not working on NIOSH's current review.

IN-HOUSE. To help the public understand the current status of CCP, NIOSH director of education and information Paul Schulte points to a review paper the agency used in its analysis. The review is a critique of the existing studies that found a link between CCP and health symptoms. This review also says that NIOSH is expected to conclude that "CCP is not a hazard to workers and has only a small possibility of producing mild or transient skin irritation." The review, written by Sapphire Group, was commissioned and paid for by Appleton Papers. Sapphire Tardiff says his company's analysis is unbiased and objective.

One factor that may figure into NIOSH's decision is that complaints about CCP seem to have declined in recent years. The CWA's LeGrande believes that refinements in the chemical formulation of the paper may have made whatever was irritating

people less pronounced. What's more, many companies, such as customer-service outfits, are now using computers or thermal paper. But LeGrande still considers CCP a possible danger.

Appleton says that were true, own workers would be suffering symptoms

TRADE SECRETS?

"What's being protected [in sealed lawsuits] is a source of embarrassment for Appleton," says attorney Brigham

say, the manufacturing plant it sprawls through the town of Appleton. A pungent chemical smell hangs in the air of the mostly automated facility, where giant rolls of paper pass through coaters to make the CCP. At the end of an hour-long plant tour, when asked what the smell was, an Appleton plant manager looked puzzled. "Smell? What smell? I don't smell anything." The problem is, many people who have worked with CCP, like Bob Hayden, do.

With Mike France in New

Legal Affairs

have not seen massive irritation complaints from the field.... Some of this non-complaining may be based upon ignorance. Once office workers become alerted to the possibility, we may be inundated with irritation complaints." Stevens went on to recommend that Appleton try to limit the amount of formaldehyde in its paper.

Despite the existence of these memos, Stevens insists that though he was initially concerned, his fears were soon

A dark blue, textured book cover. The word "COBALT" is printed in white, uppercase letters near the top. A horizontal green band is visible near the bottom, and the word "QUBES" is printed in white, uppercase letters just below it. The cover has a slightly worn, mottled appearance.

You'll never look at your DSL the same way again.



POST-TESTING



THE CEO

Looking for superheroes to deliver sky-high growth ensures disappointment

By Anthony Bianco and Louis Lavelle

In the end, after all the superlatives have been exhausted, this fact will loom large in assessing John F. Welch's impact: He lasted. If Welch carries through with his plan to remain as chief executive of General Electric Co. until the end of 2001, his tenure will reach an even 20 years—an eternity in the dog years by which today's CEOs measure their time. Welch is a Hall of Famer, the Cal Ripken of the executive suite. But the way things are going in the business world, your average major-league rookie would seem to have a better chance of breaking Ripken's consecutive-game record than a new CEO would have of matching Welch's longevity.

Two-thirds of all major companies worldwide have replaced their CEO at least once since 1995, according to a recent survey by consultant Drake Beam Morin Inc. More than 1,000 U.S. CEOs have left office over the past 12 months alone, with one-third of them departing since Sept. 1. The revolving door is even spinning fast at the biggest companies. Statistics compiled by executive-compensation specialist Pearl Meyer &

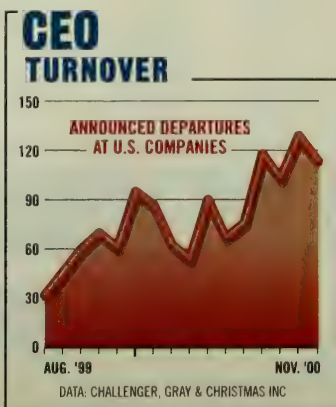
Partners Inc. show that the CEOs of 39 of the 200 largest U.S. companies have left their jobs so far this year, compared with just 23 in 1999.

In recent months, the mounting turnover at the top taken on the aspect of a crisis as one high-profile boss after another has been fired or forced to resign. What is striking is not just the number of CEOs getting the boot but how little time they were allowed to prove themselves. The combined tenures of Maytag's Lloyd Ward, Campbell Soup's Dale M. M. Thoman, Lucent Technology's Richard McGinn, and Gillette's Michael Hawley add up to 10 years and 11 months—less than half of Welch's term of service.

All of the recently ousted CEOs made mistakes that contributed to their downfall. Some never should have been promoted in the first place. (You know who you are.) But the fundamental problem is that expectations of CEO performance

have been inflated to the point where no mortal no longer qualifies. Call it the trap. Executive recruiter Korn/Ferry International has even taken to advising wannabes to "develop charisma." What next? "Grow a third eye"? "Master telekinesis"? Says Rakesh Khurana, a Harvard Business School assistant professor who is writing a book on CEOs: "We've made the superhero job. Boards look at the CEO as a panacea and get fixated on the idea that one single individual will solve all of the company's problems."

The mythologizing of the CEO began earnestly about 20 years ago, as a wave of Herculean corporate restructurings gave rise to a brash new breed of corporate maverick worker. Lee Iacocca, "the man



INSIDE

A talk with AmEx' Golub..... page 88

Welch's heir at GE..... page 94

Photo essay of the Welch era page 98

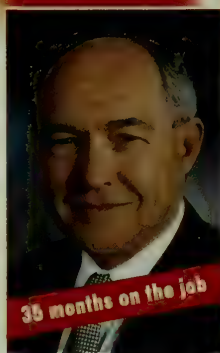
AP



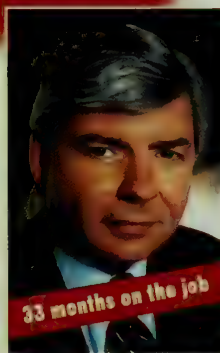
Jill Barad
Mattel



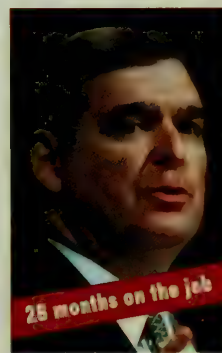
Richard McGinn
Lucent



John McDonough
Newell Rubbermaid



Dale Morrison
Campbell Soup



M. Douglas Ivester
Coca-Cola



Bert Knowling
Covad



Michael Hawley
Gillette



Durk Jager
Procter & Gamble



Lloyd Ward
Maytag



Richard Thoman
Xerox

saved Chrysler Corp.," was the prototype (even if he did get a big boost from Uncle Sam). In the 1990s, the techno-savant CEO moved center stage as the likes of Microsoft's William Gates, Cisco's John Chambers, and Dell Computer's Michael Dell kept on logging fantastic growth rates long after their companies became giants. But it is Welch who has come to epitomize the CEO as maximum leader for all seasons—a human dynamo who through sheer force of personality and brilliance of vision can transform any company, no matter how big or complicated, into an engine of perpetual outperformance.

The job of CEO is probably more difficult today than it was when Welch started out, if only because business today is more complex than it was 20 years ago—or even 5 years ago. Markets are ultracompetitive and far-flung, new technology is pervasive, everything happens faster. There is much the corporate leader must master. But the fundamental task of today's CEO is simplicity itself: Get the stock price up. Period.

For most of the 1990s, this required only a modicum of CEO

Cover Story

thanks to stock-option mania, this bull market enabled senior managers to amass the sort of wealth heretofore reserved for corporate founders. But now, economic growth is waning in the U.S. and elsewhere, and the mighty bull has turned tail and run. The technology-heavy Nasdaq index has fallen more than 40% from its high, making this the worst bear market since 1973-74. Unless the market resumes its upward climb soon—or investors lower their expectations—the recent epidemic of CEO firings could presage a bigger executive suite bloodbath to come.

The accelerating rate of CEO replacement is not all bad. "I take it as a good sign, because what it says is boards of directors are tougher on CEOs than they used to be," says Donald P. Jacobs, the longtime dean of Northwestern University's Kellogg Graduate School of Management.

Drake Beam Morin's data show that the overwhelming majority of the thousands of ex-CEOs created over the past five years effectively dealt themselves out of a job by selling their company. Merger-making no doubt saved many a struggling CEO from the ultimate consequences of his or her missteps, but most of them at least negotiated a premium price for their stockholders—and a sweet severance package for themselves.

But at the same

PAY INFLATION

AVERAGE CEO COMPENSATION

1989: \$1.2 million,

45 times the blue-collar wage

1999: \$12.4 million,

475 times the blue-collar wage

DATA: BUSINESS WEEK, BUREAU OF LABOR STATISTICS

reliance on headhunters has exacerbated the tendency to overlook or underestimate homegrown candidates. "The executive search industry is not in the business of taking big risks," says Jeffrey A. Sonnenfeld, president of the Chief Executive Leadership Institute, an Atlanta-based think tank. "And th

A TALK WITH

HARVEY GOLUB OF AMEX

By almost any measure, Harvey Golub's seven-year tenure as chairman and CEO of American Express Co. has been a considerable success. Golub took AmEx back to basics, jettisoning some businesses and restructuring the ones that remained. The company logged record earnings of \$2.5 billion in 1999 and is on pace to top that mark in 2000. Under Golub, AmEx shares have risen more than sixfold in value. In November, Golub, 61, announced plans to step down as CEO at the end of 2000 and as chairman the following April. He will be replaced in both posts by his chosen successor, AmEx President and Chief Operating Officer Kenneth I. Chenault, 49. On Nov. 20, Senior Writer Anthony Bianco sat down with Golub for a wide-ranging discussion of corporate management issues.

Q. Does the increasingly short-lived tenure of CEOs suggest that the job is getting harder?

A. I think that the job is about as hard today as it was two decades ago. The CEO

still has the final say for decisions and has to provide a vision for the direction that is compelling people who work there to the marketplace. The difference is that today's CEOs have much clearer than two decades ago, and are more willing to be on the basis of those me

Q. CEOs also make more money than two decades ago. Is there a runaway CEO pay-unreasonable performance expectations?

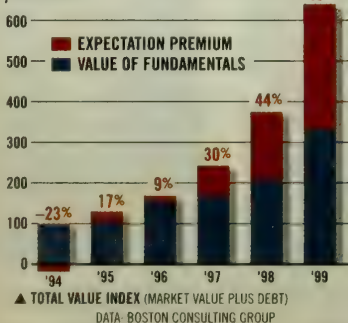
A. CEO pay has risen, but I think it is the consequence of a riskier market. Many people are tied more closely to rate performance, and they got their wish.

Q. Do you sympathize with CEOs who complain about pressure from Wall Street for quick results?

A. I think the pressure applied by the market for short-term results is appropriate and fair. On the other hand, it has made competition more competitive than it has been otherwise. If e

GREAT EXPECTATIONS

Investor hopes for future growth—as opposed to fundamentals—have come to make up an increasing portion of the stock price at 100 top-performing companies in recent years, according to a study by Boston Consulting Group. BCG used current profitability and historical growth to come up with a measure of fundamental value, then subtracted that from market value to come up with the expectation premium.



not in the business of telling you
t your answer is inside."

t is this mainly self-imposed nar-
ring of the field of CEO possibilities
t has given rise to the spurious no-
that business is afflicted by a se-
talent shortage. "There's not real-
a shortage. But we're looking for
ic qualities and unblemished

ords—and those just don't exist," says John Challenger,
of Challenger, Gray & Christmas, a Chicago outplace-
t firm. Scoffs Gerard R. Roche, chairman of search firm
brick & Struggles: "Give me half an hour, and I can give you
lf-dozen people" qualified to fill virtually any CEO spot.

et in today's increasingly unsettled business climate,
ds are more inclined than ever to want to fill the corner
e with a superhero. It's a sign of the times that Warren

SEARCHING FOR MR. OR MS. RIGHT

**First-quarter 2000 CEO search activity
increased 47% over first quarter 1999.**

DATA: ASSOCIATION OF EXECUTIVE SEARCH CONSULTANTS INC.

E. Buffett, the *éminence grise* of val-
ue investing, was instrumental in the
sacking both of Hawley and M. Dou-
glas Ivestor at Coca-Cola Co. Buffett,
chairman of Berkshire Hathaway Inc.,
has long epitomized patient capital in
an increasingly impatient world. Berk-
shire owns large positions in Coca-
Cola and Gillette Co., and Buffett is
on the board of each company. But not even the Sage of Om-
aha could passively endure the pain inflicted by the collapsing
share prices of Coke and Gillette. "We felt we had a very
good person in Hawley," Buffett says. "But we made a deci-
sion [that] it was possible to find a better one."

At some companies these days, the CEO position might
just as well be staffed by a temporary-help agency. Global
Crossing Ltd. has had three CEOs since 1997. The last of

nt to be subject to
rces, they should go
for private compa-
nange professions.

vestors who trade in
if a stock undermine
ry and its CEO?

have been occasions
eer where I wished
have had two class-
holders. One would
der dividend. To get
er dividend, investors
ve to commit to not
than 10% of their
in any one month.
d save stocks from
umped and causing
ts to operate ineffi-
a time.

ou ever attempt to
t such a system?

se way we've dealt
to discourage cer-
stors from buying
because we know
think and how they
ten we meet with
smile less, we an-
tions less expan-
some cases, I have
le they probably
be happy with us
e they shouldn't
ock.

level management
hort supply today?
the depth of man-
talent today is
an when I started
oday, management
es in both genders.

It comes in all
religions, ethnic
backgrounds, and
even countries
of origin. That
makes the mar-
ket for American
CEOs a global,
uniform market.
It also makes it
a deeper, more
robust market for
CEOs than exists
in any other
country in the
world.

**Q. Many compa-
nies have come to
grief by misman-
aging CEO succes-
sion. Where do
they tend to go
wrong?**

A. I did a review
of succession in
other companies
to see what
worked and didn't
work. In some
cases, the succes-
sor feels the need to put his
or her stamp on the company
in a way that may turn out
to be dysfunctional—almost a
case of putting a stamp on
the company for the sake of
putting a stamp on it rather
than dealing with real needs.
Sometimes, the outgoing CEO
tries too hard to make his
last year the best year rather
than making the first year of
the successor a better year.
Some CEOs won't let the suc-



GOLUB (RIGHT) WITH CHENAULT: "The old CEO ought to go away"

cessor expand responsibility
very much before the
changeover and therefore
don't have an opportunity to
provide at least some level of
guidance.

**Q. You have said that you
don't even want to keep a
seat on the American Ex-
press board after you retire
from management. Why?**

A. The dynamic of having the
old CEO hang around in order

to be helpful to the new CEO
is almost always nonsense. It
can create two problems. The
successor may not want to
make changes because he
doesn't want to hurt the feel-
ings of his predecessor. And
the person who is being suc-
ceeded may feel resentment
if something is changed. The
old CEO ought to go away, and
if the new CEO has a question,
he can call him or have lunch
with him.

them, Leo J. Hindery Jr., earned a formidable reputation in the cable TV business as a top officer of Tele-Communications Inc. But he lasted only seven months as CEO of Global Crossing, resigning in October. At some companies, CEO tenure now is best measured not in months but weeks. Robert O'Leary put in 12 weeks as CEO of PacificCare Health Systems Inc. before resigning on Oct. 25. Less than two weeks later, homebuilder Walter Industries Inc. announced the hiring of its fifth CEO in nine months.

Virtually by definition, the firing of a fledgling CEO is a corporate failure that reflects at least as poorly on a company's board of directors and on its previous CEO as it does on the failed successor. That so many of these bungled management transitions are occurring at companies regarded as paragons of corporate governance only reinforces the notion of systemic failure. In too many companies, succession plan-

STAR FINDERS

NUMBER OF SEARCH FIRMS
IN NORTH AMERICA

1989: 1,859

1999: 4,430

2000: 5,093

DATA: KENNEDY INFORMATION LLC

took charge in 1990, had impressed Wall Street by ramming through to completion what had been a tentative restructuring. Johnson essentially did what Welch did in Act One of his reign at GE: He carved cost out of an old-line operation and raised prices where he could. Campbell's stock price tripled during his tenure, powered by a jump in profit margins, to 11% from 4.9%. That Johnson was unable to boost the soupmaker's anemic rate of revenue growth was disappointing but unsurprising. Canned soup

is not exactly a novelty.

Morrison realized that there wasn't much more fat to trim. Raising prices further was an equally hazardous option in the packaged-food market of the late 1990s. So he dedicated himself to selling more soup, Pepperidge Farm cookies, juice, and Godiva chocolates. He promised Wall Street 8% to 10% annual revenue growth—and double-digit growth

in earnings per share. Investors liked what they heard, bidding up Campbell shares to \$58 in late 1998, Morrison's first year on the job.

But Morrison's forecast was soon exposed as unworkable. In fiscal year 1999, net sales fell 4.2% while earnings per share from continuing operations fell 9.5%. By the February, Campbell's stock had traded down to a four-year low of \$31. The next month, Morrison, 51, responded to a rising chorus of complaints and criticism from Wall Street and his board by resigning. Morrison, now CEO of a start-up tech firm, ci4net.com, did not return phone calls seeking comment.

Campbell Soup's board responded by persuading Johnson, 68, to return as interim CEO. "I think

we have tried too hard for growth," he told *The New York Times* in July. Even so, Johnson is again attempting to stimulate growth with a costly investment program in new products and intensified marketing that promises to take a big bite out of earnings over the next year or so. Now trading at \$33, Campbell's stock still faces a long return trip to par.

Gary M. Stibel, founder of New England Consulting Group, says Campbell Soup's struggles are symptomatic of a general delusion that has taken hold not just in the food business but throughout the consumer sector. "Consumer products companies were promising double-digit growth. Unless you have a silver bullet, this is impossible," Stibel says. "There is no silver bullet. The problem is there is a shortage of guts. Many CEOs are doing what is necessary to placate the Street at all costs rather than saying: 'This is the way we will grow our business, and you folks just may not want to own many shares.'"

Of course, disappointing Wall Street can accomplish more than dodging the inevitable. Lloyd Ward, who served his apprenticeship at Procter & Gamble and Pepsi



WELCH AND JONES IN '81: GE's revered chief made mistakes early in his tenure that likely would get him fired today

ning has been given short shrift. Instead of developing a corps of candidates over a long period, as General Electric has done, many companies have either gone the executive-search route or singled out one person and put him or her through what amounted to an abbreviated audition.

Once those barely seasoned executives take over top billing, they must perform immediately. But in some cases, they inherit companies that have nowhere to go but down. "Deflating excessive expectations" or "letting well enough alone" does not appear anywhere in the job description of the aspiring superhero CEO. On the other hand, to overpromise and under-deliver eventually shreds an exec's reputation, infuriates Wall Street, and quite possibly costs the CEO the job. What does he do? Show why the job commands the big money: Go for it.

Campbell Soup brought in Dale Morrison from PepsiCo Inc. in 1995 to run its Pepperidge Farm unit and promoted him to succeed David W. Johnson two years later. Johnson, who

ned Maytag in 1996 and enjoyed a
marking three-year run as heir apparent
CEO Leonard A. Hadley. As a division
chief and then as president and COO, Ward
is credited with transforming staid home
appliances into premium-priced growth en-
gies. His definitive new-product success
is the Neptune, a front-loading washing
machine that blew out of stores despite a
\$1,000 price tag. By mid-1999, Maytag's
stock had tripled. As one of the highest-
paid black executives in the U.S., Ward,
50, became a business celebrity, appearing on the cov-
er of BUSINESS WEEK just before he replaced Hadley in Au-
gust, 1999.

It was all downhill from there. Four weeks after Ward's
announcement, Maytag conceded that it would not meet its third-
quarter earnings projections because of flagging sales of low-
priced mid-priced home appliances. Within days, Ward an-
nounced an ambitious plan to cut \$100 million in costs while
expanding new global and e-commerce sales channels. But
Maytag's share price continued to slide as the industrywide
drop in appliance sales worsened and Ward failed to deliver
on scaled-back profit forecasts. In October, the company
reported a 27% drop in quarterly profits. By November,
Maytag's stock was off 60% from its peak under Hadley.

Ward's board demanded Ward's resignation and brought Hadley,
out of retirement to fill in temporarily.
Even some Wall Street analysts who had criticized Ward
were stunned by how quickly Maytag's board pulled the
plug. "I think his exit was largely due to bad timing on
his ascent to the throne," says Efraim P. Levy, a senior an-
alyst at Standard & Poor's Corp. "Before he showed how
effective he could be, he got hit with a surprise." Ward also
refused to be interviewed.

Ward and Morrison were hardly the only CEOs to lose
their jobs to the men they thought they had replaced. Proc-
ess and Gamble, Lucent, Xerox, and Newell Rubbermaid all
ended in desperation to familiar faces. But at GE, Welch
has no intention of making his successor, Jeffrey R.
Immelt, a short-timer. At the Nov. 27 press conference at
which he anointed Immelt, Welch took a swipe at companies
that have made the CEO post into a temp job. "The idea of a
coming in on a rescue ship for 24 months... is stupid," he
said. Welch argued that it takes 10 years, minimum, for a new
CEO to make his mark and predicted that Immelt, who is the
same age Welch was when he was named CEO, will match his
ear run at the top.

Smiling and relaxed, Immelt seemed to brim with confi-

IN AND OUT

**In the 1990s, a third of CEOs
appointed at 450 major corpora-
tions lasted three years or less.
One in four companies went
through three or more CEOs.**

DATA: DRAKE BEAM MORIN INC.

average of 23.5% a year, easily outpacing the Standard &
Poor's 500-stock index. But Welch's overriding claim to fame
is that he made GE the world's most valuable company. Its
market capitalization is now about \$500 billion, compared
with \$13 billion in 1981.

The notion that stock price is the be-all and end-all of
corporate—and by extension, CEO—performance by now is so

dence at his coming-out press conference in
New York. But no matter how well Immelt
does, he will be hard-pressed to match
Welch's record, which is a product of lucky
timing as well as talent. A treasure trove
of underperforming assets such as the old
GE can be massively restructured only
once. That assignment fell to Welch, whose
tenure happened to coincide neatly with
an 18-year bull market in stocks. Talk
about having the wind at your back. Since
1981, General Electric stock has risen an



MORRISON: Double-digit growth from soup and cookies?

deeply ingrained that it seems to have been handed down on
stone tablets. In reality, it is an outgrowth of the go-go
1980s and '90s. The GE that Welch inherited is invariably
characterized as a company in need of a good shaking. It was
indeed, and yet it is often forgotten that Welch's predecessor
and mentor, Reginald H. Jones, was by acclamation the most
admired CEO of his era, the inflation-wracked 1970s.

In 1981, just as Jones was preparing to step down, the
CEOs of America's 500 largest companies were asked to name
the country's best executive and best-managed company.
Jones and GE each finished first by a wide margin. With one
exception (Exxon Corp.), the four companies that topped
the poll had underperformed the stock market over the pre-
ceding 10 years, a generally dismal time for equities. In fact,
GE's price-earnings multiple had plunged from 22 to a paltry
9. Why, then, was Jones so admired by his peers? Dignified
and even-tempered,

he personified the traditional ideal of the CEO as statesman
and guided GE to 26 successive quarters of rising earnings
through two recessions. At a time of befuddling turbulence,
Reg Jones and GE embodied the stability of yesteryear.

To Jones's credit, he was shrewd enough to recognize that
changing times demanded that he choose a successor of ut-
terly dissimilar personality. Who can say that "Mad Jack"
doesn't deserve the appellation of America's best CEO? He
might even be the manager of the century, as his most ex-
travagant admirers claim. But it is instructive to recall that

Cover Story



ICA: "Saving" Chrysler sparked the mythologizing

even Welch made mistakes early in his career that likely would get him fired in today's unforgiving, turbocharged environment. Does "factory of the future" ring a bell?

It was to be the centerpiece of Welch's bold plan to reverse GE's long decline as a technology innovator. The idea was to tie together a host of high-tech product lines to dominate the nascent field of factory automation. "Automate, emigrate, or evaporate" was the factory-automation division's battle cry. Evaporate it did, undone by technical snafus and erroneous projections of customer demand.

Cover Story

By 1983, Welch had cut his losses and shifted his hopes to the company's financial-services unit, now known as GE Capital Services, which delivered big time.

In switching emphasis from manufacturing to financial services, Welch spurred colossal shareholder gains. On the other hand, General Electric would be an even more economically important company today had Welch succeeded in his abort-



BUFFETT: *Coke and Gillette tried his well-known patience*

ed attempt to reinvent it as a technology company for the Computer Age. This is not to criticize Welch but to put his achievement in context. To be fair, Welch did oversee the technological updating of the manufacturing businesses that survived his relentless asset pruning—aerospace, plastics, and medical imaging among them.

Today's CEO probably faces no greater hazard than attempting the transformation of a core business threatened by a disruptive new technology. George M.C. Fisher was prematurely hailed as a savior when he left Motorola Inc. and became CEO of Eastman Kodak Co. in 1993. Fisher put Kodak through the Jack Welch change machine, eliminating thousands of jobs and divesting underperforming units. But he also staked the company's future on a daring plan to meld Kodak's traditional film franchise with a new digital-imaging business. The result to date: tepid sales growth and erratic earnings. In late 1999, Fisher decided to step down as CEO, a year before his employment contract was to expire. (He will remain as chairman through yearend.)

Xerox did not give Rick Thoman nearly as much time to show his stuff. Thoman, who had acquitted himself well both at American Express Co. and at IBM, imposed a sweeping reorganization of the Xerox sales force that had the effect of separating many veteran sales reps from their best customers. The new CEO's aloof, cerebral demeanor didn't help. In May, Xerox'

THE OUTSIDERS

Percentage of CEOs hired from the outside at 800 large companies, 1990: 11%
Percentage of CEOs hired from the outside, 1999: 20%

DATA: WATSON WYATT WORLDWIDE

worried board cut short the Thoman era at 18 months. Thoman too declined to comment. Back came his predecessor, Paul A. Allaire, who reaffirmed the company's commitment to Thoman's strategy of focusing on the sale of high-tech services and solutions for the digitized office. There will be no quick fix at Xerox. Again. To the contrary, the company has issued two earnings warnings since Allaire's return, and the stock continues to scrape bottom, trading at \$1 above the split-adjusted initial public offering price in 1959.

As the tarnished icons of American industry continue to cope with their epic struggle for survival, CEO instability is giving rise to a new cottage industry. Executive Interim Management is a Dutch company, founded in 1978, that fills executive vacancies with temporary help. Over the years, it has placed some 2,500 senior executives at such companies as Sara Lee, Staples, Royal Dutch Airlines, Ingersoll Rand, and Cunard. Roger Sweeney, EIM's managing director, says CEO replacements were once comparatively rare but have surged of late and now account for 25% of total assignments. At the moment, some 200 companies are relying on EIM to place CEOs or presidents. "We don't see any shortage of opportunity," Sweeney says.

The world of management consulting abounds with ideas for rethinking the role of the CEO. One prevalent suggestion is to pair the CEO with a nonexecutive chairman who can act both as a mentor and as the manager of the board. This is a long-established tradition in Britain, of course, and has been used effectively by General Motors Corp. as well as a growing number of dot-com and biotech companies. However, Roger M. Kenny, managing partner at Boardroom Consultants, says the notion of sharing power with an executive chairman generally does not go over well with American CEOs. "In the American system, there is a bit of an ego issue if you don't have all the titles—president, chairman, and CEO," Kenny says.

There is nothing like a bear market to tame the executive ego. As much as anything else, the CEO trap was sprung in the late 1990s bull-market euphoria butting up against sobering macroeconomic realities of 2000. The good thing about distorted markets is that they tend to self-correct, and the market for CEOs should be no exception. It has been a long time since Big Business has been populated by self-inflicted CEOs for life. That's to the good. Now, if only direct reports can bring themselves to stop wishing on a star.

With Jennifer Merritt in New York, Amy Barrett in Philadelphia, and bureau reports



FISHER: *He tackled a tough technology challenge at Kodak*

**HOW HARD (CRASH)
COULD (CRASH) IT BE
TO RUN YOUR OWN
(CRASH) WEBSITE?**

There's an old saying, "If you want something done right, you've got to do it yourself." How do we know it's old? Because no one from the digital generation would ever say it. The fact is, websites are fragile things. And unless an experienced web hosting provider is helping you, they're liable to break down from time to time.

Enter one very experienced provider named WorldCom.

By teaming up Digex with our UUNET arm, we're able to offer you a comprehensive e-business solution.* Not just one of the most reliable IP networks in the industry. Not just data centers all over the world. But the far more critical, human element: an all-star team of web hosting experts that blue chip companies trust with their mission-critical applications.

Visit us at www.wcom.com/generationd. And find out what it's like (EASY) to have WorldCom (EASY) run your (EASY) website.

generation d

WORLD.COM

Cover Story



THE MAN WHO WOULD BE WELCH

Much of the GE empire will be virgin territory for Jeffrey Immelt

When Jack Welch pulled the lid off his most closely held company secret on Nov. 27 and introduced Jeffrey R. Immelt as his chosen successor, by all appearances the two were Jack and Jack Jr. The executives showed up for the big announcement in NBC's *Saturday Night Live* studio in

identical blue shirts open at the collar, navy sport coats—even matching selected loafers. The look was unintentional: Immelt, the 44-year-old head of GE's medical imaging business, had been vacationing on the South Carolina coast and was caught by surprise when Welch, 65, called him with the news at 5:30 p.m. the previous Friday. In the



er attire, his wife scrambled to find a blazer and wound up matching Welch's. Still, it's a level of familiarity that he had better get used to. He and Immelt will be roommates of sorts for the next year: Welch will be firmly ensconced at GE's headquarters in Fairfield, Conn., as chairman, while Immelt is tentatively perched in a nearby office. And investors will be watching for signs that Immelt has what it takes to follow Welch.

It is a much different world that Immelt stands to inherit. Like Welch, Immelt took over from Reginald H. Jones in 1981. Immelt is replacing an icon. The pressure to perform is much greater today than 20 years ago, due to the success and the market's rising valuation of all stocks—a combination that has bumped up GE's market value

by almost \$500 billion since 1981. And Immelt is taking over at a time of extreme turbulence in executive suites, as corporations from Coca-Cola to Procter & Gamble to Xerox toss CEOs for missteps that might have been tolerated in a more patient and forgiving environment. Says Roger M. Kenny, a managing partner at New York-based Boardroom Consultants: "The honeymoon is getting shorter and shorter. We're seeing a very quick-tempered investment community."

Initially, at least, Immelt will be buffered from some of those pressures. Welch extended by eight months his original departure date of April, 2001, so that he could oversee his \$45 billion purchase of Honeywell International Inc. And before the Honeywell merger, analysts were projecting that GE had locked in earnings growth of 15% or more

JACK AND JEFF: *Welch and Immelt sported identical outfits for the big announcement. But Immelt, stepping in during the biggest merger in GE history, is taking over in a much more complicated environment than Welch did 20 years ago*

through 2002. That comes after an expected increase of 18% for this year.

Still, there will be nothing easy about this transition. GE will be wrestling with the most massive merger in its history just as the economy is showing signs of a serious slowdown. Moreover, while Welch has symbolically handed the reins to Immelt, how the two will share decision-making and how much latitude Immelt will have in guiding GE is very much a "work in progress," concedes GE Vice-Chairman Robert C. Wright, president of NBC. Wright is one of two

TRANSITION *"This is no different than any job I've taken," Immelt says. "The first emphasis is on the marketplace"*

mentors Welch appointed to help ease Immelt's transition; the other is Vice-Chairman Dennis D. Dammerman, who is also chairman of GE Capital Services. Several management gurus say that while Immelt's promotion has been presented as a done deal, its structure—which gives him only the president's title for now—could make his position tenuous if he fails critical tests in the coming year.

Once Immelt does make it into the corner office, he will be under enormous pressure to

match Welch's recent record of profit gains. If he falls short, he could quickly face investor pressure to break up the complex conglomerate. Under Welch, GE has expanded its yearly revenues from \$27.9 billion to \$130 billion. Yet the company is a glaring exception to Wall Street's preference for pure plays. With the purchase of aerospace and industrial conglomerate Honeywell, GE will become even bigger and more complex, with estimated 2001 revenues of \$176 billion and 450,000 employees, up from 340,000 today. Holding that mass together may prove a challenge too daunting for anyone besides Welch. "What this feels like is Yugoslavia when Tito died," says James J. O'Toole, a management expert at the University of Southern California's Center for Effective Organizations who has written extensively about GE. "This whole thing is going to give Wall Street pause."

MUM ABOUT CHANGE. But if Immelt plans to shake things up, as Welch did soon after taking over 20 years ago, he's not talking about it. In his coming-out appearances, Immelt spoke in broad terms of deepening existing businesses, continuing initiatives to expand globally in China and India, and weaving the Internet more completely into everything GE does. "The way the company is run is the way I'm most comfortable with," he told a group of ana-

lysts after his promotion was announced. In an interview with *BUSINESS WEEK*, he added: "We've got incredible opportunities in our core businesses."

In fact, much of the GE empire will be virgin territory for Immelt. He has never worked overseas and has held as-

just as it was roiled by one of the largest recalls in GE's history. As vice president for consumer service, Immelt had to manage the crisis and round enough workers to install replacement compressors on millions of refrigerators. By the time he landed at Medical S-

tems as CEO in 1997, Immelt was already viewed as a potential Welch successor.

Immelt's year of transition should help him become acquainted with GE's other businesses, including the Capital unit, which accounts for 41% of its earnings. Several factors could complicate that learning process. Chief among them is the Honeywell merger, which greatly enlarges GE Aircraft Engines and GE Power Systems. Both of these units are themselves likely to experience a change in leadership. W. James McNamara at the aircraft unit and Robert L. Nardelli at the turbine manufacturing business lost out in the succession race and are expected to move. Given the importance of these businesses, Immelt plans to spend many of his first days on the job meeting with key customers, assuring them that the months ahead will go smoothly. "This is no different than any job I've ever taken," Immelt says. "The first emphasis is on the marketplace."

That's where Immelt is likely to shine. A former high school basketball player in Finneytown, Ohio, and an offensive tackle on Dartmouth College football team, the 6-foot-4-inch Immelt exudes personality. At Dartmouth, he juggled a dual major in economics and applied mathematics and was president of the fraternity, Phi Delta Theta. Classmates call him a natural

leader, and they still hoot over his humorous class notes for the Dartmouth alumni magazine, to which he contributed for five years, finally coming in 1983 by urging classmates to stay involved. He signed off by quoting John Travolta: "Excuse me while I strut."

Those leadership skills are a big



IMMELT'S CHALLENGES

DON'T DISAPPOINT WALL STREET How do you match Welch's record of earnings growth, which is expected to reach 18% this year? It helps that analysts are projecting earnings growth for months to come. And Immelt says he anticipates new acquisitions and continued product innovation.

MANAGE COMPLEXITY Immelt has never run more than one division at a time and has only worked in three of GE's 10 major divisions. Plus, if growth does slow, he'll probably come under some pressure to break GE up into more manageable chunks.

INTEGRATE HONEYWELL He'll have a year to study under Welch while the \$45 billion merger is digested. But it's GE's largest deal ever and is sure to command top-level attention for years to come.

BUILD A TEAM This doesn't get done overnight, and the other two contenders for the top job are expected to leave. But Immelt was promoted partly because he's a natural at building teams and inspiring loyalty within the ranks.

signments in only three of GE's 10 major divisions. Like Welch, most of his career was spent in GE's highly entrepreneurial Plastics division. Immelt did two stints there, eventually rising to vice-president and general manager of GE Plastics' Americas division. Immelt passed an important career test in 1989, when he landed at the Appliances unit

Cover Story

Immelt got to where he is today, people follow him," Welch says. Dr. H. Thrall, chairman of radiology at Massachusetts General Hospital in Boston, a big Medical Systems customer, witnessed several frank exchanges between Immelt and subordinates: "I was impressed that people had enough confidence in him to ask tough questions." And he got results. Soon after Immelt took the Medical Systems job, Thrall approached with a long-standing gripe about the contract negotiations on each piece of equipment the hospital purchased from GE. He wanted to negotiate pricing and other terms in a single five-year contract. "I tried to sell [the deal] to everybody at GE for the best time," Thrall recalls. "The first time I met Jeff, I told him this story. He made the decision in a minute. He said: 'That makes total sense. We'll do it.'"

D-FIRE ACQUISITIONS. The turnaround at Medical Systems also buried Immelt's reputation for encouraging innovation. Before he arrived in the unit had endured three years of low revenues. That was quickly reversed, and in 1999 revenues grew. Immelt figured out that customers needed more than just GE's traditional line of scanners and embarked on a five-year series of acquisitions—60 in all—that brought new lines such as Ultrasound, which he grew from a scant \$10 million in revenues to \$700 million,

JEFFREY R. IMMELT

BORN Feb. 19, 1956, Cincinnati, Ohio

BACKGROUND Father was GE Aircraft Engines manager; mother was schoolteacher



BORN LEADER Counseled high school basketball coach to scream less; it worked

FAMILY Met his wife, Andrea, at GE Plastics; one daughter

HOBBIES Golf

EDUCATION BS, economics, applied math, Dartmouth (photo at left); MBA, Harvard

TEAM PLAYER Offensive right tackle on Dartmouth football team, which went 6-3 his final year

FORMER GE TITLE President and CEO, GE Medical Systems

CURRENT TITLE President and Chairman-Elect of GE

GE HIGHLIGHTS Revived stagnant medical-products division; persuaded carmakers to use more plastic bumpers; successfully handled a massive recall of refrigerator parts

MANAGEMENT STYLE "I think there's a difference between tough-mindedness and meanness"

and digital X-ray technology. Information systems software grew from scratch to a \$500 million business on his watch. "Before he came in, there wasn't a lot of excitement within GE," notes Gary M. Glazer, chairman of the department of radiology at Stanford University School of Medicine. "What Jeff was able to do in a very short

time was restore the confidence that GE was committed to innovation."

Wall Street may demand that Immelt bring a similar mindset to the rest of GE. Analysts already speculate that he may have to jettison the struggling Appliances division which, though recovering from weak sales, is no standout. Moreover, NBC looks to be at a disadvantage in a world of ever-growing media corporations that link studios with television networks. And Honeywell, which was stumbling badly with underperforming businesses prior to the merger announcement, will also pose pressing issues about what to sell and what to build. Given today's preferences for highly focused companies, Immelt could face enormous pressures to sell chunks of GE, especially if it fails to continue to meet investor expectations and maintain the gravity-defying stock multiple it has enjoyed under Welch. GE shares trade today at about 40 times projected 2001 earnings, more than four times the company's price-earnings ratio of 1981.

Immelt faces what could be a very tricky year in waiting. He will be helping to implement a megamerger while trying to keep in step with a still very vigorous Jack Welch. Meanwhile, Wall Street will be scrutinizing Immelt's every move to divine any hints of future strategy. After winning the beauty contest, GE's next CEO must sit tight for another year before he gets to wear the crown.

By Pamela L. Moore in New York, with Nanette Byrnes



THE WELCH EFFECT

Jack Welch has thoroughly transformed GE in his 20 years as CEO

SALES PER EMPLOYEE

1981: \$69,059

TODAY: \$382,352

P/E RATIO

1981: 9

TODAY: 40

MARKET CAP

1981: \$13 BILLION

TODAY: \$500 BILLION

REVENUES

1981: \$28 BILLION

TODAY: \$130 BILLION

MOST PROFITABLE UNIT

1981: CONSUMER PRODUCTS (TVs, APPLIANCES, LIGHTING)

TODAY: FINANCIAL SERVICES (COMMERCIAL LEASING, MORTGAGES, INVESTMENTS)

DATA: GENERAL ELECTRIC CO.





Now that he has finally told the world who his successor will be, John F. Welch embarks on the final stretch of his remarkable 20-year reign as CEO of General Electric Co. When he leaves GE's headquarters in Fairfield, Conn., for the final time a year from now, he will end one of the longest and most triumphant runs of any CEO in Corporate America. He will also leave behind a legacy of stunning change.

Most remarkable is the way Jack Welch transformed his own image. A brash upstart who was

inimical to the staid GE culture, he started his tenure at the top by ruthlessly cutting corporate fat during the 1980s, earning unparalleled infamy among the rank and file. But that downsizing positioned GE for the '90s boom. And now that he has added almost \$500 billion in shareholder value, the slasher image has long since been replaced by that of a management

savant. Many experts consider Welch one of the 20th century's greatest corporate leaders, ranking with General Motors Corp.'s Alfred P. Sloan.

Indeed, the deftness with which he turned an industrial conglomerate into a high-growth thoroughbred overshadowed many of the company's blemishes, from expensive missteps to outright scandals. Now, Welch's legacy also will depend on how well he grooms his heir, Jeffrey R. Immelt. If he gets it right, the Welch Era will live on long after the man himself departs.

JACK

THE WELCH ERA AT GENERAL ELECTRIC

PHOTO EDITOR RONNIE WEIL

TEXT PAMELA L. MOORE



NEUTRON JACK

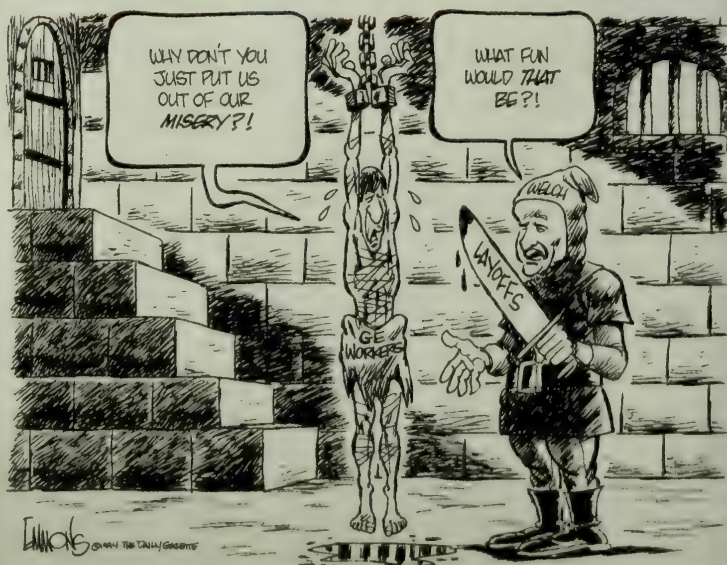
Welch was a sharp contrast to his predecessor, the statesman-CEO Reginald H. Jones, who was almost as admired in his day as Welch is now. Jones risked his reputation by pushing Welch over several other candidates. Indeed, some GE board members considered Welch too impetuous to take the helm. Welch started his reign with a bang, dismantling GE through a series of dramatic restructurings and layoffs. From 1981 to 1985, he cut 100,000 jobs, an act so painful to employees that they began referring to him as "Neutron Jack," after the nuclear bomb that vaporizes people but leaves buildings standing.

RIDICULE: Critics scored Welch—but the job cuts may have set the stage for later successes



FRICTION: Welch cut 100,000 jobs from 1981 to 1985, earning him the scorn of workers as well as a famous nickname

CHANGING THE GUARD: Newly installed CEO Welch with predecessor Reginald Jones in 1980

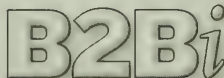




**Eight reasons you can trust webMethods
for *your* B2Bi solution.**

They do.

When the world's e-business
leaders agree on something,
it's time to sit up and take



notice. All eight have chosen webMethods software
to power their business-to-business integration.

And if those eight reasons aren't enough, here are a
few hundred more: Over 400 other leading companies
have also selected webMethods to provide B2Bi
infrastructure for trading networks, B2B exchanges
and internal enterprise integration. That's more
experience than all the other B2Bi vendors combined.

Non-stop integration among critical business systems
both inside your enterprise and out to your
trading partners and marketplaces. Only
from webMethods. The industry's first and
only comprehensive solution for B2Bi.

FREE

The B2Bi
Imperative and
Its Power to
Transform Your
Business.

webMethods

A reason to act now.

There's never been a better time for
B2Bi. Let webMethods show you how. Visit
www.webMethods.com/bwp/B2Bi/ and download our
must-read whitepaper, "The B2Bi Imperative and
its Power to Transform Your Business."

webMethods

www.webMethods.com



HIGH POINTS

Welch proved just as adept at buying and building businesses as he was at slashing jobs. He purchased RCA in 1985, bringing the NBC television network into the GE fold and adding a radically new service business to the industrial mix. He transformed GE Capital Corp. from a sleepy finance company into a powerhouse that now supplies 41% of GE's earnings. And in a dramatic stroke that proved he was a dealmaker to the end, Welch last October seized Honeywell Inc. from rival United Technologies Corp. with a \$45 billion bid. It was the largest deal of his career—and to see it through, Welch postponed his retirement by eight months.

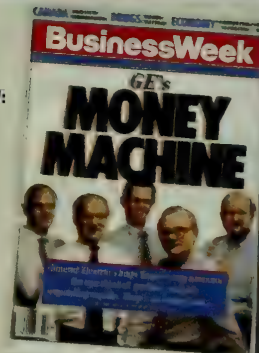


MAJOR MERGER: Welch, with RCA execs Robert Frederick (left) and Thornton Bradshaw at a 1985 press conference

FINAL PROJECT: Welch announces that GE will acquire Honeywell—and postpones retirement to do the deal

CAPITAL CREW:

In 1993, GE's hugely profitable finance arm makes the cover of this magazine



Do you rip the wrapping paper?

Can you still catch a snowflake on your tongue?

Do you love going home for the holidays but dread sleeping on the couch?



**HOLIDAY HIT
THE ROAD RATESSM
FROM \$50***

If the answer is yes, you're one of us. The kind of person who values both the holidays and a good night's sleep. That's why this season, HamptonSM hotels offer Holiday Hit the Road Rates starting from \$50 a night.

Rates are good seven days a week and include a free breakfast bar, and you'll earn Hilton HHonors[®] hotel points and airline miles throughout your stay.

For reservations, call Hampton and ask for Holiday Hit the Road Rates today.

*Not available at all locations.

We're with you all the way.



For your holiday travels, visit us at hampton-inn.com or call 1-800-HAMPTON.[®]

member of the Hilton Family of Hotels
rates by location and are based on availability.
© Hilton Hospitality, Inc.

**MASSACHUSETTS MESS:**

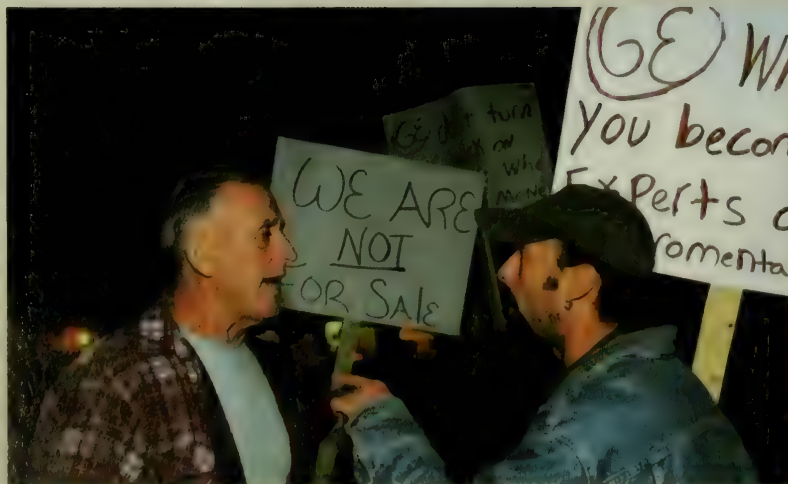
GE faced fire in the 1990s for PCB pollution at plants such as this one in Pittsfield, Mass.



BIG HIT: *In 1994, Kidder Peabody's Joseph Jett is blamed for losses that lead to millions in write-offs for Kidder parent GE*



FLASH POINT: *The PCB controversy rages on this year in Hudson Falls, N.Y., near two GE plants*



LOW POINTS

The Welch era was not without flaws. GE has suffered major setbacks and scandals from criminal indictments relating to military contracts to ongoing battles with environmental groups. Until recently New York's fabled River Café would not serve top GE executives because of PCB contamination in the Hudson River that many blame on the company. Indeed, regulators will soon rule on whether GE will have to pay to dredge the river. Even more damaging to GE: the 1994 bond-trading scandal at Kidder, Peabody & Co. that led to huge losses and the dismantling of the investment bank Welch bought in 1986.

Confidence. **Trust.** Security.

(You know, the feelings your customers should get when they transact business on your website.)



Trust online. Truth is, many customers still really don't have it. Problem is, it's one of the biggest impediments to realizing your e-business plans. At Ernst & Young, our CyberProcess Certification™ solutions, including WebTrust™, are among the most recognized—and respected—in business. When we verify your processes for securing your customers' privacy and confidentiality, they will feel that doing business with you online is the same as sitting with you across the table. It doesn't get any more reassuring than that.

newrules
neweconomy™

ey.com/cpc



ERNST & YOUNG

FROM THOUGHT TO FINISH.™

**ALL EARS:**

Managers and executives at GE's training center in Croton-on-Hudson, N.Y., listen intently to one of the boss's lessons in 1988

**THE GOOD LIFE:**

Spending some quality time on the links with wife Jane during a trip to Ireland in 1996

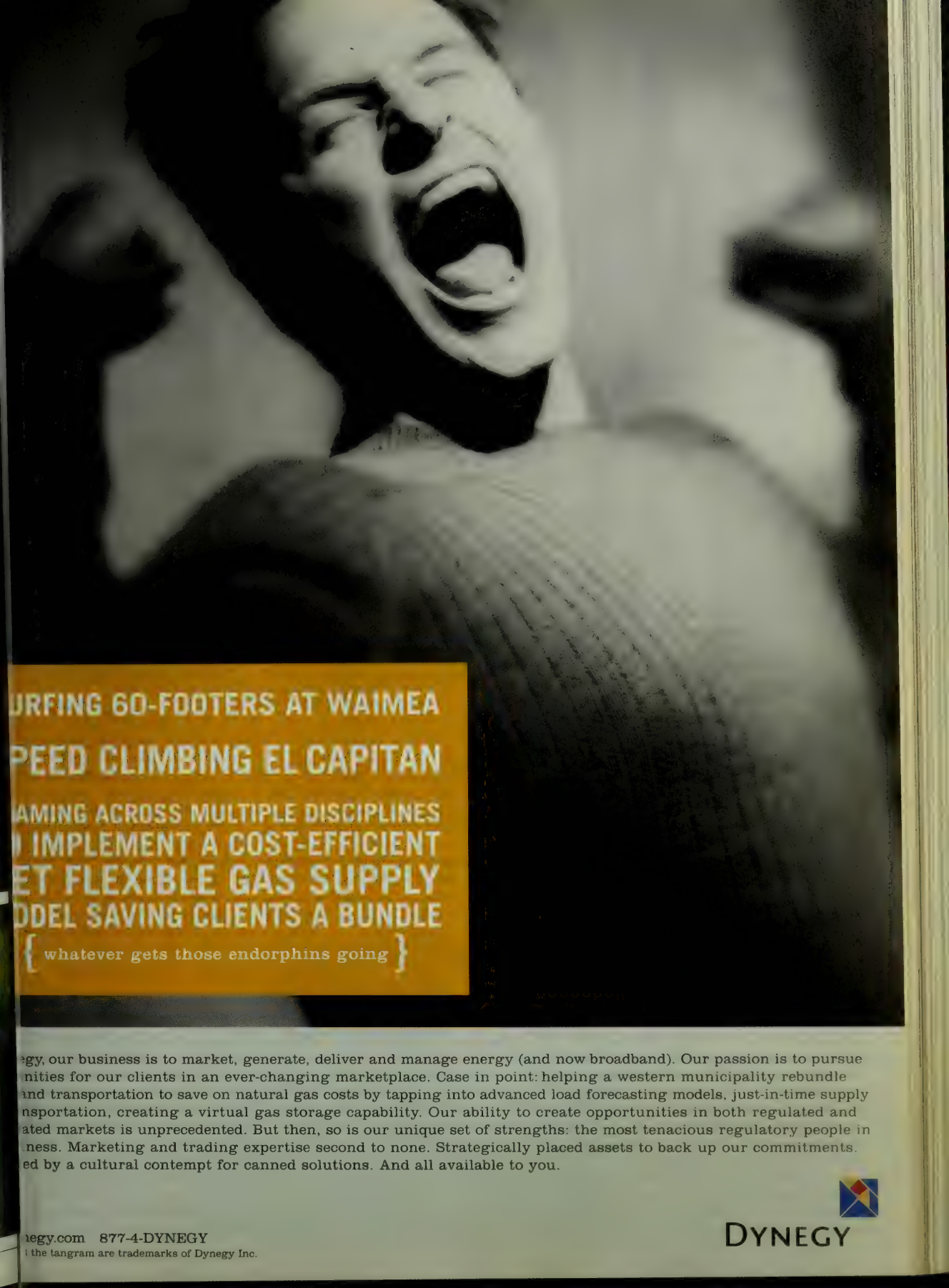


THE WELCH TOUCH

A hands-on manager who supplies the massive company's daily shot of adrenaline, Welch sets high standards and can display a fiery temper when they're not met. But Welch's charisma is most apparent when he's pursuing two of his passions: golf and teaching in "the pit" at GE's leadership training center in Croton-on-Hudson, N.Y., where he engages GE managers in candid exchanges.

POWER PLAY: On Martha's Vineyard with another chief executive in 1997





**SURFING 60-FOOTERS AT WAIMEA
SPEED CLIMBING EL CAPITAN
JAMMING ACROSS MULTIPLE DISCIPLINES
TO IMPLEMENT A COST-EFFICIENT
AND FLEXIBLE GAS SUPPLY
MODEL SAVING CLIENTS A BUNDLE**

{ whatever gets those endorphins going }

Dynegy, our business is to market, generate, deliver and manage energy (and now broadband). Our passion is to pursue opportunities for our clients in an ever-changing marketplace. Case in point: helping a western municipality rebundle water and transportation to save on natural gas costs by tapping into advanced load forecasting models, just-in-time supply and transportation, creating a virtual gas storage capability. Our ability to create opportunities in both regulated and deregulated markets is unprecedented. But then, so is our unique set of strengths: the most tenacious regulatory people in business. Marketing and trading expertise second to none. Strategically placed assets to back up our commitments. Powered by a cultural contempt for canned solutions. And all available to you.

STOCKS

THE FALL OF THE NET ANALYST

Former oracles have been demoted, and a New Guard is rushing in after the fact to downgrade Internet stocks

The Queen of the Internet was not amused. Under the glare of CNBC's television lights, Morgan Stanley Dean Witter's Mary G. Meeker appeared somewhat tentative on Oct. 23. Meeker, who among myriad other accolades has been called the third-most-powerful woman in business, usually exhibits a Zen-like calm. But on this day, *Squawk Box* host Mark Haines clearly put Meeker on the defensive, tersely grilling her on her willingness to talk up Internet stocks. At one point, Meeker responded: "If we sound a little too optimistic, it's really a function of the fact that this is the kind of environment that creates buying opportunities." Haines retorted: "You're telling us to start from this point and put our money in the right places. But following your advice, we put our money in the wrong places...now we don't have any money." In fact, since Meeker's appearance, the Nasdaq has dropped a further 22%. And so far this year, her picks are down 68%.

It's life in the hot seat for big-time Internet analysts. The Goldman Sachs Internet Index is down 70% for the year. Lay-offs at dot-coms hit record numbers in November. Both Merrill Lynch & Co. and Chase H&Q recently canceled their Internet conferences, with a Merrill spokesman saying the sector is "more of a defensive story" right now. So far this year, 130 dot-coms have shut down, according to Webmergers, a research firm that tracks Internet mergers and acquisitions. Still, most high-profile Internet analysts like Meeker and Mer-

rill Lynch's Henry M. Blodget continue to stand by the stocks they cover.

Clearly, big-name analysts from mega investment firms have caused investors untold pain. Rather than paying heed to the glitz, investors should be looking at humbler, lesser-known analysts at smaller firms that are not involved in investment banking. On a long-term basis, these are the best Internet stockpickers, according to Bulldog Research.com Inc., an analyst rating service. "A huge part of an analyst's job is to bring in investment-banking business," says Michael Thompson, Bulldog's co-president. "[But] these analysts are largely unencumbered."

SPREAD TOO THIN? If investors had for an instance listened to Sean Jackson (who?), an Internet software analyst at Suntrust Equitable Securities (what?) in Nashville, they would have reaped a 236% gain over the past year through Oct. 31. "As an analyst at a small firm, I get to choose the stocks I cover and focus on my niche, which is Internet security software. At big firms, analysts are often forced to cover too wide an array of companies because of investment-banking relationships," says Jackson. His winners include Checkpoint Software, and ISS Group. Matthew Barzowskas at First Albany Corp. in New York net-

ted a 216% gain with recommendations like 3Com. Stephen Sigmund, a Neapopolis, has posted a 46% return the last year with picks like Ariba and Netegrity.

A study by Kent L. Womack, a finance professor at Dartmouth's Tuck School of Business, and Michaela, a Cornell University professor, found that the stock recommendations of brokerages without investment banking ties tend to be

accurate. Their stocks rose an average of 3.5% within a year, vs. a decline of 11.6% over the same period in stocks recommended by brokerages involved in investment banking with companies they cover.

Investors are so upset by the bullish forecasts they're turning to analysts who are making splashy no-calls on Internet companies. Indeed, the trend is for analysts to make no-brainer "nuptial" calls—that is, no-calls on already beaten stocks like Amazon.com, line.com, eBay, and Yahoo.

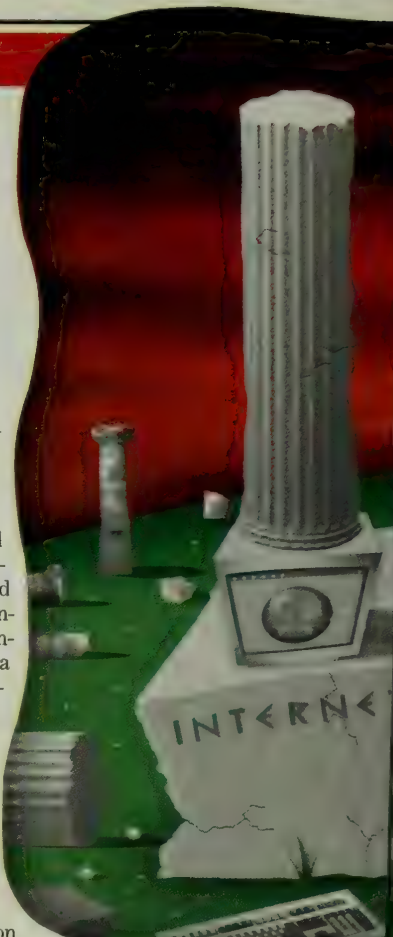
SOME GOT IT RIGHT

Analysts Covering Internet Software and Services

ANALYST	FIRM	1-YEAR PERCENT RETURN*
SEAN JACKSON	SUNTRUST EQUITABLE SECURITIES	236.45%
MATTHEW BARZOWSKAS	FIRST ALBANY CORP.	215.88
PAUL SAUNDERS	WIT SOUNDVIEW	185.45
HOWARD SMITH	FIRST ANALYSIS CORP.	181.16
DAVID ZALE	SANDS BROTHER & CO.	120.5
STEPHEN SIGMUND	DAIN RAUSCHER WESSELS	46.25
JOHN HODULIK	UBS WARBURG	27.97
SCOTT APPLEBY	ROBERTSON STEPHENS	10.70

*THROUGH OCT. 31

DATA: BULLDOG RESEARCH





Since the beginning of 1998, Wall Street firms did \$2.4 billion underwriting Internet initial public offerings, according to Thomson Financial Securities Data.

Maybe Wall Street should start to care. "Now that the underwriting business has dried up, the big firms are stuck with these white-elephant analysts who were so bullish and so much in the public eye. They may have been good branding, but they've caused investors to lose their shirts," says a hedge fund manager who asked not to be identified. Over the past two years, celebrity analysts have been heralded as oracles of the New Economy. "We all got much more attention than analysts are used to getting, and perhaps much more than we deserved," says Lise J. Buyer, a former Internet analyst for Credit Suisse First Boston who is now a venture capitalist.

The bullishness of Internet analysts is legendary. "Because of the uncertainty when it comes to Internet valuations, it is easier for biased recommendations to hide more comfortably," Womack says. Merrill's Blodget, for instance, has never put a "sell" on a stock he covers. He downgraded Priceline in September, a day after the stock fell 43%, to \$10.50 a share. And in August, he downgraded 11 stocks, dropping eToys Inc. and barnesandnoble.com to "holds," those stocks were already 95% and 84%, respectively, below their 52-week highs. Another who has never issued a "sell" is Meeker, who has downgraded only three stocks in three years. Meeker was not available for comment, and Blodget did not respond to phone calls.

For the analysts' part, experts say their hands have been tied. "Think about the impact they would have on a stock if they severely downgraded it," says Eric Von der Porten, a hedge-fund manager at Leeward Investments. "It appears they're just quietly and slowly getting more negative in order to allow clients

these analysts are riding likely short-lived crest of Internet stardom.

the downgrades are a day and a dollar short. On Nov. 18, Lehman Brothers Inc. analyst Holly Becker downgraded from buy to hold and

ed it in a report, saying other things that profits wilting and margins would ve up to expectations. She may be but many say her call was hardly ent. The stock was already down since the beginning of November. noriously fashionable right now to up on Internet companies. But it take any courage or daring to do his environment," says Jonathan , a former Net analyst who soured tocks in the mid-'90s. He is now of European mergers and acqui-at Wit Soundview Group. Says r: "My job isn't to look through urview mirror, but to call it as it is and I think there's more down-Still, Becker didn't become bearish Internet until after her colleague, analyst Ravi Suria, issued a breaking report in July question-

Long-term, analysts without investment banking ties make more accurate picks

SHAKE-UP: (CLOCKWISE FROM BOTTOM) KIGGEN, MEEKER, COOKS LEVITAN, BLODGET, AND BECKER

ing the fate of Amazon (page 110).

The scores of other analysts making negative calls include Thomas Courtney of Banc of America Securities. On Nov. 28, he issued a downbeat report on Amazon. And in September, Salomon Smith Barney analyst Tim Albright downgraded Priceline just a month after reiterating a \$130 price target and recommended buying the stock—even as the stock fell to \$25.

Big underwriters, it seems, don't seem to give a hoot about stockpicking. "Let's face it, someone like Henry Blodget is a real brand for a firm like Merrill. He has a following and sells stocks and gets underwriting business, and that's all the firms care about," says a venture capitalist who asked not to be identified.

Models once used to justify high Internet valuations are now greeted with skepticism and deemed inappropriate

and brokers to get out of the stock." On Oct. 4, Lauren Cooks Levitan, senior e-tailing analyst at Robertson Stephens, said in a report that Amazon would never turn a profit without making "fairly radical shifts" in its business model. Yet Levitan kept her "long-term accumulate" rating on the stock. And Blodget has defended himself by saying his written comments on Internet stocks have been turning negative for more than a year, but that his ratings didn't reflect the trend.

DECODING LINGO. But do investors pay attention to the fine print in analysts' reports? Moreover, what connotes a "sell"? Part of understanding analysts is deciphering their codes, experts say, and this is especially true with Internet analysts. "It's a world where even a downgrade to 'hold' from 'buy' can be a signal to sell," says Charles L. Hill, First Call Corp.'s director of research. And while

more Internet analysts are moving to "neutral" ratings on stocks, the average recommendation is still a "buy," according to First Call.

Like the analysts themselves, the Internet valuation models used to justify high valuations have come under sharp scrutiny. Where amorphous things like "hits metrics" and "annual run-rate sales" used to matter, most experts now see them as mere valuation voodoo. One analyst, Credit Suisse First Boston's Jamie Kiggen, has been criticized over his "lifetime value of a customer" metrics used to justify his bullish Amazon calls. Kiggen's response: "The probability of my most optimistic growth scenario is lower than it was a year ago, but that's all due to economic uncertainty and the near-term supply and demand in capital markets." Says Michael K.

Parekh, an Internet analyst at Goldman Sachs & Co., the leading e-commerce underwriter: "Instead of using valuation criteria for mature industries, we ended up using filters that venture capitalists use."

Fitting, then, that an extraordinary number of Internet analysts—including Buyer, Robertson Stephens' Keith Benjamin, Chase H&Q's Daniel H. Rimer, and CSFB's Bill Burnham—have jumped ship to venture capital firms, despite the recent downturn there, too. There has even been a persistent rumor that Meeker will leave for a VC. Buyer, who started covering the Internet in 1995 and secured a spot at a venture firm five years later—prior to the Internet crash—says of her decision to leave the dot-com world: "It was one of my greatest calls as an Internet analyst."

*By Marcia Vickers
in New York*

UNCONVENTIONAL WISDOM FROM LEHMAN

You might say this credit analyst is getting the credit he deserves. In June, Ravi Suria, who covers Amazon.com Inc. for Lehman Brothers Inc., dropped a bomb on the Internet world with a report that likened Amazon to an Old Economy retailer and asserted that its creditworthiness was "extremely weak and deteriorating." It was sharp analysis in a market where most analysts seem to be press agents for investment bankers. And it was a needed wake-up call. Since Suria's report, investors are paying more heed to once-obscure bond analysts.

BUMPY ROAD. "The past six months have opened up the world a lot more than I imagined," Suria says. His Amazon report—and a subsequent downbeat report on the telecom sector in early November—have propelled Suria into rarefied Wall Street realms. His research has caught the attention of the world's top money managers, and he has been asked to speak at B-schools.

But there have been some bumps along the road. Sources say Suria's Amazon report caused upheaval in the research trenches at Lehman. Holly Becker, Lehman's equity analyst who covers Amazon, had a "buy" on the company at the time. She was not pleased when Suria's report was released. "He's a relatively unknown credit analyst who has written a report—having never spoken to the company and having no insight into the company's strategy," she told BUSINESS WEEK at the time. But she put her own highly publicized downgrade on Amazon a month later. Sources say that after



Way back in June, Ravi Suria warned that things were looking shaky at Amazon.com

her downgrade, she had a hand in persuading Lehman to spike a subsequent bearish report on Amazon by Suria, called "Of Toys and 10Qs," and to put out her more bullish report. Becker denies this and claims that Suria spiked his own report.

Lehman's director of research announced at the time: "The firm has one voice on Amazon's fundamentals and stock, and that's Holly Becker." Since then, she has made an attention-grabbing downgrade on eBay Inc. and put out a sour report on Yahoo! Inc.

Suria is keeping a lower profile. "This allows me to make calls like this without repercussion and excessive backbiting," he says.

By Marcia Vickers in New York



AMNESTY

INTERNATIONAL® KNOWS THE PEN

IS MIGHTIER

THAN THE SWORD.

LOTUS KNOWS

THE MOUSE IS

FASTER THAN THE PEN.

With Lotus and Interliant®, a Lotus Business Partner, Amnesty International can now respond to cases of human rights violations in record time via the Urgent Action Network.

Instead of waiting days for reports, members receive them in seconds, so they can take lifesaving action even faster. Plus, Amnesty International can now share case updates among members through a worldwide knowledge base. It's just one of the ways

Lotus helps people work together. To learn more, visit www.lotus.com/superhumansoftware

SUPER.HUMAN.SOFTWARE

Lotus

An IBM Company

COMMENTARY

By Louise Lee

SCHWAB, GOING UPSCALE, STEPS ON SOME TOES

It was a small purchase. So minuscule that few analysts bothered to find out much about why Charles Schwab Corp. bought research firm Chicago Investment Analytics Inc. on Nov. 15 for under \$20 million.

But they should have. For the deal, to acquire a company that produces software to pick stocks based on quantitative analysis, was hardly a minor transaction. Rather, it was a major move by Schwab to appease a legion of 5,000 advisers handling its millionaire clients. Schwab will distribute Chicago Investment's analytical tools to them to help them recommend stocks to their clients. "You could call it an olive branch," says adviser John S. Scarborough in San Francisco.

Ever since Schwab bought U.S. Trust Corp. for \$2.7 billion in May, independent advisers have watched it like a hawk. "Schwab is walking a fine line," says adviser Scott Walker in Orange County, Calif. Long the top discount broker for Middle America, Schwab had been itching to move upmarket quickly and get a firmer grip on the assets of the very wealthy. U.S. Trust seemed to be the ideal vehicle because it offers everything from trust services to estate planning and tax advice. There is just one catch: Those are exactly the same services that many of Schwab's outside advisers already provide.

"VESTED INTEREST."

As a result, Schwab is facing a conflict of interest of the sort it prides itself in avoiding. It refers clients to independent advisers who, in return, keep clients' assets at Schwab. Schwab collects trading commissions, but advisers keep the annual fees for their services. If Schwab refers clients to one of its own advisers at U.S. Trust, however, it collects both commissions and annual fees—a fat 1.1% on the first \$2 million in assets. Advisers and analysts doubt Schwab can remain impartial when it refers customers. "It's trying to be agnostic, but it's in

Schwab's vested interest to have customers go to U.S. Trust," says Greg Smith, analyst at Chase H&Q. Schwab "definitely has new conflicts that didn't exist before."

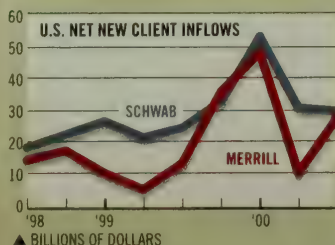
Alienating advisers puts Schwab's ability to gather and keep assets—a key measure of performance—at risk. Schwab's independent advisers manage \$243 billion in assets, roughly a quarter of the company's \$961 billion total assets.

Even so, the assets the advisers bring haven't kept Schwab from losing a wide lead to industry behemoths.

moth Merrill Lynch & Co. in attracting new money from U.S. clients. In the first three quarters of 1999, Schwab drew far more new money than Merrill (chart)—sometimes more than twice as much, says Richard H. Repetto, analyst at Putnam Lovell Securities Inc. Merrill finally started to gain on Schwab after it launched an online counterattack a year ago. In the quarter ended in September, Merrill attracted \$28 billion in net new investment assets, just under Schwab's \$30 billion. "While it's not zero-sum game, it's a neck-and-neck race," says Repetto.

Schwab insists that regardless of who attracts more assets in a given quarter, it stands apart from rivals because it doesn't pay brokers based on commissions or give them incentives to push one product over another. And while "there can be competition" between U.S. Trust and the outside advisers, the rest of Schwab's business avoids conflict, partly because it has long offered many products from many companies, says Edward M. Rodden, senior vice-president of Schwab's advisory services.

Schwab must do a lot more to stay on good terms with outside advisers. It also needs to work hard to convince potential advisers that it is worth an \$8,000 annual fee for them to join the company's fold. Besides Chicago Investment's product, Schwab has begun to give advisers access to some U.S. Trust research and Webcasts with U.S. Trust analysts. That hasn't convinced Laurie Tarbox, who advises her own millaires in Newport Beach, Calif., to take the plunge. The last thing she needs is to be forced to butt heads with U.S. Trust in the name of Schwab. "[The U.S. Trust purchase] is smart on Schwab's part," Tarbox says. "But it doesn't make me happy." That's a sentiment that even wealthier Schwab cannot afford.

**LOSING A BIG LEAD**

▲ BILLIONS OF DOLLARS
DATA: PUTNAM LOVELL SECURITIES, COMPANY REPORTS
EXCLUDES INFLOWS RELATED TO SPECIAL FIDUCIARY AND
MUTUAL-FUND CLEARING SERVICES

With reporting from E
Thornton in New

REBUILDING THE SPINAL CORD

the lab, treatment methods for back injuries are advancing by leaps and bounds

Purdue University and Indiana University are about to embark on an experiment that, until a few years ago, would have been tack- only in a science-fiction novel. In ember, the two institutions an- iced that they were planning the human trials to see if weak electri- charges can regenerate nerve fibers injured spinal cords. The technique, h uses an implantable device ded- at the Purdue School of Vet-

erinary Medicine, has already helped dogs suffering paralysis regain some functions, and the researchers hope for the same results in humans.

This clinical trial is hardly a sure bet: Experimental spinal cord treatments have had far more failures than wins. Still, these efforts represent a revolu- tionary change in thinking about such injuries. For decades, it was a firmly held belief that the neurons, or nerve cells, of the brain and spinal cord were

unable to regenerate after injury, un- like cells in the body's other tissues. But over the past decade, scientists have come to realize that the body can create neurons if the circumstances are right. Now, they are figuring out just what some of those circumstances are and how to induce them.

PROMISING. While many doctors believe it may be 10 years before the discover- ies benefit human patients, they are starting to envision what a successful treatment strategy might entail. Particularly promising approach- es include efforts to transplant stem cells into the spinal cord, where they may be able to repair or replace damaged neurons. Anti- bodies have also been developed that encourage the regrowth of nerves. And researchers are ex- ploiting the recent discovery that the spinal cord is able to retrain itself after injury, shifting tasks to the undamaged nerves.

Such advances have supercharged the whole area of research on spinal cord injuries. At the November annual meeting of the Society for Neuroscience in New Orleans, semi- nars on spinal cord advances were

packed. Some of the presenta- tions featured monkeys that had regained the use of their fore- limbs and rats able once again to walk and swim—in the wake of catastrophic spinal damage. "Man, to be a rat right now," said Christopher Reeve, the paralyzed actor who cannot breathe without a respirator, and who spoke at the meeting. "I never thought I'd be jealous of a rodent."

Of course, it is a big leap from rats to humans—and there are huge obstacles to clear before any doctor will take that leap. Still, in an October review article in *Nature*, leading neuroscientist Fred H. Gage of the Salk Institute for

IT'S BACK-MENDING WORK

The spinal cord consists of long nerve cells called axons, surrounded by protective vertebrae. Axons carry signals back and forth from the brain, controlling the body's movements. If these axons are crushed or severed, paralysis results. Scientists are working on three potential treatments:

GROWING

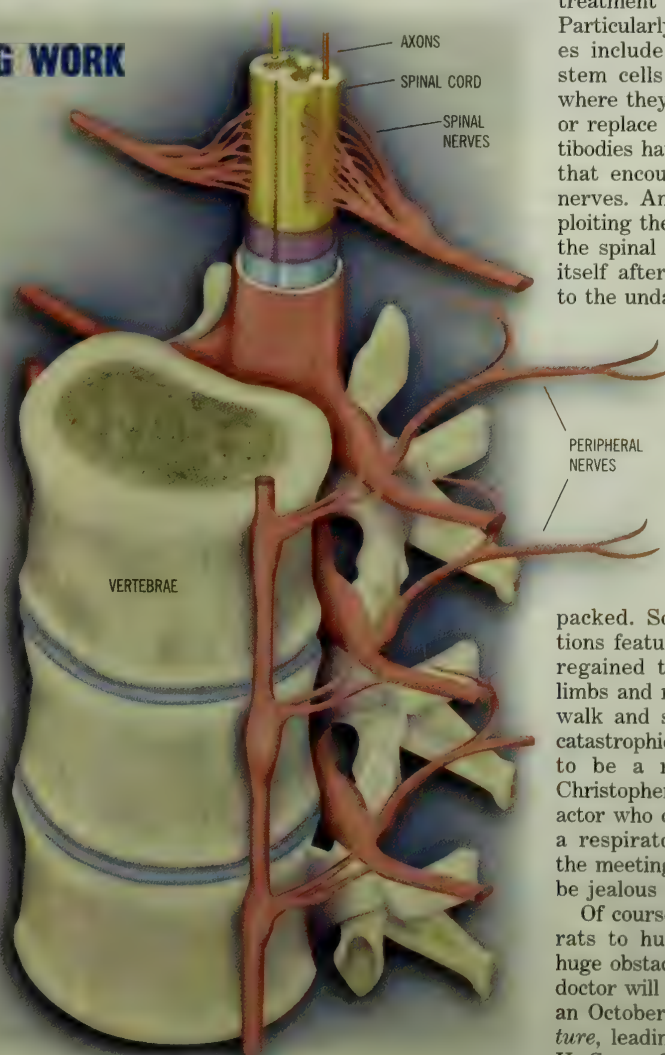
Researchers have discovered the chemical signals that block the regrowth of damaged axons. Antibodies to these "stop" signals have been developed.

PLACING

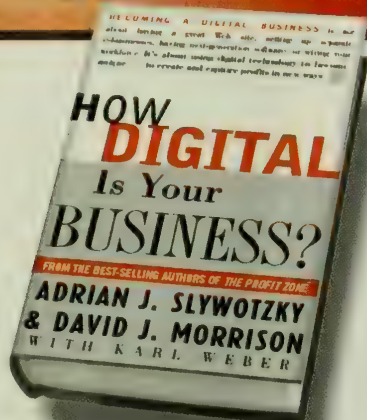
Scientists are hopeful that stem cells, the precursor cells that give rise to all others, will turn into new nerve cells when injected into damaged spines.

TRAINING

Axons have some ability to make decisions without instructions from the brain. So, scientists hope that repeated exercises can strain undamaged nerve cells to take over the func- tions of the damaged ones.



**Want to be a winner
in the next economy?
Going digital is the last
thing you should do.**



MERCER

Management Consulting

Also available as an ebook and a Random House AudioBook



You need the right
business model first.
In *How Digital Is Your
Business?*, the authors
of *The Profit Zone* offer
insights from digital
innovators that help
you to capture the
best kind of technology
edge—one that delivers
stronger and more
profitable customer
relationships.

For more information and
to download excerpts, visit:
www.howdigitalisyourbusiness.com

Biological Studies in La Jolla, Calif. wrote that "the first rational, function therapy for regeneration, probably if spinal cord injury, may be in the clinic just 10 years from now."

Sadly, that will likely be too late help people such as Reeve who have lived with spinal cord injuries for years. In such cases, researchers suspect there will be too much scar tissue and atrophy around the site of the injury to allow repair. Plus, scientists are quick to point out that even those patients who can be helped are not likely to gain full functionality. Nevertheless, "coming from complete paralysis to some movement would be a huge improvement in the quality of life of these patients," says Dr. Evan Y. Snyder, Harvard Medical School. "Just to get that patient off a respirator would make a huge difference."

BROKEN LINK. It could also be a huge cost savings. The National Institute of Health estimates that about 11,000 Americans suffer spinal cord injuries each year, with 47% becoming paraplegic and 52% quadriplegic. There are some 250,000 permanently paralyzed persons in the U.S., and the cost of caring for them is \$10 billion a year. One reason: People aged 16 to 30 suffer 55% of all spinal cord injuries, and they require massive amounts of care for the remainder of their lives.

Spinal injuries are so disastrous because they interrupt communication between the brain and the rest of the body. The spinal cord contains two bunches of nerves known as axons. The descending pathway carries signals from the brain that control voluntary movements, while the ascending pathway carries sensory information to the brain, such as sense of touch, temperature, pain, and body position. These two pathways are connected to a large network of peripheral nerves that exit and enter at each vertebra and control specific areas of the body. When the axons are crushed or severed, connections to peripheral nerves are lost, and the regions they control are paralyzed. In general, the higher up the spinal cord the injury occurs, the more severe the ensuing paralysis.

Spinal cord injury research breaks down into three different approaches: replacing the damaged nerves, repairing them, or retraining unused nerves to take over their functions. The replacement, or regeneration, has gotten the most attention since a major breakthrough in 1996, when a team of researchers at the Karolinska Institute in Stockholm grafted

*In nature
we see reflections of our children.*

The tree is the strong one.

The ocean, rambunctious and untamed.

The sky, the absolute dreamer.

*And to choose the tree over the ocean
would be like choosing one child over the next.*

An impossibility as large as the world itself.

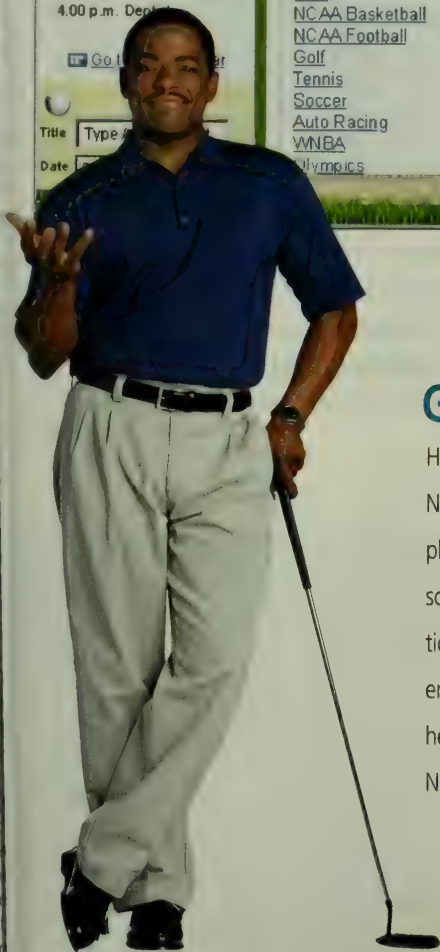
*The world's leading environmental groups are working together.
To find out how you and your employer can help,
please visit our Web site at www.earthshare.org.*



Earth Share
One environment. One simple way to care for it.



Personalize your Internet with Netscape®



Gary Walker is head of operations at a telecom company and a passionate golfer. He can use Netscape to help him be more productive on the Internet. With new Netscape 6, Gary can keep his most important information conveniently displayed in his browser – like his personal calendar, his buddy list, or even his sports scores. And at Netscape.com, Gary can quickly find news and business information related to his fast-paced job. Other great Netscape features like search, email, and a personalized home page can help him streamline his work tasks (so he has more time to perfect his putt). But Netscape is not just for golfers. Try Netscape today and see what it's like to experience the Internet your way.

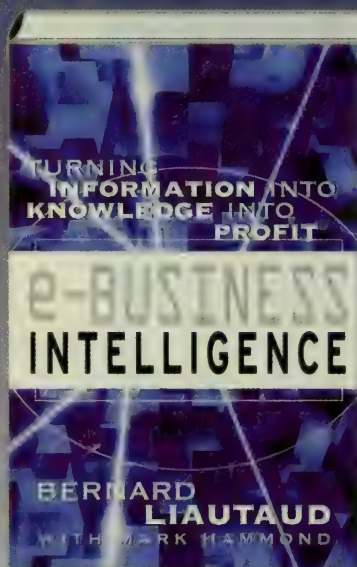
Visit Netscape.com today. It's free.



The power of the Internet made simple

**"THE INTERNET
NOT ONLY ENABLES
E-BUSINESS
INTELLIGENCE—
IT DEMANDS IT, AND
DEMANDS IT NOW."**

—Bernard Liautaud



The President and CEO of the world's #1 provider of e-business solutions reveals the intranet, extranet, and b-to-b strategies at global giants e-Bay, MasterCard, British Airways, and other top clients.

e-Business Intelligence describes how those strategies have led to dramatic increases in organizational efficiency, customer value, and long-term profits—and arms corporate strategists with a complete game plan for achieving similar results in their organizations.



Available Everywhere
Books Are Sold
Visit us at
www.books.mcgraw-hill.com

A Division of The McGraw-Hill Companies

Science & Technology

bridges made of cells taken from peripheral nerves into rats with sections of their spinal cords removed. Some axons regrew into the bridges, and the rats were able to move their hind limbs and support body weight.

The regenerated axons, however, never reconnected with peripheral nerves, sending scientists searching for a better cell-transplant source. The most promising so far are fetal stem cells, also called precursor cells, which have the ability to turn into any kind of tissue. At the Neuroscience meeting, Dr. Hideyuki Okano of Osaka University's Graduate School of Medicine highlighted this versatility. His report, on stem cells extracted from the spinal cords of rat embryos and transplanted into adult rats, showed that the rats had regained the use of their front legs within five weeks. Autopsies revealed that the transplanted cells had not only turned into several types of neurons but had also reconnected with peripheral nerves.

RIGHT CELLS. When it comes to obtaining adequate supplies of fetal stem cells, however, there are considerable obstacles, both practical and political. George W. Bush has said, for example, that he would stop federal research using fetal cells. But adult stem cells might also do the trick. For years, adult cells were thought to be less malleable than embryonic versions, but this notion seems to be falling by the wayside. "Our work shows that bone marrow cells from mature individuals... can be changed by environmental signals," says Dr. Ira Black, chairman of neuroscience at New Jersey's Robert Wood Johnson Medical School. In Black's lab, adult stem cells bathed in growth hormones were induced to convert to nerve cells within minutes or hours. Black says these converted cells were then transplanted into the brains and spinal cords of normal rats, where they continued to survive.

It remains unclear whether stem cells from any source will consistently turn into the right kind of nerve cells, once transplanted. To get around that problem, some researchers hope they can get damaged nerves to repair them-

selves. Martin E. Schwab of the Brain Research Institute at the University of Zurich is a leading advocate of this approach. Ten years ago, he discovered the "stop" signals in the spinal cord that prevent damaged nerves from regrowing. In January, his lab isolated the gene for one of these inhibitors, called Nogo. Schwab's team has developed antibodies that block Nogo, allowing uninjured nerves to sprout and extend to peripheral nerves that have lost their original connections.

Rats tested with the antibodies were able to recover full functional use of their limbs, Schwab says.

It is likely that antibodies and stem cells will eventually be combined into one therapy. But a more immediate treatment may also be in the offing: researchers have discovered that the spinal cord has the ability to process some sensory information and make decisions on its own without help from the brain. "We are just beginning to realize that spinal intelligence and plasticity is far greater than had been previously realized," says Reggie Edgerton of the University of California at Los Angeles.

As a result, there are numerous efforts

to retrain spinal cord nerves, so that patients can regain motor skills on their own after injury. Edgerton notes that some patients can dramatically improve their ability to step when trained on a treadmill. Animals have also been trained to bear their full weight, though the ability declines once training is stopped. Edgerton is now conducting human trials with a robotic step-training device, hoping to identify types of injuries that respond to treatment.

All of these breakthroughs are bringing more resources to the field, says researchers. This may speed up the pace of development—as will be sure from Reeve, the most tireless campaigner on behalf of spinal cord research. "There is no reason this problem can't be overcome," he exhorted at a meeting of neuroscientists. "I might be able to wait three or five years, but I couldn't wait another 20."

By Catherine Arst in New Orleans



**"Man, to be a rat
right now. I never
thought I'd be jealous
of a rodent"**

CHRISTOPHER REEVE

Paralyzed actor

Internet

address directory

Each these Business Week advertisers on the Web:

anced Micro Devices

amd.com

ent

agilent.com

ira

agilera.com

tel

alcatel.com

ican Airlines

aa.com

ican Electric Power

aep.com

ican Express

ate Services

americanexpress.com

ican Express

cial Advisors

americanexpress.com/

isors

ihl

amdahl.com

asera

asera.com

nd

ashland.com

et Communications

ispect.com

ivaya.com

ystems, Inc.

ea.com

Martini

luemartini.com

n Consulting Group

cg.com/

kingcompromises

LING WATCHES

reitling.com

ce

adence.com

Cap Gemini Ernst & Young

www.capgemini.com

CapitalStream

www.capitalstream.com

Centra Software

www.centra.com

Chrysler

www.chrysler.com

CNF Transportation

www.freight.com

cobalt

www.cobalt.com

Cognos

www.cognos.com

Comdisco

www.comdisco.com

Commerce One

www.commerceone.com/

Compaq

www.compaq.com

Computer Associates

International interBiz

www.interbiz.cai.com

CoreChange

www.corechange.com

Covisint

www.covisint.com

Crown Publishing Group

www.randomhouse.com

DATALINK

www.datalink.com

Dell Computer Corporation

www.dell.com

Deloitte & Touche

www.us.deloitte.com

Digex

www.digex.com

Diner's Club

www.citibusiness.com

Documentum

www.documentum.com

Dynegy

www.dynegy.com

Enterworks

www.enterworks.com

Ericsson

www.ericsson.com

Evis

www.evis.net

eXcelon Corporation

www.exceloncorp.com

Fidelity Investments

www.fidelity.com

Framework Technologies

www.frametech.com

Gillette

www.gillette.com

Global One

www.global-one.net

GP Worldwide

www.gpworldwide.com

Hampton Inn

www.hamptoninn.com

Hilton Hotels

www.hilton.com

HP/PSG

www.hp.com

i2 Technologies

www.i2.com

iAsiaWorks

www.asiaworks.com

IBM

www.ibm.com

IBM

www.ibm.com/eserver

Informix

www.informix.com

InfoUSA.com

www.infousa.com/homesite

Innomedia

www.innomedia.com

Interland, Inc.

www.interland.net

iProcure, a division of

Datastream Systems, Inc.

www.iprocure.com

J.D. Edwards

www.jdedwards.com/

Jamcracker

www.jamcracker.com

LAWSON SOFTWARE

www.lawson.com

LeadersOnline

www.leadersonline.com

Lincoln

www.lincolnvehicles.com

Lotus

www.lotus.com/superhuman/

software

Morgan Stanley Dean Witter

www.morganstanley.com

mySAP.com

www.mysap.com

Netcentives

www.netcentives.com

Nokia Networks

www.nokia.com

One World Alliance

www.oneworldalliance.com

Oracle

www.oracle.com

Order Fusion

www.orderfusion.com

Quantum

www.quantum.com

Rational

www.rational.com

Redleaf

www.redleaf.com

Register.com

www.register.com

Robertson Stephens

www.roberstonstephens.com

Samsung Group

www.samsung.com

SAS

www.sas.com

Saturn

www.saturn.com

Savin

www.savin.com

Siebel

www.siebel.com

SilverStream

www.silverstream.com

SiteSmith

www.sitesmith.com

SmartForce

www.smartforce.com

Starband

www.starband.com

Stellcom Technologies

www.stellcom.com

Stonebridge Technologies

www.stonebridgetechnologies.com

StorageNetworks

www.storagenetworks.com

Sun

www.sun.com

Texas Instruments

www.ti.com

Tonic Software

www.tonicsoftware.com

Toyota Motor Sales

www.toyota.com

Trend Micro

www.trend.com

VERITAS Software Corporation

www.veritas.com

VerticalNet

www.verticalnet.com

Vitria

www.vitria.com/

Williams

www.williams.com

WorldCom

www.wcom.com

Yantra

www.yantra.com

YOUcentric

www.youcentric.com

BusinessWeek

Leverage greater profits from
your e-purchasing power

See and hear from the experts at
www.sas.com/webcast

The Power to Know.™

sas.
e-Intelligence

"People love performance products with emotional, inspiring design. Consumers everywhere are demanding not only great aesthetics, but a fusion of design and technology to both enhance and simplify their complicated lives. We thank IDSA and *Business Week* for recognizing our passion for creating cars, motorcycles and products that not only move our customers physically as 'the ultimate driving machines,' but move their hearts as well."

—Chris Bangle, Chief of Design, BMW AG, Germany

GOOD

"As a global company that firmly believes in the strategic value of industrial design excellence and its ability to establish our presence as a premium brand with a strong preference by consumers, it is very rewarding to be recognized with an IDSA/*Business Week* IDEA."

—James Lico, President, Fluke Corporation, a Danaher Company

DESIGN

"The Fisher-Price Brand has been built upon 70 years of design innovation and excellence that gives families the best possible start in life. It is an honor to receive multiple IDEAs and we salute IDSA and *Business Week* for recognizing the impact design excellence has on business leadership."

—Neil Friedman, President, Fisher-Price Brands

PAYS

"As a winner of several IDEAs, Motorola recognizes this program as a premier indicator of design excellence.

These awards confirm category creators in increasingly competitive markets

As technologies converge, design becomes more valuable as a key differentiator and strategic tool"

—Bill Werner, Corporate Vice President & General Manager, 'DEN' Subscriber Products Group, Motorola

OFF

2001 INDUSTRIAL DESIGN EXCELLENCE AWARDS

Sponsored by *Business Week*
& Presented by the Industrial
Designers Society of America

Apple Computer, Black & Decker, Philips, Sony, Target, Steelcase, GE and Symbol Technologies. These companies, all 2000 IDEA winners, show that good design pays. It pays off in lower costs, healthier profits, greater customer satisfaction and new product innovation. *Business Week* is again proud to sponsor the Industrial Design Excellence Awards (IDEA) annual competition conducted by the Industrial Designers Society of America. The IDEA is accepting entries from Asia, Europe, Latin America, Canada and other foreign countries for products sold in North America. *Business Week* will publish a major story on the winners in a June, 2001 issue. Designs of business and medical equipment, consumer products, graphic and digital media, heavy machinery, transport packaging, exhibits and furniture are eligible. The deadline for entry is February 12, 2001. For entry information, procedures and fees contact: Industrial Designers Society of America (IDSA), 1142 Walker Road, Grant Falls, Virginia 22066. Telephone (703) 759-0100. Fax (703) 759-7679. E-mail: idsa@idsa.org. Web: www.idsa.org.



Will never breathe without a tracheal tube.

Will always have to wear a diaper.

Will never utter an intelligible word.

Will never see the light of day (literally).

Isn't expected to live past the age of 5.

GOD, WE LOVE HIM.

Founded on a promise that all children should know love,
The Foundling Hospital is a multi-faceted family agency with innovative services
and programs that provide caring, compassion and yes, love.

To help, please call **1-877-FOUNDLING.**



The New York Foundling Hospital

His life is in pieces... that fit.

Mark knew more about crime than he did about building. Today, he's learning more than carpentry. He's learning that he is valued, able, and important to his community.

What happened? You happened!

Adults like you helped Mark and other kids build a better community and a foundation for success. Programs like these are bringing out the best in kids and the best in their communities.

LESS CRIME IS NO ACCIDENT

It takes you — and programs that work.

Call 1-800-WE PREVENT and we'll send you a free booklet on how you and your community can keep kids away from crime and crime away from kids.



1-800-WE PREVENT

www.weprevent.org



**TAKE A BITE OUT OF
CRIME**
U.S. Department of Justice
Crime Prevention Coalition of America

EDITED BY ELLEN LICKING

CHEAPER, EASIER WAY WHIP UP SILICON

RICE HUSKS, ANTIFREEZE, a dash of salt? No, it's the latest hooch for your day soiree. It's a relay cheap and nontoxic to create silicon-based pounds that are used in electronics, plastics, polys, and optical glass. This cal technique was de- by Richard M. Laine, essor of materials science engineering at the Uni- ty of Michigan. He be- s that it could also fun- tentially change the way on chips are produced. Silicon is traditionally man-

ufactured from sand, a process that requires huge inputs of heat and electricity. According to Laine, about 70% of the energy that goes into refining silicon is released as the toxic waste gas hydrochloric acid. But with Laine's novel method, there are no nasty by-products to worry about.

Laine's recipe is simple: Just mix burnt rice husks and ethylene glycol—the active ingredient in antifreeze—and add a small helping of the corrosive chemicals sodium carbonate and sodium hydroxide. Within minutes, a novel silicon-based material begins to form. Laine recently formed a startup to commercialize the technology.

Petti Fong



ATTING AN EEL ON WHEELS

ALMSIZE MOBILE ROBOT CONTROLLED BY THE embodied brain of a sea lamprey may one day lead to ter artificial limbs for amputees. A team of neurobiol- sts headed by Dr. Sandro Mussa-Ivaldi at Northwest- University Medical School, is using this fish-robot rrid to uncover the delicate interactions that allow brain to access and process information. 'or the moment, Mussa-Ivaldi's "fishbot" does little e than scoot around on wheels. But that movement irected by signals transmitted from the lamprey in, which lies three feet away suspended in a sugar- er solution. When light illuminates optical sensors e robot, a signal travels along tiny wires from the ot's wheels to the lamprey brain. Electrodes in the n tissue respond by emitting nerve impulses that e the robot to wheel toward or away from the t source.

fussa-Ivaldi hopes to use his system to probe how the plex circuitry of the brain responds to damage. When mprey injures its nervous system, its brain rewires f to overcome the injury. Mussa-Ivaldi says that he map out the critical rewiring steps by first creating ific brain lesions and then monitoring how the robot's vior changes. With that knowledge, researchers d begin to decipher better ways to transmit signals een the brain and artificial limbs.

Petti Fong



WANT SWEETER MANURE? FEED THOSE PIGS RIGHT

PIG EXCREMENT IS BAD FOR the environment—and it smells horrendous, too. Researchers at the University of Missouri at Columbia believe they have hit upon a solution to both of these problems: Feed pigs more of what their bodies need and less of what they don't, advocates Gary L. Allee, the swine nutritionist heading up the project.

The stench associated with hog manure comes from ammonia and other nitrogenous compounds that form when bacteria break down amino acids. To make sure that commercially fed hogs get enough of certain essential amino acids, farmers stuff them

with corn and soy-containing foods. But that causes high levels of more plentiful amino acids, which are discarded in the manure.

An added problem is that corn and soy foods contain high levels of phytate phosphorus, a compound that—in high concentrations—is toxic to the environment. Because pigs can't digest the compound, phytate phosphorus levels also build up in dung piles.

But Allee believes that altering the diets of hogs can help solve the environmental predicament. By feeding hogs supplements of essential amino acids, as well as corn engineered to contain 60% more digestible phosphorus, it's possible to reduce the amount of phosphorus excreted—and the smell—by about 40%.

Petti Fong

FOR SUPERFIBERS. SCRAPE THE BOTTOM OF THE BARREL

CARBON FIBERS ARE ONE OF the wonder materials spawned by the Space Age. They are stronger than steel and more conductive than copper. But high costs have restricted carbon fibers to a few special markets, such as aerospace and sporting goods. Now, fiber prices are poised to plunge to a fraction of their current costs, which start at around \$8 a pound.

One leader in this area is Conoco Inc., which has developed an inexpensive way to mass-produce the strands. As a result, Conoco predicts the superstrong fibers will soon become a staple reinforcing material for plastic panels and parts in autos, bridges,

and other high-volume markets. Most carbon fibers are now produced by charring polyacrylonitrile strands, which cost at least \$1.50 a pound. But Conoco's process squeezes carbon threads from the thick gunk at the bottom of barrels of oil, which is worth mere pennies a pound.

To avoid creating a margin-squeezed commodity business, the Houston company will sell the sizzle, not the steak. In autos, for example, Vice-President Andrew D. Roberts says Conoco will help find ways to use carbon fibers to trim vehicle weight, then claim a reward for each pound saved. To meet the expected demand, Conoco is building a carbon-fiber factory that, when finished in 2001, will spew out 8 million pounds a year, or 20% of total worldwide sales.

Otis Port

READY FOR SOME OLD-FASHIONED PAPER WARS?

A trio of scrappy publishers is out to revive the notion of the two-newspaper town

He's a white knight named Black—David Black, that is. The soft-spoken newspaper mogul, who owns 80 small and midsize publications in Canada and Washington State, agreed to purchase Hawaii's sinking *Honolulu Star-Bulletin* on Nov. 10 for a paltry \$10,000.

Even that might be too high a price for the 118-year-old afternoon daily. The deal struck with Liberty Newspapers LP and Gannett Co. nets Black a subscriber list and newsroom staff—and not much else. Not only will Black have to build a Sunday edition from scratch in order to compete with its larger morning rival, *The Honolulu Advertiser*, he must secure newsprint and labor contracts. Black will jettison the joint operating agreement (JOA) under which the *Star-Bulletin*, with a circulation of 63,500,

ceded control of business functions and operations to the *Advertiser*, in exchange for a guaranteed share of the JOA's profits. The *Advertiser*, with a circulation of 105,000, is owned by Gannett, the world's largest and most profitable newspaper chain.

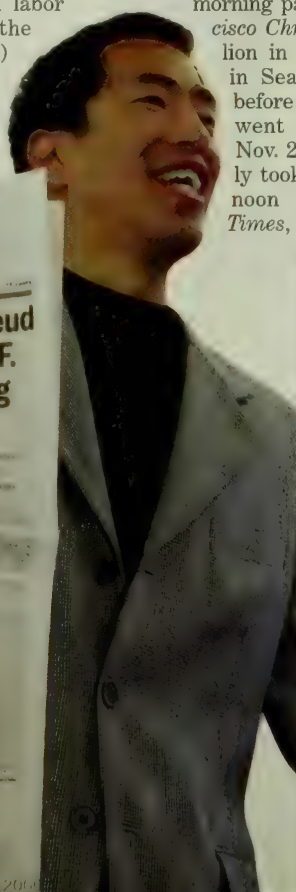
Has Black been out in the Hawaiian sun too long? Maybe. But Black joins two other West Coast newspaper operators in trying to prove that metro markets can support two daily newspapers. On Nov. 21, Ted Y. Fang published his maiden morning edition of the *San Francisco Examiner*, a failing former afternoon daily that Hearst Corp. sold after it purchased the dominant

morning paper, the *San Francisco Chronicle*, for \$660 million in August, 1999. And in Seattle, eight months before newspaper workers went out on strike on Nov. 21, the Blethen family took their strong afternoon daily, *The Seattle Times*, into a head-to-head

rivalry with Hearst's smaller and more profitable morning paper, *Seattle Post-Intelligencer*. That deal involved a unique JOA in which the *Times* runs the circulation, delivery, and advertising functions of two morning dailies.

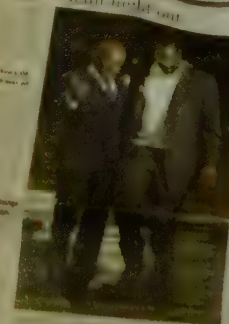
TOO LATE? The shifting newspaper strategies in Honolulu, San Francisco and Seattle show a competitive spirit reminiscent of old-time circulation wars. The papers hope to take a big chunk of a mature but highly profitable \$57 billion U.S. newspaper industry, which revenues have grown for several straight years. Last year, advertising dollars for daily and Sunday papers increased 5.4%, to a record-breaking \$46.3 billion.

But are these scrappy West Coast publishers, two of which are in high-tech boom towns, coming too late to the party? Amid signs of a slacker economy, analysts are predicting softer ad market next year. That could mean even more pressure on two-newspaper markets. "The history of a second newspaper in commercially competi-



Examiner

Feds feud over S.F. housing audit



Florida Supreme Court extends recount deadline

West Coast Upstarts

Newspaper owners out West are hoping to revive competition

HONOLULU STAR-BULLETIN

OWNER	STRATEGY	MAIN COMPETITOR
David Black* Black Press	New owner Black will hire hundreds of new employees, launch a Sunday edition, and plans to break the joint operating agreement (JOA) with Gannett	Honolulu Advertiser (Gannett-owned)
CIRCULATION 63,500		

SEATTLE TIMES

Blethen family	No plans to break JOA with the P-I, but the Blethens shifted to being a morning paper earlier this year to compete head-on	Seattle Post-Intelligencer (Hearst-owned)
CIRCULATION 226,000		

SAN FRANCISCO EXAMINER

Ted Fang	Fang will launch a Sunday edition, shift to mornings to compete directly with Chronicle, and promises to be the more local newspaper	San Francisco Chronicle (Hearst-owned)
CIRCULATION 100,000		

*Acquisition scheduled to close on Dec. 30

DATA: BUSINESS WEEK, AUDIT BUREAU OF CIRCULATION

is one that doesn't show success for the most part," warns news-analyst John Morton of Morton in Silver Spring, Md.

Black will encounter a strength-local economy in Hawaii as con- and tourism finally rebound. o, his reputation as a savvy op- will be put to the test. Gannett erd partner Liberty \$26.5 million the JOA and shutter the *Star- z*, clearing the way for the *Ad-* to dominate the Honolulu mar-

a federal court on obtained by te and citizens' spurred Liberty he paper up for ter Black, who l the JOA with l stunted the lletin's growth. ERS. The Brit- lumbia-based

er plans to invest as much as ion initially to build advertising ulation departments and launch day edition. Black's intent is to e *Star-Bulletin's* circulation by 100,000. But most analysts are nistic about the *Star-Bulletin's* s. "Gannett only goes into mar- ere they have an upper hand,"

says Dennis O'Neil, publisher of trade magazine *Editor & Publisher*.

FEISTY: Fang (far left) and Black aim to buck critics



Like Black, Ted Fang hopes to buck the naysayers. And he figures he can win over a literate town that has low local readership. "We don't think it's because San Francisco people don't read. It's that they haven't had anything to read," says Fang. Hearst, which had to sell the *Examiner* after it bought the morning *Chronicle*, coughed up a sizable \$66 million subsidy paid out over three years to land Fang as a buyer. That deal came about after legal threats and community uproar over the

prospect of shutting the *Examiner*. Fang's goal is to deliver stronger local coverage than his competitor. He's bringing in a skeleton crew of 25 new reporters, plus content deals with such Internet sites as Salon.com and CBS

MarketWatch.com. To help boost advertising and its 100,000 circulation, Fang will leverage ad sales and production from the existing operations with his *San Francisco Independent*, a popular free weekly.

To the north, in Seattle, the Blethens already have a sizable circulation lead, with 226,000 subscribers, over the morning *Post-Intelligencer*, with 179,000 subs. Under publisher Frank Blethen, the *Times* maintains profit margins that are half those of the big, publicly traded newspaper operators, such as Gannett and Knight-Ridder. In part, that's because the *Times* has labored under the weight of a larger staff. Its travails have annoyed newspaper giant and 49.5% owner Knight-Ridder Inc., says Merrill Lynch & Co. analyst Lauren Rich Fine. This, along with delivery difficulties in clogged Seattle, likely influenced the Blethens' decision to go to the morning. Now, the Pacific Northwest Newspaper Guild strike affecting both dailies could hurt the Blethens far more than their deep-pocketed competitors.

With a JOA that runs through 2083, the *Times* looks plenty safe for now. Black and Fang may not have as much time. Both will have to win over advertisers generally loath to buy space at smaller circulation publications. Gannett and Hearst will likely continue to hire more staff and slash ad rates in an old-style, take-no-prisoners newspaper war. "The graveyard is full of papers that have been in the positions Black and Fang are in," says Morton. But for now at least, they're in the thrill of battle.

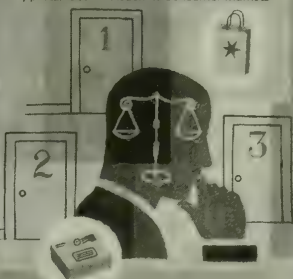
By Alex Salkever in New York

WHY ACCEPT THE TRADE-OFF BETWEEN CHOICE AND COST?

Rethink your basic assumptions about business.

BREAKING COMPROMISES

Opportunities for Action in Consumer Markets



THE BOSTON CONSULTING GROUP

Edited by Michael J. Schreiner and Gerald Stale Jr.

More breakthrough thinking from THE BOSTON CONSULTING GROUP

www.bcg.com/breakingcompromises

WILEY

Available at bookstores or online retailers

GIFTS THAT
THRILL—OR
MAKE THE WORLD
A BETTER PLACE

BusinessWeek Lifestyle



All I Want for Christmas

From car racing to balloon rides, such gifts are getting pop

BY ELLEN NEUBORNE

Shannon Sullivan was tired of getting her dad a tie. So last year, as Father's Day approached, she logged on to www.monsterracing.com and bought her father—a UPS truck driver who's an avid auto-racing fan—a day as a NASCAR driver (\$299-\$1,600). Richard Sullivan had the chance to learn the basics of stock-car driving and go out for a 10-lap spin at speeds as high as 120 miles an hour at Dover Downs International Speedway in Dover, Del. "It was the experience of a lifetime," he says. "It's the kind of thing you never forget."

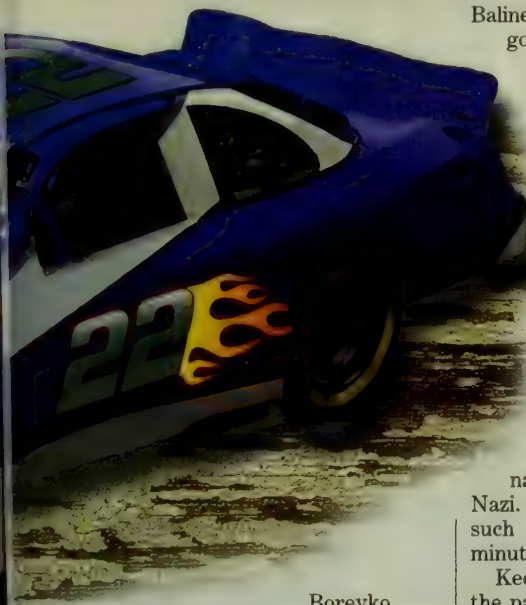
If that's the kind of response you'd like to hear, why not forgo the traditional gift this holiday season and opt for an experience? Such gifts are growing rapidly in selection and popularity as the strong economy has created a class of consumers eager for something new and different. "I get orders from panicked adult children on Christmas Eve, trying to figure out what to buy for their have-everything parents," says Scott Lorenz, president of Westwind Balloon in

Plymouth, Mich. Westwind offers a \$400 for a one-hour ride for two on a hot-air capped off by champagne and refreshments at the landing site.

Many experiences for sale are fantas holiday season, eBay has partnered with dot-com, UltimateBid, to auction off encounters, with a portion of the proceeds to charity. Up for bid are a one-day visit set of the TV hospital drama *ER*, a day permodel Valeria Mazza (makeup lesson

HOLIDAY
gifts

ed), and a hoops session in Los Angeles Lakers Kobe Bryant. A Brewing's "Goods" auction can bid for lunch at the Playboy Mansion, with hundreds in attendance. For B.K. Boreyko, a 38-year-old dot-com entrepreneur in Scottsdale, Ariz., bought five days on in Europe with the *Sports Illustrated* models. In addition to standing "two in the action, running my own video



Boreyko

dined with the models twice. "I get a lot of mileage with the for this," he says. "They say: 'You did AT?'"

her fantasy gifts include something for the Child wannabe. For \$250, you can work side head chef Patrick Concannon of nou-Mexican restaurant Don Juan in Chicago. arrive in the kitchen at 4 p.m. and do prep—such as chopping parsley and shallots—the *souschef*. As the kitchen opens for busi- and the orders start rolling in, you'll help are the restaurant's paper-thin medallions nb carpaccio, grilled breast of duckling with ed foie gras, and pork loin on a delicate o pancake with green chili. "You see how it mes together, you feel the intensity as the ts start pouring in, you get to see the ry that goes into it," says Concannon. Lat- the evening, you can opt to switch from er bee to patron and enjoy the fruits of labor—but you'll have to pick up the tab.

ERING. More relaxing are spa gifts, which available at many major hotel and health-club s. They run the gamut from a \$100 mani-edicure/massage at Equinox health clubs to long \$699 Post Holiday Stress Treatment ge offered by Giraffe, a boutique hotel in attan's midtown. The Greenhouse Spa chain, has outlets in such locations as New York, rnia, and Texas, has teamed up with cham-maker Taittinger to create a Bubbles & y Escape. For \$1,200, two people get to gyptian cotton pajamas, sip champagne, njoy a facial, manicure, pedicure, and re-gy massage. Lunch, more champagne, and set of health and beauty products and pa-complete the package.

ly big spenders can nab the Neiman Mar-ift Book's \$38,000 spa offering: a trip to escorted by personal trainer David Kirsch, client list includes model Naomi Campbell. tures first-class airfare from New York,

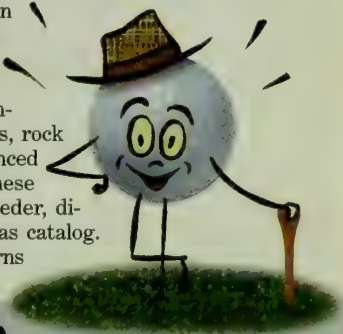
seven days at a private villa, and five days on a Balinese yacht. A five-star chef prepares healthy gourmet meals. Also included are massages, yoga, and outdoor activities such as hiking, whitewater rafting, and water skiing.

Usually, you need to plan experience gifts far in advance. But even the last-minute shopper has options. At site59.com, you'll find a slew of activities. The site's mission, says CEO Michelle Peluso, is "hard-to-resist, affordable, spontaneous escape and entertainment." Just \$111 buys a session with a Class A PGA golf instructor at Manhattan's Chelsea Piers sports complex. For \$39, Kenny Kramer, inspiration for the *Seinfeld* TV show's Kramer character, takes you on a three-hour tour of the hit's hot spots in New York, including Soup Kitchen International, inspiration for the infamous Soup Nazi. Site59 also offers non-New York options such as Washington (D.C.) nightlife and last-minute airfares to cities in North America.

Keep these tips in mind. If you're giving to the parents of small children, consider throwing in babysitting. If the gift is for a busy executive, be sure it has a long shelf life, because it may take a while before the person can cash it in. Ask if there are extra charges, such as tips, that may crop up. You may want to take care of those in advance. And for any adventure-related undertaking involving cars, rock climbing, and the like, pick an experienced provider. "Ask them how many of these they've done before," says Ginger Reeder, director of the Neiman Marcus Christmas catalog. That will help ensure that your gift turns out to be a great experience. □

If the recipient has small children, throwing in the cost of babysitting will be much appreciated

ILLUSTRATIONS
AND DIGITAL
IMAGING BY
DAVID GOLDIN



Are You Experienced?

CATEGORY

WHERE TO BUY IT

WHAT YOU GET

CARS

www.monsterracing.com
www.drivingadventure.com
www.superbikeschool.com

Experiences range from riding as a passenger in a stock car to learning to take laps yourself at 100 mph-plus to two-day motorcycle camps

CELEBRITIES

Auction sites, such as eBay and UltimateBid.com

A sampler: Backstage passes to the television drama *ER*, lunch with the boys from 'N Sync, and a round of golf with Tiger Woods

DREAM JOBS

Check the auction sites. Most require you to contact the desired business to work out details

Choices include chef for a night at a fine Chicago restaurant or editor for a day at a New Jersey newspaper

SPAS

A good search tool for finding spas: www.spas.about.com; major hotel chains, such as Hilton, Hyatt, and Westin, offer spa services in many locations

Pedicure and massage run under \$100; more expensive pampering packages, including hotel accommodations and upscale beauty treatments, are also available



Gifts That Change Lives

Contributing to charities in other people's names

BY JOAN OLECK

Sure, you could give your business colleague or client another fruit basket, golf putter, or engraved pen set this holiday. But why be boring and predictable? Choose something dramatic, creative—and compassionate. For the executive who has everything, consider...a cow.

No kidding. This cow will not be delivered to your colleague's or client's home, a relief to both them and their neighbors. But a living, breathing bovine will go to a family in Bangladesh—and it will make a huge difference. Handling the arrangements is Heifer Project International, a Little Rock (Ark.)-based nonprofit that has been sending livestock to needy families in developing countries since 1944. Your cow will cost you \$500, and the person on your gift list will receive a card describing how this milk-producing heifer can provide four gallons a day that a family can consume or sell. For \$120 to \$250, you can also donate a pig, sheep, llama, goat, or water buffalo. A smaller donation of \$10 to \$50 buys an

animal "share" (www.heifer.org, 800 422-075).

Unorthodox gifts like these that actually good in the world—in ways an engraved pen set cannot—are a fresh idea for the business-giver. True, you can always write a check charity in someone else's name. But the Web is making it easier to find more creative choices that appeal to the philanthropic spirit. They "something your tax adviser and your spirit adviser can agree on," says Randi Sha, co-founder of Charitygift Services, an "philanthropy" site that sends a handsome card to let your recipients know you've donated to charity in their name (table).

If you're excited about helping the developing world but not sure about a heifer, the Seva Foundation of Berkeley, Calif., lets you help underwrite such services as the training of Mayan midwives in Guatemala and shipment of cataract-surgical supplies to Nepal. Seva sends colorful gift cards (www.seva.org, 800 7382). Closer to home, certain U.S. affiliates like CityCares (www.citycares.org, 404 875-7334), or Hands On Atlanta, will deploy volunteers to your recipient's name, to tutor inner-city or renovate schools. Suggested donation: \$50.

You may be more intent on finding a tangible gift, yet one that still helps charity. In that case, check out the Web site for Robert Redford's Sundance Catalog Co., which sells finely crafted apparel and home items from its base in Park City, Utah (www.sundancecatalog.com, 800 2770). The company donates 10% of its net annual income to independent filmmakers.

environmental projects and gives merchandise to the Juvenile Diabetes Foundation and other causes. Another option: Create a gift basket using Newman's famous salsas and ad dressings, knowing that the

company's philosophy. Newman's Westport (Conn.) company's aftertax profits go to educational projects. The Newman's Web site (www.newmansown.com) fills you with the company's philosophy.

FLOWER POWER. Still another way to do good is to make a theme donation geared to your recipient's hobby or interest. For the book lover, there's First Book, a Washington (D.C.) literacy project that buys books for underprivileged children (www.firstbook.org, 800 333-6737). For the favorite gourmand might appreciate a donation to America's Second Harvest (www.secondharvest.org, 800 771-2303) in Chicago, the nation's largest hunger relief organization. For the dedicated gardener, look into a gift membership to the Lady Bird Johnson Wildflower Center (www.wildflower.org, 512 292-4242). Austin, Tex., which promotes native plants for the clothes horse, the Dress for Success work outfits low-income women for job interviews (www.dressforsuccess.org, 212 545-3333).

All four acknowledge donations. And all thank both you and your holiday gift recipient for that you didn't go with a fruitcake.

Sites With a Heart

WEB SITE (WWW.)

charitygift.com

DESCRIPTION
Make a donation, then have your relative or friend direct it to any of thousands of IRS-certified U.S. charities; gift card is also available in e-format

clickrewards.com

Earn ClickMiles for flights or products in return for your gift to a partner charity of the marketing firm Netcentives

flooz.com

Gift-certificate site lets recipients shop at dozens of online stores, then donate any unused "Flooz dollars" to a charity listed at linked.charitableway.com

When barriers fall, we all rise.



Viatel welcomes you to a new world of communications.

A world where new integration of pan-European, North American, trans-Atlantic and metropolitan high-speed, fiber-optic networks makes local, national and regional boundaries to communication disappear.

A world where new networking technology shatters physical limits on the speed and movement of information.

A world where innovations — in products, pricing and delivery — redefine customer access and eliminate constraints on usage.

Viatel's new rules for this new world of communications?

No borders. No barriers. No limits.

Viatel from anywhere in Europe **00800.0064.4444**

Viatel in the U.S. **1.800.244.1798**

www.viatel.com



© 2000 Viatel, Inc.

*ingenuity*²

We develop software for the intelligent. We create e-marketplaces for the resourceful. We apply our own ingenious companies to make them faster, smarter and exponentially more valuable. So far, we've created more \$16 billion in value for over 950 companies worldwide. Want some? Contact us at www.i2.com or 1-877-926-9281.

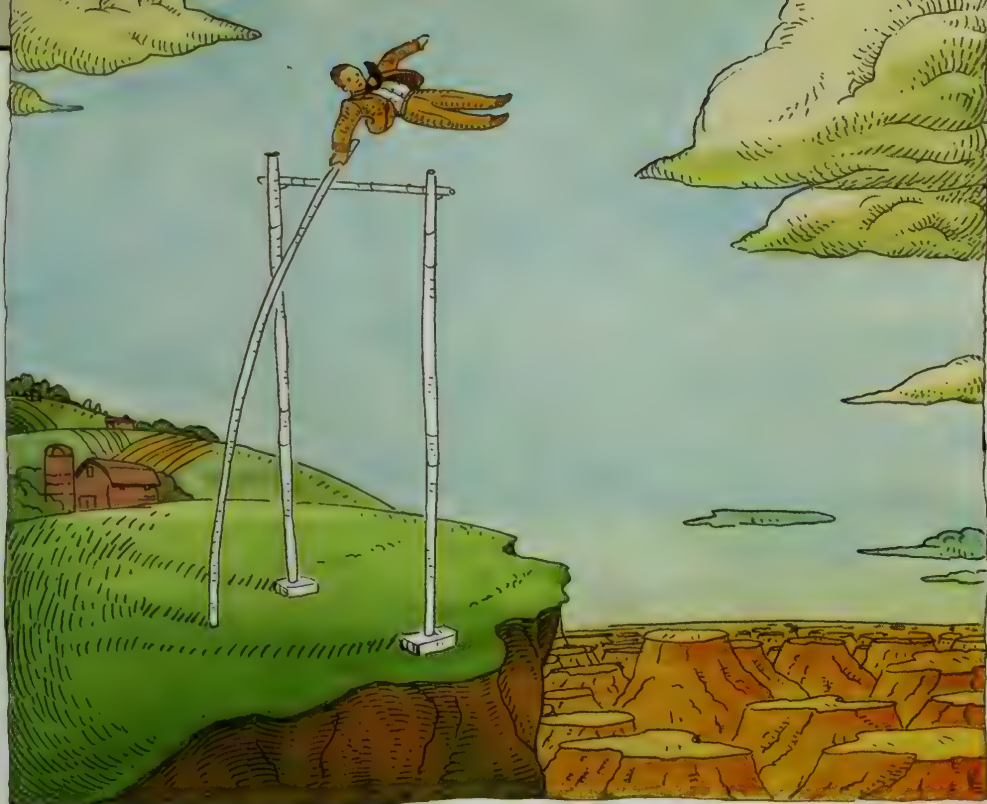


Powering the Bottom Line

BusinessWeek

BOND-FUND
DISASTER,
TIMBERS COME
FIRST, AETNA

BUSINESSWEEK Investor



Lessons from a Muni-Fund Nosedive

The sad tale of Heartland yields warning signs for investors

BY LEWIS BRAHAM

As bond market blowups go, the collapse of Heartland Advisors' two municipal-bond funds was small-time. The fall was painful for shareholders—write-downs in the funds cost them \$64.9 million in one nasty afternoon. But compared to Long-Term Capital Management, whose 1998 losses threatened to topple many Wall Street firms, the bond market got off easy because the Milwaukee-based funds had less than \$120 million in assets.

Still, Heartland offers valuable lessons. There were warning signs that attentive investors might have spotted. And Heartland management made bad decisions that regulators did not recognize soon enough.

Here's what happened. On Oct. 13, Heartland Advisors, faced with portfolios of low-quality, illiquid municipal bonds, marked down the values of Heartland High-Yield Municipal Bond Fund and Heartland Short Duration High-Yield Municipal Fund by 69.4% and 44%, respectively.

Those kind of one-day losses are unheard of—even in a high-risk equity mutual fund. Heartland said it repriced bonds in the portfolios because of the “current lack of liquidity” in the high-yield muni market and “credit quality concerns.”

Lawsuits followed soon after, arguing that the portfolios had been mispriced all along. Since the two funds' bonds were illiquid, gauging price accuracy was difficult. Heartland had relied on an outside pricing service, but eventually the firm applied a “fair value” system to estimate the bonds' worth. That's when the markdowns occurred.

There are lessons to learn from this fiasco:

■ Learn how to read the prospectus and shareholder reports.

Indeed, the fine print of these documents contained signs of danger ahead. Just look at the Heartland High-Yield Municipal's June 30 semiannual report. That report, not filed until Aug. 21, showed that the fund used a line of credit. During the first six months of 2000, the loan, made by Deutsche Bank, had an average

Bond Funds

Most high-yield muni funds invest in nonrated bonds, but none came close to Heartland. One of its funds had 96.7% of its portfolio in them

daily balance of \$10.3 million. That was 14.5% of the fund's \$70.8 million in assets on June 30. At the same time, Heartland Short Duration High-Yield Municipal reported an average daily loan balance of \$13.3 million, or 13.2% of assets.

True, the prospectus showed the funds could borrow up to a third of total assets "to avoid liquidating securities under circumstances which Heartland Advisors believes are unfavorable to shareholders, such as to meet large or unexpected redemptions." That in itself wouldn't raise red flags, since most funds have credit lines.

But it's rare for funds to use them. "In my experience I haven't seen anybody using their credit line," says a Big Five accountant with 25 years' experience auditing mutual funds. The idea of the credit line is to allow a fund to make redemptions while waiting for the proceeds of its securities sales to arrive—bridging a few days' liquidity gap. With Heartland, the loans went on for months. Apparently, ex-portfolio manager Tom Conlin—the company announced his resignation Sept. 28—was borrowing money to pay off shareholders who wanted to redeem. The loans allowed Conlin to avoid selling bonds and realizing large losses. Conlin declined comment.

Perhaps he thought the bonds' prices would recover—but they didn't. The impact of this decision was to perpetuate the funds' inflated net asset values (NAVs). That meant shareholders who re-

prompted investors to take a closer look.

Heartland earned extra yield by taking credit risk: buying bonds either rated below-investment grade by the ratings agencies, or bonds that had not been rated at all. Nonrated bonds aren't necessarily bad credits; they can be from issuers too small to pay for a rating.

Most high-yield muni funds invest in nonrated bonds, but none came close to Heartland. The June report for Heartland High-Yield revealed that 96.7% of its portfolio was nonrated. In comparison, only 13 of 248 national muni-bond funds had more than 50% of their assets in nonrated bonds, according to Morningstar.

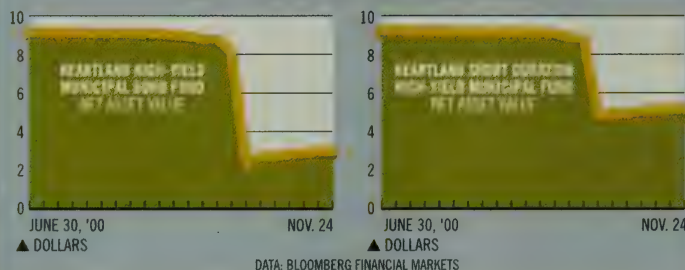
Bond-fund managers run their own credit views. In the June 30 report, Heartland's analysis shows 88.6% of its nonrated bonds were low investment grade. More telling, 8.4% of bonds were in default. Even when nonrated bonds make their payments, they can be problematic. Few buyers will take them on without a lot of credit research. And if funds need to load them quickly, there may be no takers.

■ **Stick with the large muni-managers.** High-yield or "junk" bonds require the most rigorous credit analysis. Heartland, a boutique firm, had only two muni analysts. Major muni managers Franklin and Van Kampen, with large research staffs, have a better chance of finding better deals in this tricky market.

Moreover, a larger fund will usually have enough cash inflows to make redemptions without dumping bonds. What's more, the steady



Hard Times in the Heartland



deemed over the summer were paid more than their shares were worth. The money came from loans that had to be paid back with what could be salvaged from the portfolio. Heartland spokesman Doug Lucas says management did what the prospectus allowed.

During this time, Heartland used Interactive Data, an independent pricing service, to value its bonds. Art Brasch, Interactive's director of municipal services, says its prices are only good for "normal market conditions," not the distressed sales that Heartland was facing.

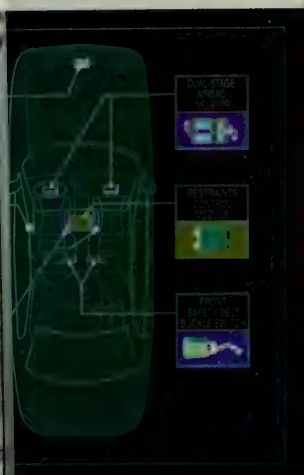
■ **Be wary of the highest-yielding fund.** Before its fall, Heartland High-Yield Municipal sported the highest 12-month yield of any muni fund, 7.3%. Since you don't get higher yields without taking greater risk, this huge payout should have

come provided by a larger portfolio should it meet redemptions more easily.

■ **Don't count on regulators' help.** According to the Securities & Exchange Commission, muni funds shouldn't have more than 15% of the assets in highly illiquid securities. Heartland's portfolio must have been way over that line when the SEC did nothing about it. In part, lawyers say it's not clear how to define an illiquid security. Heartland's Lucas says throughout the entire period, the portfolios were in compliance with the 15% rule. If so, then why did the funds have to tap their credit lines?

One reason regulators are behind the current poor fund disclosure. Mutual-fund activists have been lobbying the SEC for years to require funds to make better and more frequent reports of their holdings. Right now, funds have to provide a complete account of themselves only once a year. John Rekenhaller, Morningstar's managing director, argues that if funds were made to provide quarterly reports at the same time that investors would be able to spot problems more easily. Now, funds make their own timetable.

With better disclosure, shareholders could avoid some of the troublesome funds before they blow up. Better yet, putting a brighter light on the workings of the funds might prevent the Heartland fiasco from happening.

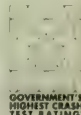


The
3,400-pound
bodyguard.



2001 sable

From the time you start the engine to the time you step outside its well-equipped interior, the 2001 Mercury Sable is busy looking after you and your passengers. Sable's Personal Safety System™ includes dual-stage airbags* that deploy at different rates depending on the driver's seat position and severity of the impact. Safety belt pretensioners and available side-impact airbags* help further reduce the risk of injury. Not surprisingly, all of these safety features helped Sable earn the government's highest crash-test rating†. Want to know more? Just click or call.



www.mercuryvehicles.com ■ 888.566.8888



Mercury
LIVE LIFE
IN YOUR
OWN LANE

*Always wear your safety belt and secure children in the rear seat. †Driver and passenger front-crash test

SHE DID IT BY THE NUMBERS



BY TODDI GUTNER

Nina McLemore's passion for the spreadsheet propelled her rise in business. Now, she promotes other women in financial careers

It's all about the numbers. At least that's how Nina McLemore sees it. By focusing on the bottom line, McLemore, 55, has climbed high in her business career. Now president of Regent Capital Management, a private equity firm in Manhattan, she started out in retailing and by age 29 was a division manager for May Department Stores. She quickly learned that to be a successful retailer you must have "a gut instinct for merchandising and be diligent about analyzing the numbers."

Unfortunately, most women don't concentrate enough on numbers, so they lose out on business opportunities. Women hold only 7% of the managerial positions that have profit-and-loss responsibility, according to a 2000 study by Catalyst, a nonprofit research organization that works to advance women in business. And it's those P&L positions that lead to the corner office. Financial positions are where women "can earn a lot of money," says McLemore, "and the more money we have, the more power we have—and power matters." She uses her pulpit as chair of the Washington, D.C.-based National Foundation of Women Business Owners to encourage women to pursue financial careers.

ROADBLOCK. McLemore's passion for numbers is a familial trait. Her grandmother did the bookkeeping for the family farm in Hazelhurst, Miss., where McLemore grew up. Her mother took charge of the finances for the family-owned gift shop in the same town. McLemore graduated from Louisiana State University in 1967 and went to work as a buyer at a regional department store, D.H. Holmes, that now is part of the Dillard's chain. She landed her next job at May Department Stores and quickly rose through the ranks, keeping a close eye on finances there. Says McLemore: "Your [merchandise] line may look great, but you have to know how to make money." That she did. Still, McLemore hit a roadblock in 1980, when she realized the company wasn't prepared to promote a woman to division president. So she left. "It dawned on me that women weren't going to

get ahead simply on their merits," she says.

McLemore went where she thought she could get ahead. She joined Kayser Roth Accessories, then a unit of Gulf & Western—as president—and she quickly obtained the license to launch Claiborne Accessories in 1980. "I focused on the bottom line and made money the first year," she says. In 1986, Liz Claiborne acquired the accessories business, along with McLemore, who decided to make it the most profitable division based on operating income as a percentage of sales, in the Liz empire. For her compensation, she requested stock options for most of her salary. That was unusual in 1986—especially in the apparel industry—but it paid off big-time.

The options helped push her investment portfolio to \$3 million in 1992, from less than \$200,000 in 1986. In 1988, when the founder retired, McLemore became the highest-ranking woman at Liz Claiborne. "I made it my business to always speak to the [success of] the numbers."

By 1992, McLemore wanted to make money for herself, not someone else. But she realized that while she knew how to turn a profit, she didn't know much about corporate finance. So she earned her MBA from Columbia University School of Business in 1995. Then she formed Regent Capital with two partners.

McLemore now wants to pass her financial zeal on to other women: "I want it to be easier on women to succeed than it was for me. I back their words with my own and her time. McLemore invests in businesses owned by women and that promotes them into top management positions. For example, Regent Capital is a major backer of sportswear maker Danskin, whose chief executive officer, Carol Hochman,

is a protégé of McLemore's. "I learned a tremendous amount from her," says Hochman. "She sets very high standards, which has helped me achieve at my highest level." McLemore speaks regularly to women's groups, spreading the gospel of numbers. She's one woman who practices what she preaches.



Nina E. McLemore

BORN 1945, Hazelhurst, Miss.

EDUCATION BA, Louisiana State; Executive MBA, Columbia University

RESIDENCE Manhattan

BIGGEST ACCOMPLISHMENT Founder of Liz Claiborne Accessories

HOBBIES Adventure travel, music, entertaining

BusinessWeek online

For more on women and investing or to join a discussion in our forum, see hers.online.businessweek.com/investor/



e-business software

WebSphere software.

It's not just a platform.
It's also a springboard.

It's a different kind of world.
You need a different kind of software.



WebSphere™ is the broadest, most powerful e-business software platform available. It helps you integrate with your customers and suppliers, grow as your e-business prospers and personalize each user's experience. WebSphere is part of the IBM portfolio of e-business software that includes Lotus®, Tivoli® and DB2®. To learn more about WebSphere and to get a free copy of the Patricia Seybold Group report, "How to Succeed @ e-business," visit us at ibm.com/websphere/discover2

A HEALTHY PROGNOSIS FOR AETNA AT LAST?



BY ROBERT BARKER

After it restructures, the insurer will offer shareholders cash plus a share in the new Aetna—a deal some consider to be a bargain

How much pain have investors in Aetna, the nation's top health insurer, suffered? This much: The last time they saw their stock split, Jimmy Carter was President. And since 1996, when Aetna set out to turn itself into a big player in managed care, an investment of \$10,000 in the stock is only worth \$9,170. Throw in the dividends, and you're about even. In contrast, 10 grand in the Standard & Poor's 500-stock index would have grown to more than \$22,000. Ouch.

More than a few investors must now be looking to St. Jude, patron of desperate cases, as the company gets set to undergo critical surgery. If shareholders approve, Aetna by yearend will have sold its financial-services and overseas divisions to Dutch financial giant ING Group. In return, Aetna investors will get \$35 in cash per share, plus one share in a "new Aetna." It will focus almost solely on insuring Americans' medical and dental health.

Will this end shareholders' suffering? They're still in danger, but the prognosis is good. In Aetna, I spy opportunity—if only because the company's many ills have persisted so long that they're well known. By now, no one expects much. **BAD BOOK.** The trouble began back in 1996, when then-CEO Richard Huber paid top dollar for U.S. Healthcare. He added the health lines of New York Life Insurance two years later. To make those investments pay, Aetna started squeezing patients and doctors. But by inflexibly managing medical care, it earned their enmity. It hurt itself, too, by pricing policies too low. Then, after paying \$1 billion last year for Prudential's health-insurance arm, Aetna found it had bought

a book of business even less profitable than own. Profits sank in 1999 for the second year a row. In February, Huber got the hook, director William Donaldson took over. By July had agreed to split Aetna with ING.

If the ING deal goes through, curing the Aetna will be up to John Rowe, who is set to take over as CEO. He did not comment, but Aetna's proxy statement lays out a drastic turnaround plan: Cut 340,000, or 50%, of Aetna's paying Medicare members, raise prices on other policies, and lower overall administrative costs both by cutting employment and by substituting online communications for some paperwork. Aetna also aims to repair relations with doctors and hospitals, in part via more flexible treatment



tions and payment schemes. This last task may be the one to which Rowe is best suited. A gerontologist, he is Mount Sinai Health, a group of nonprofit New York City hospitals, through some difficult days. Standard & Poor's analyst Jack Reichman told me, may give Aetna the credibility it needs in dealing with doctors and hospitals. Whether he's fit to lead a former public company remains an open question.

"It's a different ball game," Reichman said.

Just the same, if you look carefully at the health market is pricing Aetna's shares, much of the risk and more seems already to be reflected. Starting from \$63, where Aetna's shares have been trading, and taking away the \$35 a share cash that shareholders will get from ING, that indicates a price of \$28 for each share in the new Aetna—a total market capitalization of about \$10 billion. That's way cheaper than leading companies like Cigna and United HealthGroup (table).

As Aetna shrinks revenues and lowers costs, the valuation gap with its rivals is likely to narrow. Yet some sharp-penciled investors who stake in it think that a smaller Aetna will be generating enough cash flow to support a higher stock price. John Schneider, manager of PIMCO Renaissance Fund, expects Aetna next year to earn more than \$4 a share in cash. Even so, the trio of value investors who run Lazarus Partners Funds, think the new Aetna is worth more than \$55 a share. I figure it's almost time for St. Jude to make way for Lazarus.

Aetna: Nearly Left for Dead

	REVENUES (MILLIONS)	NET INCOME (MILLIONS)	MARKET VALUE (MILLIONS)	MARKET VALUE/ REVENUES	MARKET VALUE/ NET INCOME
NEW AETNA*	\$26,031	\$687	\$ 4,147	0.2	6.0
CIGNA	19,443	592**	19,352	1.0	32.7
UNITED HEALTHGROUP	20,214	645	18,400	0.9	28.5

Revenue and net income are for 12 months ending on June 30. Market cap is as of Nov. 20

*Assumes planned spin-off is approved by shareholders **Net income from continuing operations

DATA: BUSINESS WEEK, COMPANY REPORTS

BusinessWeek online

For a Q&A with John Schneider, go to barker.oweb.com or fax (321) 728-1711 at AOL keyword: BW Daily



e-business software

How do you build a web site in 60 days that lives up to the name No Fear? Start with WebSphere.

It's a different kind of world.
You need a different kind of software.

WebSphere™ Commerce Suite helped No Fear, a sports gear company, sprint from Internet strategy to an Internet business in less than 60 days – and build an e-business infrastructure as fast, flexible and fearless as its customers. If you're looking for extreme performance, you'll find it in the IBM portfolio of e-business software that includes WebSphere, Lotus®, Tivoli® and DB2®. For information and some cutting edge case histories, visit ibm.com/websphere/discover2

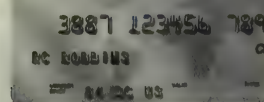
CALL US AND YOU'LL HEAR A STRANGE SOUND ON THE OTHER END.

IT'S CALLED A HUMAN VOICE.



We do things differently than the average card company. Like making sure a real person answers the phone, ready to help you when you call, 24 hours a day. And providing an award-winning rewards program with miles you can use on all major U.S. airlines, not just one or a few. And if your business trip runs longer than expected, unlike other cards, we always give you up to 62 days to pay your bill, interest-free. And of course, the Diners Club Card is welcomed by airlines, hotels, car rental companies and millions of other places you go. You won't find another card company that does all this. Call us at 1 800 2 DINERS. A real live person will give you all the details.

 **Diners Club
International**



CITIBANK

BREAKING THE PLASTIC

MITCHELL BURNS HOT



NE G. MARCIAL

al gas has
ell Energy
g pretty.
s could be
g the joint
k Place. And
remedy for
lepsy may
phan wired

Arnold Schmeidler is high on "big-picture theme investing," which has produced compounded yearly returns of 25% for his portfolio for three years. His current top pick is Mitchell Energy & Development (MND) for two reasons: "It is a very attractive play on the sizzling demand for gas, and we expect one of the majors will end up buying Mitchell," says the president of A.R. Schmeidler, which manages some \$500 million. Mitchell is a major independent producer of natural gas and gas liquids—used to produce propane, butane, and ethane.

"Mitchell is well-positioned to benefit from the long-term strength of natural gas," says Schmeidler. Prices have jumped from \$4.50 per 1,000 cu. ft. in the third quarter to around \$6.25 now. Schmeidler notes that for every 10¢ jump in the price of gas, Mitchell's earnings rise by \$5.3 million, or 10 cents a share. Mitchell's gas output this year, he says, exceeded 335 billion cu. ft. a day, up 36% from a year ago. Proven reserves as of July had jumped 45%, to 1.5 trillion cu. ft., from a year ago. So Mitchell, he says, doesn't have to undertake any wildcat exploration, since the life of proven reserves runs up to more than 12 years.

Based on earnings and cash flow, Schmeidler figures Mitchell, now at 48%, is worth 75 to 80. Mitchell posted earnings of \$1.38 a share in the third quarter, vs. 53¢ a year ago. For 2001, he sees Mitchell earning well over \$5 a share, up from 2000's estimated \$4.75 and 1999's \$1.64. And he sees 2001 cash flow per share at \$10, up from 2000's \$8.68, and 1999's \$4.50.

Schmeidler notes that CEO George Mitchell, 82, owns 57% of the stock. "At some point, we think Mitchell will opt to sell the company, or merge it with the likes of Exxon Mobil or Phillips Petroleum," says Schmeidler.

IS PARK PLACE SET TO CASH IN?



Gambling companies don't usually show up on the radar screen of Bob Olstein, president of Olstein Financial Alert Fund, who is a fanatic about cash flow and financial strength. Yet Park Place Entertainment (PPE), the world's largest casino company, has caught Olstein's eye. The reason: Park Place is on a solid financial footing, generating excess cash flow of about \$500 million through the third quarter—and it is expected to hit \$700 mil-

lion in 2001. On top of all that, Park Place is takeover bait, says Olstein.

Since the death in mid-October of CEO Arthur Goldberg, speculation has grown that a foreign operator might make a move on the company, which owns 28 properties with 2 million sq. ft. of gaming space and 28,000 hotel rooms. In the U.S. it operates in Nevada, New Jersey, and Mississippi. Its casinos include Caesars Palace, Bally's, and Hilton.

"These geographically diversified properties are almost impossible to duplicate," says Olstein. He figures the company expects to earn 85¢ a share in 2001. But that figure is understated, he says, because the \$500 million that the company allows for depreciation is twice the \$250 million set aside for maintenance capital expenditures. "The real net earnings is more like \$1.30 a share," Olstein figures. So he thinks the stock, now at 13%, is worth more than 20.

PERKING THINGS UP AT ORPHAN MEDICAL

Orphan Medical (ORPH), which has been working on remedies for narcolepsy, may have a new drug that's—well, a sleeper. The Food & Drug Administration has granted "priority review status" to Xyrem, which treats extreme daytime sleepiness related to narcolepsy. Such status commits the FDA to completing the review in six months. Orphan filed for approval on Oct. 2. "Assuming timely FDA approval, Xyrem could be on the market by mid-2001," says Ernest Andberg, an analyst at investment firm R.J. Steichen in Minneapolis, who rates Orphan a strong buy. He figures the company will be in the black by 2002, earning 16¢ a share on estimated sales of \$30 million. After 2002, Andberg says, Orphan's potential sales are limited only by how fast Xyrem can penetrate the narcolepsy market.

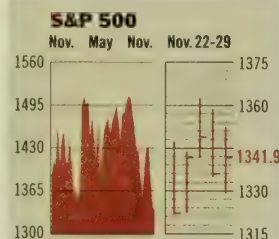
Also high on Orphan is Michael Scheffery, a general partner at OrbiMed Advisors, which invests all its assets of \$2.5 billion in biotech and drug stocks. "We invest in companies that have drugs with the potential of producing sustainable profits," says Scheffery. "Orphan is such a company—whose Xyrem alone could drive it to huge profitability," he says. Orphan has five other products on the market, including an injection for patients preparing to undergo bone-marrow transplants. (BW—Oct. 23). Scheffery expects the stock, now at 13%, to more than double within a year.



BusinessWeek online

Watch for Gene Marcial's Inside Wall Street Online column every Tuesday afternoon at www.businessweek.com/today.htm

STOCKS



COMMENTARY

Despite continued uncertainty over who will occupy the White House come Jan. 20, the Dow Jones industrials and the S&P 500 gained for the week. The Nasdaq was another story. That tech-heavy index fell 1.8%, bringing the loss for the year to 33.5%. Some of the downward pressure may have been related to tax selling. There could be some relief next week.

Data: Bloomberg Financial Markets
Bridge Information Systems, Inc.

U.S. MARKETS

	Nov. 29	Week	Year to date	Last 12 months
S&P 500	1341.9	1.5	-8.7	-4.7
Dow Jones Industrials	10,629.1	2.2	-7.6	-2.9
Nasdaq Composite	2706.9	-1.8	-33.5	-20.9
S&P MidCap 400	490.1	0.4	10.2	17.1
S&P SmallCap 600	200.2	-1.2	1.2	9.0
Wilshire 5000	12,220.6	0.9	-11.5	-6.1

SECTORS

	Nov. 29	Week	Year to date	Last 12 months
Business Week 50*	1044.2	2.1	-19.7	-11.7
Business Week Info Tech 100**	660.8	-3.1	NA	NA
S&P/BARRA Growth	740.2	1.3	-16.6	-12.5
S&P/BARRA Value	612.9	1.6	0.4	3.8
S&P Energy	903.1	-4.0	8.2	8.1
S&P Financials	151.8	5.3	14.1	13.0
S&P REIT	82.2	0.8	11.7	14.6
S&P Transportation	695.9	1.3	16.6	14.5
S&P Utilities	325.9	-0.5	43.4	47.3
GSTI Internet	213.9	-0.1	-70.0	-64.8
PSE Technology	843.4	-1.8	-13.2	8.2

*Mar. 19, 1999=1000 **Feb. 7, 2000=1000

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %	
Pollution Control	34.0	Defense Electronics	115.0
Genl. Merchandise Chains	19.8	HMOs	79.1
Food Chains	19.0	Hospital Management	69.1
Diversified Machinery	18.7	Food Wholesalers	59.7
Engineering & Constr.	16.2	Natural Gas	59.1

GLOBAL MARKETS

	Nov. 29	Week	% change
S&P Euro Plus (U.S. Dollar)	1332.3	3.7	-
London (FT-SE 100)	6164.9	-0.9	-
Paris (CAC 40)	6060.7	2.0	-
Frankfurt (DAX)	6598.3	1.3	-
Tokyo (NIKKEI 225)	14,507.6	0.7	-
Hong Kong (Hang Seng)	14,169.1	-4.1	-
Toronto (TSE 300)	8821.1	-0.3	-
Mexico City (IPC)	5907.2	-0.3	-

FUNDAMENTALS

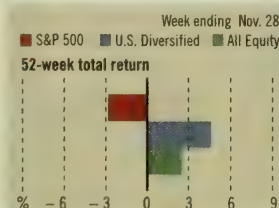
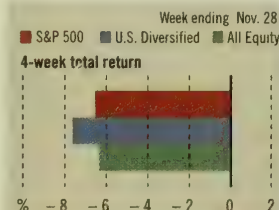
	Nov. 28	Wk. %
S&P 500 Dividend Yield	1.20%	1.1
S&P 500 P/E Ratio (Trailing 12 mos.)	25.8	25.
S&P 500 P/E Ratio (Next 12 mos.)*	21.3	21.
First Call Earnings Revision*	-2.04%	-2.7

*First Call Corp.

TECHNICAL INDICATORS

	Nov. 28	Wk. %
S&P 500 200-day average	1382.4	1440.
Stocks above 200-day average	50.0%	50.
Options: Put/call ratio	0.67	0.7
Insiders: Vickers Sell/buy ratio	1.60	1.5

MUTUAL FUNDS



Data: Standard & Poor's

EQUITY FUND CATEGORIES

4-week total return	%	52-week total return	%
Leaders		Leaders	
Precious Metals	4.0	Health	61.4
Natural Resources	1.5	Natural Resources	27.5
Real Estate	0.5	Real Estate	21.3
Pacific/Asia ex-Japan	-0.9	Small-cap Value	13.7
Laggards		Laggards	
Technology	-20.2	Japan	-28.5
Communications	-18.7	Diversified Pacific/Asia	-23.3
Small-cap Growth	-14.2	Precious Metals	-19.5
Mid-cap Growth	-13.2	Communications	-18.1

EQUITY FUNDS

4-week total return	%	52-week total return	%
Leaders		Leaders	
ProFunds UltraShort OTC	43.8	Schroder Cap. Micro Cap	149.3
CGM Focus	23.0	Dresdner RCM Biotech. N	147.4
Potomac OTC Short	20.7	Munder Fram. Hlthcare. B	133.3
Credit Suisse Inst. Jap. Gr.	16.4	Franklin Biotech. Disc. A	102.8
Laggards		Laggards	
ProFunds UltraOTC Inv.	-38.5	Warburg Pinc. Jap. Sm. Co.	-56.3
PBHG Tech. & Commun.	-36.2	Warburg Pincus Japan Gr.	-53.0
Turner Technology	-35.5	Credit Suisse Inst. Jap. Gr.	-52.4
Amerindo Technology D	-33.7	Amerindo Technology D	-52.3

INTEREST RATES

	Nov. 29	Week %
KEY RATES		
MONEY MARKET FUNDS	6.15%	6.14%
90-DAY TREASURY BILLS	6.22	6.36
1-YEAR TREASURY BILLS	5.96	6.10
10-YEAR TREASURY NOTES	5.54	5.62
30-YEAR TREASURY BONDS	5.65	5.68
30-YEAR FIXED MORTGAGE†	7.66	7.76

†BancQuote, Inc.

BLOOMBERG MUNI YIELD EQUIVALENT

Taxable equivalent yields on AAA-rated, tax-exempt bonds, assuming a 31% federal tax rate.

	10-yr. bond
GENERAL OBLIGATIONS	4.74%
TAXABLE EQUIVALENT	6.87
INSURED REVENUE BONDS	4.92
TAXABLE EQUIVALENT	7.13

THE WEEK AHEAD

NEW SINGLE-FAMILY HOME SALES *Monday, Dec. 4, 10 a.m. EST* ▶ New homes probably sold at an annual rate of 905,000 in October, says the median forecast of economists surveyed by Standard & Poor's MMS, a division of The McGraw-Hill Companies. Home sales jumped by 11.6% in September, to a strong annual pace of 946,000.

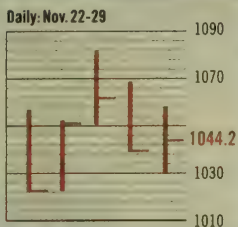
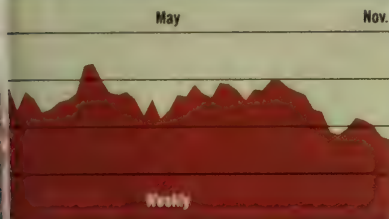
LEADING INDICATORS *Monday, Dec. 4, 10 a.m. EST* ▶ The Conference Board's composite index of leading indicators proba-

bly fell 0.1% in October, after no change in September. The leading index has not posted an increase since March, 2000.

BEIGE BOOK *Wednesday, Dec. 6, 2 p.m. EST* ▶ The Federal Reserve will release its compilation of reports on regional economic activity. The Beige Book is being prepared in advance of the Dec. 19 policy meeting. Fed watchers will be interested in any sign that domestic demand is growing at a pace below that of potential supply.

INSTALLMENT CREDIT *Thursday, Dec. 7, 5 p.m. EST* ▶ Consumers probably added \$7.1 billion in new debt in October, adding \$6.4 billion in September.

EMPLOYMENT *Friday, Dec. 8, 8 a.m. EST* ▶ The S&P MMS median forecast is a 150,000 rise in nonfarm jobs in November. That follows a 137,000 rise in October, and it would be firm evidence that the economy is improving. The unemployment rate likely to fall to 4% last month, from 3.9% in September.



Strong showing in the drug stocks, the BW 50 rose 2.1% for the week. Indeed, since the start of the year, the index is up 58.1%, while Pfizer has gained 43.1%. Capital One Financial, the credit card outfit, was the week's best gainer, benefitting from buy recommendation by Salomon Smith Barney and Raymond James.

COMPANY PERFORMANCE

	% change		Rank	Company	% change	
	Week	Since 3/1/00			Week	Since 3/1/00
Technology	-4.7	-28.4	26	Intel	3.8	-26.2
Telecom	5.1	-23.7	27	Tribune	2.0	-1.3
Pharmaceuticals	2.2	-21.5	28	Xilinx	-17.9	-42.5
Energy	2.5	-36.0	29	Enron	-7.0	1.8
Healthcare	-6.4	24.0	30	Lexmark International	8.8	-59.2
Media	-2.4	-76.0	31	Omnicom Group	2.1	-14.1
Telecom	1.0	-13.6	32	America Online	5.6	-23.9
Telecom	5.6	-46.1	33	Guidant	6.0	-20.9
Technology	-10.6	-75.4	34	MBNA	9.4	57.3
Technology	3.2	-12.5	35	Pfizer	6.1	43.1
Technology	-0.3	-18.6	36	Solecra	-1.3	-6.9
Technology	7.0	-48.0	37	Gateway	-12.6	-58.4
Technology	9.7	-6.9	38	Wells Fargo	8.5	35.3
Technology	8.8	-28.1	39	General Dynamics	4.1	76.8
Technology	-5.2	-49.3	40	Texas Instruments	-6.3	-52.5
Technology	0.7	5.6	41	Capital One Financial	16.4	49.6
Technology	-14.5	-47.4	42	General Electric	2.3	13.4
Technology	4.0	10.4	43	Kansas City Southern Industries	-0.7	82.4
Technology	4.3	4.7	44	Wal-Mart Stores	13.1	5.9
Technology	-10.0	-65.8	45	Paccar	3.7	5.5
Technology	1.6	-53.5	46	PE Biosystems Group	4.2	-17.9
Technology	-1.1	47.3	47	Merck	4.6	58.1
Technology	-3.8	-59.9	48	Adobe Systems	-11.1	28.1
Technology	-5.9	-45.8	49	Reliant Energy	-1.1	95.4
Technology	4.7	-40.6	50	Citigroup	5.0	27.7

PRODUCTION INDEX

Change from last week: -0.3%
Change from last year: 12.2%

AL OUTPUT
=176.1
=100

The index is a 4-week moving average



The index fell during the week ended Nov. 26 to its lowest level since early September. The index slipped to 175.8 from 175.9. The seasonally adjusted output of trucks fell as vehicle makers cut production to clear inventories. Steel, lumber, autos, and other production and railfreight traffic fell. Power output rose strongly, and the index ended with a small gain.

The index components are at www.businessweek.com.
Index Copyright 2000 by The McGraw-Hill Companies

ONLINE RESOURCES

BW50 Track the index and the companies in it all day long. Plus: our exclusive Info Tech 100 index.

S&P PERSONAL WEALTH Real-time market coverage, industry analysis, and personalized retirement advice.

MUTUAL FUNDS Search for funds, view BW ratings, and read Q&A's with fund managers.

COLUMNS Hot stocks, takeover plays, and the latest strategies for managing your money.

BusinessWeek online

For more investment data and the components of the production index, visit www.businessweek.com.

[Take away your network's downtime privileges] Comdisco Network Services will deliver reliability to your network. Because being inaccessible is a liability your business can't afford. www.comdisco.com

COMDISCO

Index to Companies

This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

A

ABB (SMAWY) **EB44**
 Accordant Health Services **EB77**
 AdRelevance (MMXI) **EB16**
 Adventis **48**
 Aetna (AET) **44, 64, EB60, 132**
 Agilent Technologies **EB77**
 Airbus Industrie **56**
 Airlines Reporting **42**
 Alcatel (ALA) **56**
 Alere Medical **EB77**
 Allscripts (MDRX) **EB60**
 Amazon.com (AMZN) **14, EB18, EB20, EB52, EB85, EB90, EB100, EB116, 108, 110**
 American Airlines (AMR) **EB30**
 American Express (AXP) **42, 89**
 America Online (AOL) **20, 44, EB16**
 Andersen Consulting **EB30**
 Angel Investors **EB90**
 Apollo Group (AOL) **EB104**
 Appleton Papers **76**
 Aqua Glass **EB52**
 Archer Daniels Midland (ADM) **28**
 Ariba (ARBA) **EB30**
 A.R. Schmidler **135**
 Art Technology Group (ARTG) **EB30**
 Ask Jeeves (ASK) **EB30**
 AT&T (T) **31, 44, 47, 56**
 AT&T Wireless (AWE) **48**
 Atlas Commerce **EB30**

B

Bain **40**
 Banc of America Securities (BAC) **EB30, 108**
 B&G Manufacturing **76**
 barnesandnoble.com (BNBN) **EB116, 108**
 BEA Systems (BEAS) **EB30**
 BellSouth (BLS) **48**
 Ben & Jerry's Homemade **54**
 Berkshire Hathaway (BRK) **86**
 Black & Decker (BDK) **42, EB52**
 Blackboard Network **EB104**
 BNP Paribas **EB44**
 Boise Cascade (BCC) **EB30**
 Boom.com **EB18**
 BP Amoco (BP) **44, 47**
 Bridgestone/Firestone **76**
 British American Tobacco **76**
 British Sky Broadcasting (BSY) **66**
 British Telecommunications (BTY) **56**
 Brivo Systems **EB82**
 Broadcast (BRCM) **56**
 BroadVision (BVSN) **EB30**
 Brown & Williamson Tobacco **14**
 Bulldog Research.com **108**

C

Campbell Soup (CPB) **86**
 Canal+ **66**
 Caredata (CDCM) **EB60**
 Carlson Wagonlit **42**
 CBSMarketwatch.com (VIA) **120**
 Candiant (CD) **44**

Cerebus Capital Management

60
 ChannelHealth (IDXC) **EB60**
 Charitygift Services **124**
 Charles Schwab (SCH) **112**
 Chase H&Q (CMB) **108, 112**
 Chelsea Piers **122**
 Chicago Investment Analytics **112**
 Chinatrust Commercial Bank **60**
 Chinese Automobile **60**
 Chipshot.com **EB25**
 Chiyoda Mutual Life Insurance **54**
 ci4net.com **86**
 Ciena (CIEN) **56**
 Cigna (CI) **EB30, 132**
 Cingular Wireless **48**
 Citigroup (C) **56**
 CNBC (GE) **108**
 CNET Networks (CNET) **EB20**
 Coca-Cola (KO) **44, 86**
 Columbian Chemicals **42**
 Commerce One (CMRC) **EB30**
 Commercial Bank of San Francisco **56**
 Commerzbank **EB18**
 Compaq Computer (CPQ) **50, 66, EB20**
 CompareNet **EB25**
 CONSOL Energy (CNX) **112B**
 Context **66**
 Corlissens **EB77**
 Covisint **EB116**
 Credit Suisse First Boston **108**
 CUC International (CUC) **44**
 Cushman & Wakefield **36**

D

Daiichi **64**
 DaimlerChrysler (DCX) **44, 46, 47**
 Danskin (DANS) **130**
 Datatrak International **EB66**
 DealTime.com **EB20**
 Dell Computer (DELL) **50, 66**
 Deutsche Bank (DBK) **47, 56, EB30, 127**
 Deutsche Telekom (DT) **48**
 Dillard's (DDS) **130**
 Domino's **66**
 Donaldson, Lufkin & Jenrette (DLJ) **50**
 Dram Beam Morin **86**
 Dreyer's Grand Ice Cream (DTRY) **54**
 DrKoop (KOOP) **EB60**
 Duchossois Technology Partners **EB82**

E

Eastman Kodak (EK) **86**
 Eaton Vance (EV) **127**
 eBay (EBAY) **EB18, EB116, 108, 122**
 eCollege.com (ECLG) **EB104**
 E-Commerce Industries **EB85**
 Emerson Electric (EMR) **EB30, 86**
 Enron (ENE) **40**
 E.piphany (EPNY) **EB30**
 EthnicGrocer.com **EB18**

eToys (ETYS) **EB100, 108**
 eZopen **EB30**
 Exxon Mobil (XOM) **135**
F
 FatWire **EB30**
 Federated Department Stores (FD) **44**
 Fiderus **14**
 First Call **108**
 First Consulting Group (FCGI) **EB66, EB70**
 FleetBoston Financial (FBF) **70**
 Ford (F) **EB30, EB70**
 FreeMarkets (FMKT) **EB116**
 Freeserve (FREE) **66**
 Frontier **42**

G

Gannet GCI **120**
 Garden.com (GDEN) **EB96**
 General Electric (GE) **44, EB30, EB70, 86**
 General Electric Capital (GE) **86**
 General Mills (GIS) **40**
 Giant Eagle **EB104**
 Giga Information Group (GIGX) **EB30**
 Gillette (G) **86**
 Glaxo Wellcome (GLX) **56**
 Global Crossing (GX) **86**
 Global Reach **EB18**
 Globopolis.com **EB18**
 Gluckhaus **46**
 GoCo-op **EB116**
 Godiva **54**
 Goldman Sachs (GS) **EB30, 108**
 Gomez Advisors **EB20**
 GongShee.com **EB18**
 GoodTechnology **31**
 Google **50**
 Greenhouse Spa **122**
 Gulf & Western **130**

H

Handspring **31**
 Hardware Wholesalers **EB52**
 HBO **44**
 Health Hero Network **EB77**
 Heartland Advisors **127**
 Hewlett-Packard (HP) **40, 66, EB18, EB25, EB77**
 HFS **44**
 HMG Worldwide (HMGC) **54**
 HomeBase **EB52**
 Home Depot (HD) **EB52**
 HomePortfolio.com **EB85**
 Honeywell International (HON) **44**
 Hotmail **20, 50**
 Humana **EB77**
 Hyundai Motor **47**

I

IBM (IBM) **50, EB30, EB60**
 IDEO Product Development **EB82**
 Information Resources (IRIC) **54**
 ING Group (ING) **132**
 Inktomi (INKT) **EB30**
 Intel (INTC) **50, 66**
 Interactive Data **127**
 International Data **50, 127**
 InterWorld **EB30**

i2 Technologies (ITWO) EB30

J

JetBlue **42**
 Jupiter Media Metrix (JMXI) **66, EB82**

K

Kaiser Associates **EB82**
 Kana Communications (KANA) **EB30**
 Kellogg (K) **40**
 Kimberly-Clark (KMB) **40**
 Kmart (KM) **EB16**
 Knight-Ridder (KRI) **120**
 KPMG **EB30**
 Kuoyang Construction **60**
 Kyoei Life Insurance **64**

L

Learning **44**
 Leeward Investments **108**
 Lehman Brothers (LEH) **48, EB60, EB100, 108, 110**
 LifeMasters **EB77**
 Living.com **EB20**
 Liz Claiborne Accessories **130**
 Longleaf Partners Funds **132**
 Lowe's **EB52**
 Luntz Technologies (LU) **86**
 Luntz Research **16**

M

MasterCard **62**
 Mattel (MAT) **44**
 May Department Stores (MAY) **130**
 Maytag (MYG) **86**
 McGraw-Hill (MHP) **76, 132**
 Medtronic **EB77**
 Mercata.com **EB20**
 Merisel (MSEL) **EB85**
 Merrill Lynch (MER) **EB104, 108, 112, 120**
 MetalSpectrum **EB30**
 Microsoft (MSFT) **14, 50, 70, EB25, EB30, EB52, EB77**
 Miller Brewing **122**
 Mitchell Energy & Development (MIND.A) **135**
 Mitsubishi **47**
 Montgomery Ward Holding **44**
 Moody's Investors Service (DNB) **60**
 Morgan Stanley Dean Witter (MWD) **36, 40, EB30, 108**
 Morningstar **127**
 Mother Nature (MTHR) **EB60**
 Motorola (MOT) **86**
 mySimon.com **EB20**

N

Nabisco (NGH) **EB44**
 Napster **EB25**
 Naroff Economic Advisors **56**
 Navistar (NAV) **40**
 Neiman Marcus **122**
 Nestlé (NSRGY) **EB44**
 NetPerceptions (NETP) **EB30**
 Network Appliance (NTAP) **50**
 New England Consulting Group **54, 86**
 New Enterprise Associates **EB90**
 New York Life Insurance **132**
 Newman's Own **54, 124**

Nextag.com EB20

Nippon **64**
 Nortel Networks (NT) **40**
 Northern Trust **36**
 Novartis **42**
 NTT DoCoMo (NTT) **48**

O

OmniSky **31**
 Open (BSY) **66**
 OpenTable **EB85**
 Oracle (ORCL) **42, EB30**
 OrbiMed Advisors **135**
 Orphan Medical (ORPH) **135**
 Oxford Health Plans **EB77**

P

PacificCare Health Systems (PHSY) **86**
 Palm (PALM) **16, 31**
 Park Place Entertainment (PPE) **135**
 PBS **75**
 Pearl Meyer & Partners **86**
 PeopleSoft **42**
 PepsiCo (PEP) **44, EB52, 86**
 Pets.com (PET) **EB20, 108**
 Philip Morris (MO) **EB44**
 Phillips Petroleum (P) **135**
 Piko Communications **EB25**
 PIMCO Renaissance Fund **132**
 Polaroid (PRD) **EB52**
 PolyOne (POL) **EB30**
 Priceline.com (PCLN) **108**
 ProAir **42**
 Procter & Gamble (PG) **40, 86**
 ProphetBrand Strategy **EB85**
 Proxy Monitor **EB96**
 Putnam Lovell Securities **112**

Q

Quaker Oats (OAT) **44, EB44**
 Qualcomm (QCOM) **48**
 Qantas Airways **56**
 Quintiles Transnational (QTRN) **EB66**
 OXL.com **EB18**

R

Rackable Systems **50**
 Raymond James & Associates **42**
 Regent Capital Management **130**
 R.J. Steichen **135**
 Robertson Stephens (RBS) **108**
 Robotics **44**
 R.R. Donnelley **42**

S

Sabre **42**
 Safeway (SWY) **47**
 salesforce.com **EB30**
 Salomon Smith Barney (C) **60, 108**
 Salon.com (SALN) **120**
 Sanford M. Bernstein **108**
 SAP (SAP) **EB30, EB44**
 SBC Communications (SBC) **48**
 Schering-Plough **EB66**
 Siebel Systems **EB30**
 Snyder **75**
 Softbank **EB25**
 Sony (SNE) **31**
 Sprint (FON) **31, 56**
 Sprint PCS Group (PCS) **48**

Standard & Poor's (MHP) **6**
 Sumitomo **64**
 Sundance Catalog **124**
 Sun Microsystems (SUNW)

T

Target (TGT) **EB104**
 TD Waterhouse Group (TW) **108**
 TeenFX.com **EB104**
 TeleCheck Services **37**
 Tellme Networks **EB25**
 the Knot.com (KNOT) **EB9**
 ThermoQuest **76**
 The Wiz (CUC) **EB20**
 Thomson Consumer Electronics **42**
 Thomson Financial Services **42**
 3Com (COMS) **44, EB25**
 Timbuk2 Designs **EB85**
 Time Warner (TWX) **44, E**
 Time-Mirror (TRB) **120**
 T-Online International **66**
 T. Rowe Price (TROW) **12**
 TRG Products **31**
 Tuntex Group **60**

U

UAL **44**
 UBS Warburg **60**
 Unilever (UN) **54, EB44**
 UnionRecord.com **14**
 Uniscap **EB18**
 United Airlines (UAL) **42**
 UPS (UPS) **122**
 US Airways Group (U) **4**
 U.S. Healthcare **132**

V

Validea **108**
 Value America (VUSA) **1**
 Vanguard **127**
 Van Kampen **127**
 Verizon Communications **108**
 VerticalNet (VERT) **EB5**
 Vignette **EB30**
 Visa International **62**
 VisionTech W **56**
 Vivomatrix **EB77**
 VoiceStream Wireless **4**
 Volvo (F) **EB16**

W

Wainhouse Research **4**
 Wal-Mart (WMT) **EB18**
 Walter Industries (WLT) **108**
 WebCT **EB104**
 WebMethods **EB30**
 Westwind Balloon **127**
 Weyerhaeuser (WY) **56**
 Willamette Industries **108**
 Wit Soundview Group **108**
 World Online Internet **108**
 Worldwide Retail Exchange **76**

X

Xerox (XRX) **47, 86**
 Xircorn **31**

Y

Yahoo! (YHOO) **20, 5**

Z

zBox **EB82**
 Zurich Insurance **64**

Business Week (ISSN 0007-7135) published weekly, except for one week in January August, by The McGraw-Hill Companies, Inc. Executive, Editorial, Circulation, and Advertising: 1221 Avenue of the Americas, New York, N.Y. 10020. U.S. subscriber rate \$54.95/year. \$69.95/year. Periodicals postage paid at New York, N.Y., and at additional mailing offices. At Montreal, P.Q. Canada Post International Publications Mail Product Sales Agreement. Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, N.J. 08520.

One small step for you. One giant leap for your small business.

BusinessWeek online



frontier

THE RESOURCE FOR ENTREPRENEURS

cover frontier and launch your business to new heights.

frontier.businessweek.com

businesses are setting the pace of today's economy. frontier is an essential resource that merges the immediacy of the web with the expert tools, information, and analysis you've come to expect from *BusinessWeek Online*. frontier's in-depth coverage and archives let you learn from the past and prepare for the future. And it's updated every day. Best of all, it's free

to *BusinessWeek* magazine subscribers. One click and you're powered with the knowledge only *BusinessWeek Online* provides to make your small business successful.



**2000 National Magazine Award Winner
General Excellence in New Media**

Keyword: BusinessWeek

Keyword: BusinessWeek frontier

A Division of The McGraw-Hill Companies



BusinessWeek MARKETPLACE

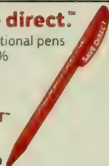
Corporate Gifts/Premiums

Buy direct. Save direct.™

- Custom imprinted promotional pens
- Buy direct, save up to 25%
- Two business day turnaround available

Worldwide Pens DIRECT™

Toll free: 877-510-7367
www.worldwidepens.com



Legal Services

ASSET PROTECTION

Corporations, Ltd. Partnerships, LLCs
Offshore Trusts, Corps., Private Banking
• Best Jurisdictions • Maximum Privacy
• Tax Savings • Estate Planning
Professional - Confidential

Steven Sears, CPA • Attorney at Law
714-544-0622 • www.searsatty.com

Men's Footwear

MEN: BE TALLER!!

Tired of being short? Try our quality footwear. **HIDDEN** height-increasing feature **INSIDE** shoe. No **OVERSIZED** HEELS! Will make you 2-3" TALLER depending on style. **OVER 100 STYLES AVAILABLE.**



Extremely comfortable. Sizes 5-12 Widths B-EEE. In business over 55 years. **MONEY-BACK GUARANTEE.** Call or write for **FREE** color catalog.

ELEVATORS®

RICHLEE SHOE COMPANY DEPT BW00D
P.O. BOX 3556 FREDERICK MD 21705

1-800-290-TALL

Business Services

INK CARTRIDGE

SAVE UP TO 70% ON CARTRIDGES FOR EPSON® AND CANON® -- GREAT PRICES ON OTHERS, TOO -- DELIVERED BY FEDEX OVERNIGHT FOR ONLY \$5.00. TENS THOUSANDS OF SATISFIED CUSTOMERS

FREE BLACK CARTRIDGE VIA THIS LINK: WWW.CARROTINK.COM

CARROT'S INK CARTRIDGES® ALL TRADEMARKS ARE PROPERTY OF THEIR RESPECTIVE OWNERS

Education/Instruction

Get Your MBA Through Distance Learning



- Prestigious British University
- World Leader in Distance Learning
- No GMAT required
- Local support center
- Flexible Education Financing available
- Work experience & qualifications considered
- Member of the Association of Business Schools
- Accredited by the Association of MBAs
- Offered under Royal Charter

800-874-5844
email: rduisa@crols.com
www.rdi.co.uk

tdi

BIRCHAM INTERNATIONAL UNIVERSITY

Bachelor Master Ph.D Accredited Distance Learning
College Degrees Over 100 majors
Credit for Work/Life Experience

www.bircham.org / usa@oxfordnet.edu
CALL NOW! TOLL FREE 1-877-7 BIU USA

The Leader in Distance Learning for 20 Years

• Associate • Bachelor • Master • Doctor
Business (Mgmt, HRM, Health Care)
Management of Technology,
Psychology, Law
Southern California University
for Professional Studies
1840 E 17th St BW, Santa Ana, CA 92705
800-477-2254 www.scups.edu

Meeting Planners

Meetings are our Business.™

Your comprehensive
outsource solution.
Fep, Inc. 1-800-465-7374
www.meetings-events.com

e-incorporate.com

- Registered agent service
 - U.S. bank accounts open
 - Nominee director service
- Delaware Incorporation Handbook
Delaware Business Incorporators
800.423.29

Need a Logo

myLogo Get a Professional Custom Design
LOGO TODAY!
Visa/MC/Amex
Toll-Free: 1-888-869-5555
www.1800mylogo.com

Expand your horizons.



Earn a top-ranked MBA without
interrupting your career.

Columbia and London Business Schools join to offer the 20-month EMBA-Global, a new Executive MBA that drives managers on a unique route to global leadership. Classes start May 2001 in New York and London on a convenient, innovative schedule.

To learn more about Columbia's entire Executive MBA portfolio (EMBA-Global, Friday/Saturday and Friday Programs), attend an Open House and visit our Web site.

Call us at 212-854-2211 or visit us at www.gsb.columbia.edu/emba

London
Business
School

COLUMBIA
BUSINESS
SCHOOL

For Ad Rates and Information

Phone: (312) 464-0500 Fax: (312) 464-0512

Computer Equipment

Ted Dasher Inc.
Hewlett-Packard
Buy-Sell-Trade

Print • Color • DraftMaster • DeskJet
DraftPro • DesignJet • RuggedWriter
Electrostatic Plotters
1/3000 Workstations & Personal Computers
Demo & Refurbished Equipment
800-638-4833
Email: sales@teddasher.com

Business Opportunities

CONSULTANTS NEEDED

Lawyer needs associates to
provide unique financial services to
clients lawsuit-proof. All the
pointments you can handle.
State-of-the-art marketing tools.
Demand. Extremely high income
lifetime residuals in multi-
dollar market. Candidates
dependable, have outstanding
skills & good communication
skills. 1-hr. recording.

(800) 653-4497

OFFSHORE BANK FOR SALE

FreeReport

800-733-2191

MAKE MONEY AS A BUSINESS FINANCE CONSULTANT

Business Loans and Equipment
from \$1,000 to \$10 million. No co-
signers. Work directly with National
unlimited earnings potential and
some.

minute
lunar and
on packet
1-800-336-3933
Loan Consultants, Inc.

Logos/Marketing

YOUR PRODUCTS MILLIONS OF MAIL ORDER CATALOGS!

Commissioned manufacturer's
specializing in selling to this
market. Please call:

Write To Catalogs, Inc.
Rt 1, Hanover PA 17331
1-800-633-1850

Education/Instruction

ABSOLUTELY FREE EVALUATION

**Bachelor's -- Master's --
Ph.D. Degrees**

Based on life and work experience.
Confidential -- Fast -- Student
Loans. www.arcc.org

800-951-1203

Cruises

REDEEM AND EARN MILEAGE PLUS MILES!



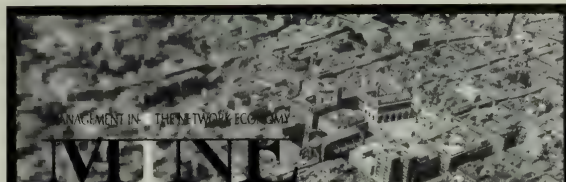
1-888-666-8120

WIN A CRUISE - SEE OUR WEBSITE
12 CRUISE LINES - GREAT PRICES

Travel

AS SEEN ON
**Discount CNN
Hotels & Condos**
Up to 65% Off! Rooms for Soldout Dates!
hoteldiscount.com
1-800-964-6835
Most Major Cities

Education/Instruction



Log on today for the Master's of tomorrow!

<http://mine.pc.unicatt.it>

MASTER OF MANAGEMENT IN THE NETWORK ECONOMY

Learn how to manage an organization in
the digital age. Be part of an international
group on a small campus in the peaceful
surroundings of historic Piacenza, in Italy.

- Collaboration between the Università Cattolica at Piacenza, Italy and the University of California at Berkeley, USA.
- 11 months of coursework led by professors from top U.S. universities and by Silicon Valley experts.
- 5-month internship in a network-economy-oriented organization.
- Starting date: September 17, 2001
- Applications: March 1 - April 30, 2001



FONDAZIONE
DI PIACENZA E VIGEVANO



Università di Piacenza e Vigevano

<http://mine.pc.unicatt.it>
info.mine@pc.unicatt.it

Aviation/Fractional Ownership

WHICH IS FASTER, YOUR ASAP OR YOUR COMPETITION'S?

www.flexjet.com

As a fractional owner of a Learjet® or Challenger® business jet, modern CEOs are able to respond with speed and spontaneity due to less congested airfields and personalized scheduling built around their specific business needs. We offer the most complete range of latest technology aircraft available today. So while there may be other options to Flexjet, there can only be one choice. Flexjet. For more information on the many affordable benefits of fractional ownership and our unprecedented level of personal service and attention to detail, call **1-800-FLEXJET**.

**BOMBARDIER
AEROSPACE**



FLEXJET
we build the aircraft

Flexjet is a Bombardier Aerospace program.

THE CEO AS HERO—AND BUM

Chief executives are getting fired all across Corporate America (page 86). Some CEOs are not making the transition from Old to New Economy. Others are trying to pass off sclerotic food or washing machine companies as fast growth engines. And many high-tech CEOs are zigging when they should be zagging with new technologies. A record 350 American CEOs left their corner offices in the past three months. Those who manage to hang on can expect a job tenure half of what it was in the '80s. Wall Street believes that in an era of higher productivity and faster economic growth, double-digit earnings increases every quarter are the norm, and heaven help any chief executive who can't meet that target. The message is: Heck, if Jack Welch can do it, you can do it too.

Wait a minute. It may be perfectly reasonable for investors to hold CEOs to higher New Economy profit standards when globalization and information technologies are quickening the pace of innovation and cutting costs dramatically. After all, we're living in a once- or twice-in-a-century time of unusual technological change and opportunity for making money. But it is a naive misunderstanding of the New Economy to expect that the annual gains of 20% in corporate profits of the past five years can simply be projected forever into the future. Yes, Virginia, there is a New Economy business cycle, and it is just beginning to show its downside. Next year can't possibly be as good as this one. Even if the Federal Reserve achieves its soft landing, the growth rate will still fall to about 3% from more than 5%. That's a 40% drop. The economy could easily fall farther. Wall Street, unrealistic about the New Economy, built in unrealistic expectations of stock prices and CEO performances. Now unhappy with both, the Street is hammering them hard.

We're not going to cry for CEOs. They played a major

role in setting themselves up for a fall by striking heroic tures, claiming they could deliver outside results when, in reality, many were lucky enough to surf the stock boom fast-growth years of the '90s. Head-hunting firms stoked fire by creating the myth of a CEO shortage. Really good could transform any company into a highflier, they claim, but these were scarce—and therefore expensive. Headhunting helped push compensation to enormous heights. This, inflated wildly inflated investor hopes for celebrity performance delivering profits. When they weren't met, vengeance swift. An increasing number of CEOs are joining the "club"—fired in 18 months or less. Unfair? In a few cases. In most, no.

Investors and CEOs alike can be pardoned for some of their exaggerated expectations. Few of us have experienced a technological revolution that changes so much in society at large. Few of us have lived through a decade in which stock prices quadrupled. No one really knows the contours of this change, and wanting the unexpected surge in growth profits to continue forever is only too human. But we are in the year five of the Internet revolution, and it is time to come down to earth. A New Economy cyclical business decline is under way, and it could have plenty of surprises.

We believe there are still strong gains to be made in productivity in the decade ahead and noninflationary economic growth of 3% to 4% is widely seen as possible. That solid long-term earnings gains for many corporations. It also means that CEO churn will continue. Not every executive will be able to traverse the treacherous terrain between Old and New Economy, bet on the right technology or deal with a new kind of business cycle. CEOs will come and go. But that's good, not bad.

GETTING OVER THE DOT-CON

What were we thinking? For nearly two years, before the crash last spring, investors accepted such loopy notions as "eyeball stickiness," "annual run-rate sales" and "hits metrics" to value dot-com equities. And value them they did—to the skies. But who actually invented these measures and why? The answer to the first question is easy—Wall Street analysts. But the answer to the second is more complex, combining forgivable naivete with deception and greed (page 108).

Remember the halcyon days of dot-com mania, when the Internet was new and full of fresh possibilities? Analysts were on CNBC every day singing the praises of new companies and initial public offerings. They were all so optimistic about each and every dot-com. The truth is, we were all swept away then. Entrepreneurs were trying everything on the Net. All kinds of new business models were being trotted out. Many of the lasting, successful companies, such as Yahoo! Inc.,

took several iterations to get it right, and even so some stocks are down sharply. Others never did get it right after the tech wreck, look ridiculous. In retrospect, the Street analysts misjudged the business possibilities of the Internet. But they weren't venal in their optimism.

What is not forgivable is that many analysts were revealed to be no better than circus barkers who brought investors into the tent to pump up the investment banks of their Wall Street employers. Their never-ending bull market was based less on an attempt to analyze Net firms than on effort to underwrite IPOs. And despite the recent carnage, they remain unduly optimistic. A new study shows that, in the long term, the best Internet stockpickers are analysts who are not involved in investment banking with the companies they cover. Investors should start dumping the charlatans on Wall Street and check out the truthsayers.



The future of your e-business
is being decided right here.

Do you really know what goes on in the minds of your e-customers? What they might be thinking about buying? Or not buying? And why? That's where you need e-Intelligence from SAS. With e-Intelligence, you can quickly integrate bricks-and-mortar data with clicks-and-mortar data. To reveal insights that can help you optimize online merchandising, recognize cross-selling opportunities, build greater customer loyalty, and establish more profitable relationships with your very best e-customers. To learn more about e-Intelligence from SAS, and what it can do for your business, phone 1-919-677-8200 or stop by www.sas.com.

The Power to Know[™]



SAS and e-Intelligence are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. © SAS Institute Inc. 2000.

NEW WORLD

NEW CAPACITY ON DEMAND



IBM and the IBM logo are trademarks of International Business Machines Corporation. UNIX is a registered trademark of The Open Group. All other trademarks or registered trademarks are the property of their respective owners. Actual dealer price may vary. Prices, specifications and availability may change without notice. IBM, POWERPC and the e-business logo are trademarks of International Business Machines Corporation. UNIX is a registered trademark of The Open Group. All other trademarks or registered trademarks are the property of their respective owners. © 1997 IBM Corporation. All rights reserved.

BusinessWeek

MBER 18, 2000

A PUBLICATION OF THE MCGRAW-HILL COMPANIES

E WINS...



ow Bush
Would
govern

The
conomic
Team

Senate's
w Power
Blocs

ealing
h Global
t Spots

THE TECH SLUMP

Even if the Nasdaq starts rising, the industry downturn is real. Will it take the economy down, too?



*****5-DIGIT 94010
602 1058111600# 107
BURLINGAME
DEC 12 2000
BURLINGAME PUBLIC LIBR
O PRIMROSE RD
BURLINGAME CA 94010-40
LIBRARY





Look around. You're in the midst of a global maelstrom. A swirling mass of converging technologies and new business opportunities unleashed by the Internet. All waiting to be harnessed by companies like Fujitsu – the world's third largest IT services provider*. We've focused our energy and

resources on creating technology to solve the unique problems of thousands of individual businesses. Last year alone we invested \$4 billion of our

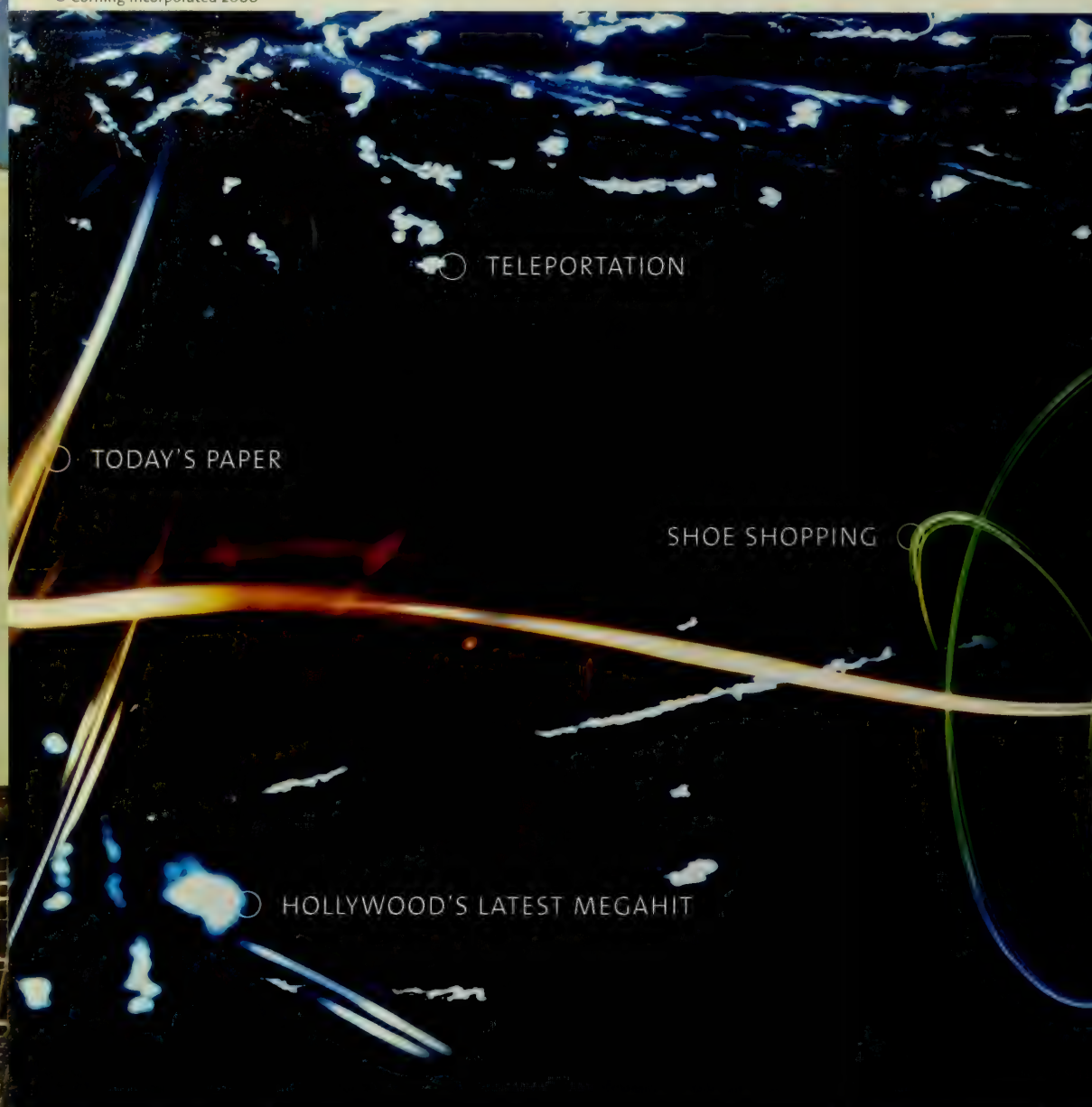
WHEN YOU CLOSE YOUR EYES,
WHAT DO YOU DREAM?
WHEN YOU OPEN YOUR MIND TO THE
FULL POTENTIAL OF THE INTERNET,
WHAT DO YOU SEE?

\$50 billion global IT and telecommunications revenues on R&D. Imagine, \$4 billion. That's more than the total sales of many Fortune 500 companies. But that's what it takes to create next generation mobile technology, ultra-high-speed servers and leading-edge photonic networks. Innovations that keep your business one step ahead of the Internet. And light years ahead of the competition.

THE POSSIBILITIES ARE INFINITE

www.fujitsu.com

*Source: IDC, December 1999, *Who Will be Leading the Global IT Services Industry in 2000?*: A Competitive Analysis by Mauro Peres, Sophie Janne Mayo.



○ TELEPORTATION

○ TODAY'S PAPER

SHOE SHOPPING ○

○ HOLLYWOOD'S LATEST MEGAHIT

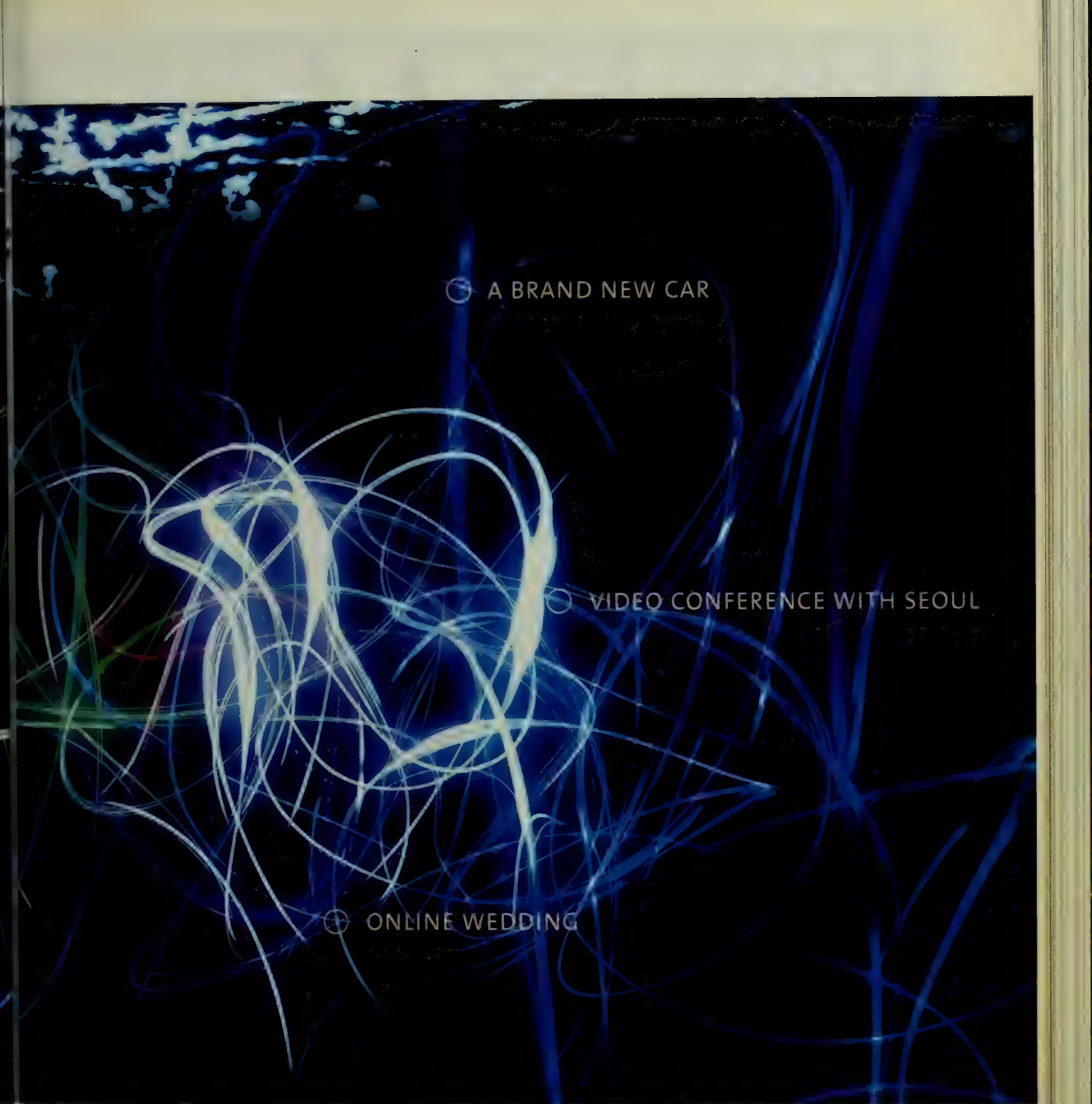
It's changing the world at the speed of light. Touching everything we do.

But while the road ahead is twisting, it's also clear.

Clear as a ribbon of the finest glass.

The global optical network is carrying the world's voice, video and data.

And at its core: Corning.



⊕ A BRAND NEW CAR

⊕ VIDEO CONFERENCE WITH SEOUL

⊕ ONLINE WEDDING



CORNING

Discovering Beyond Imagination

Over 20,000 Lotus Business Partners can provide solutions for you today. For more information, call 1.800.672.3387, ext. F112. In Canada, call 1.800.672.3387, ext. F112. ©2000 Lotus Development Corporation, an IBM company. All rights reserved. Lotus is a registered trademark and SuperHuman Software is a trademark of Lotus Development Corp. IBM is a registered trademark and the e-business logo is a trademark of International Business Machines Corp.



**WORK AS IF
YOU'RE ALL
STANDING AROUND THE
WATERCOOLER. EXCEPT THE
PACIFIC OCEAN
IS THE WATER.**

able to collaborate with your partners, suppliers, employees and customers over the Web is what distinguishes e-business from e-commerce. The same goes for enabling your employees and customers to help themselves with online self-service applications. It's all how super.human.software helps e-business people work together. To learn more, visit www.lotus.com/superhumansoftware

SUPER.HUMAN.SOFTWARE

Lotus.

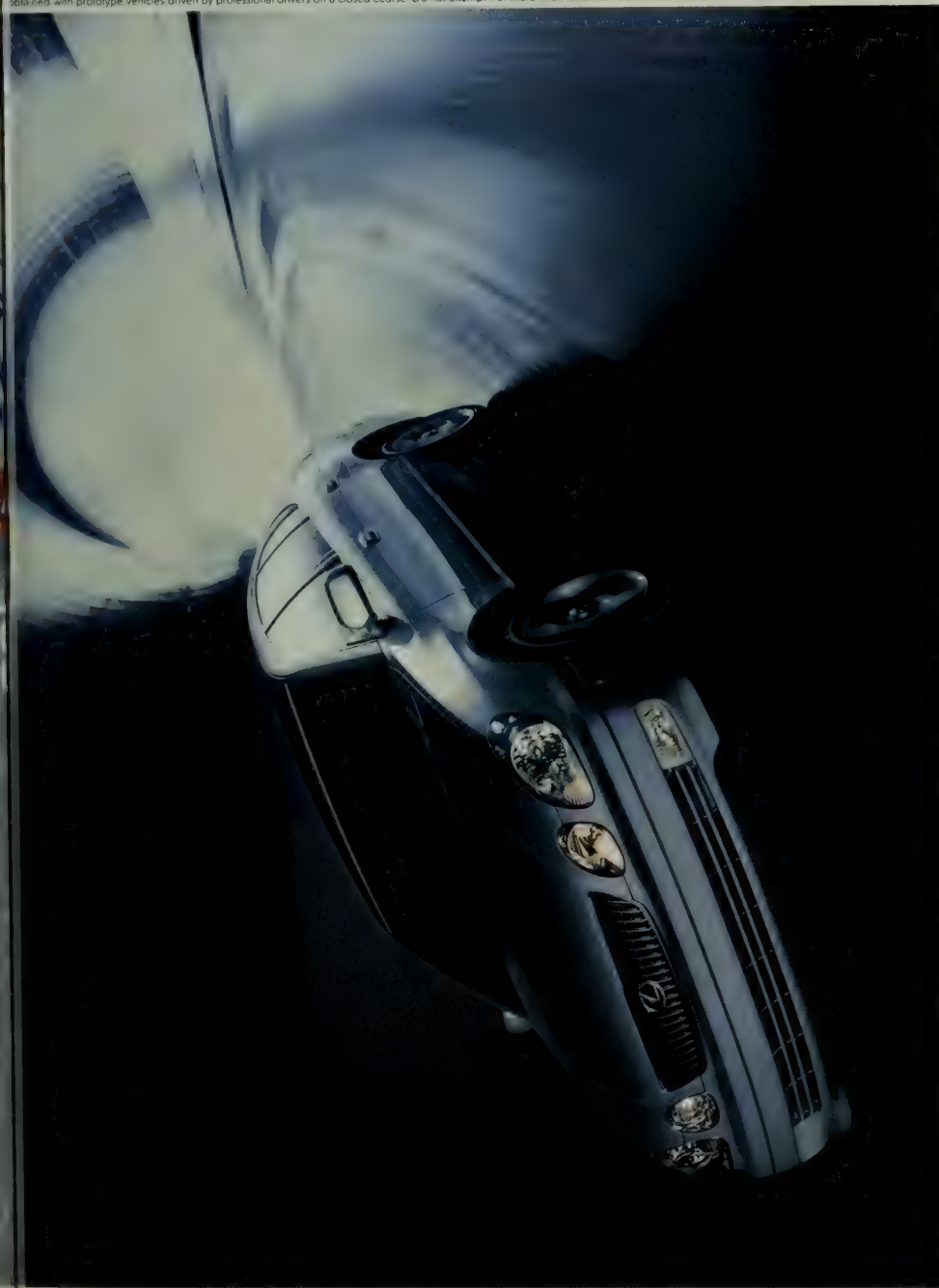
An IBM Company

©2000 Lexus, a Division of Toyota Motor Sales, U.S.A., Inc. Lexus reminds you to wear seatbelts, secure children in rear seat, obey all speed laws and drive responsibly.



Introducing the new, more powerful 2001 GS 430. It features a larger 4.3

obtained with prototype vehicles driven by professional drivers on a closed course. Do not attempt. For more information call 800-USA-LEXUS (800-872 5398)



And for an even drier mouth, arrange a test drive. **THE PASSIONATE PURSUIT OF PERFECTION.**

43 responsive handling and the power to reach 60 mph in 5.8 seconds.* Visit lexus.com for a closer look.

COVER STORY

THE TECH SLUMP

Slowing growth in tech spending, not shrinkage, is what's in store. But that will be painful enough—for the industry and the economy as a whole *page 54*



Cover Story

54 THE TECH SLUMP

The pools of money that fueled the tech-buying binge—IPOs, the debt market, and flush corporate earnings—are starting to dry up. The question is, how much of the sector's pain will spread?

60 DOWNTURN? WHAT DOWNTURN?

Why some tech outfits are chirpy

62 COMMENTARY: INFO TECH

As it goes, so goes the economy

64 COMMENTARY: THE FED

Greenspan stands ready to cut rates

66 LOW HOPES FOR NASDAQ?

Valuations may still be high

Government

40 HOW BUSH WOULD GOVERN

With a divided nation, hamstrung Congress, and weakening economy, it doesn't look like he'd have much of a honeymoon—but that may help

44 BUSH'S E-TEAM

The probable economic leaders

46 COMMENTARY: THE DEMOCRATS

Likely suspects to fill Gore's shoes

48 BLURRED LINES IN A SPLIT SENATE

A survey of likely coalitions

52 COMMENTARY: FOREIGN POLICY

What Bush's team would look like

Economic Analysis

32 ECONOMIC VIEWPOINT

It's time to consider quality again

36 ECONOMIC TRENDS

Bad-news bears get vocal, outside directors, job-changing in a boom

37 BUSINESS OUTLOOK

Not to worry: There's no meltdown around the next corner

The Corporation

69 GM'S UGLY DUCKLING

"Concept drift" begets the struggling Aztek SUV

72 A HOLE AT THE GAP

Executive flight crimps the retailer

Special Report

76 THE BEST PRODUCTS OF 2000

This year offered a range of invention from scooters to pencils

The Workplace

94 COMMENTARY: UAW

Chrysler's troubles present a golden opportunity for the union

Marketing

98 TALBOTS ON A TEAR

The fashion retailer heats cooling down its styles

Science & Technology

153 TANGLED IN HEALTH CARE

Hospitals say a new law to electronic transactions is a

157 DEVELOPMENTS TO WATCH

Acoustic nanotechnology, beta blockers, mad cow dis

Legal Affairs

160 IS THE FTC DEFENDING GO

It nixed a combo of Heinz Beech-Nut, rivals of giant

Social Issues

164 I DIDN'T GIVE AT THE OFF

Corporate philanthropy lo

Media

170 MADISON AVENUE RETREN

After a banner year in 20 companies brace for an ac

172 INTERNET ADS: THE SHAK

Growth is slowing to a cr



ARD ROAD
Bush could well
off a successful
sidency page 40

UR VENUS

says
of
oft's
ice



HOW NOT TO WORK THE WEB

Fingerhut has cost
parent Federated page 198



SHANGHAI ARRIVAL

These days, more than
100 million Chinese
are on the move page 176

BEST PRODUCTS OF 2000

Our annual
roundup of
the new,
the cute,
and the
cool

page 76



PHOTO ESSAY

Maya Lin's
calm, flowing,
tactile work
finds fans in
Corporate
America

page 224



Report

AS GREAT MIGRATION

ese peasants are leaving their
ges for the big cities

USADER FOR THE INJURED

helps factory mishap victims

ditional Finance

MENTARY: MSCI

ime Morgan Stanley Capital
national adjusted its indexes

ditional Business

A: MICROSOFT

an to rule the market flopped

S: JAPANESE CARMAKERS

oup in Europe

UTIVE SUITE: REUTERS

Tom Glocer is tech-savvy

INATIONAL OUTLOOK

corruption corroding China

tion Technology

STROM: TECHNOLOGY & YOU

ter browser for Net appliances

RATED'S FINGERHUT FIASCO

the cataloger's grandiose Web
as turned ugly

202 CAN SEGA CATCH SONY?

Dreamcast's numbers say no

204 EDS: STILL PROVING ITSELF

Revenues are not up to snuff

208 AMAZON VS. WALMART.COM

In our test, Amazon won by a mile

Management

214 LIFE AFTER GE

How two top-flight GE execs left
with breathtaking speed

218 HEADHUNTER EXTRAORDINAIRE

Gerald Roche, corporate kingmaker

Industries

220 THE BIG THREE HIT THE BRAKES

2001 looks rough for Motor City

Entertainment

221 HOW UNIVERSAL STOLE XMAS

It stuck to a smaller-is-better script

Photo Essay

224 MAYA LIN'S WORLD

The artist/architect embraces nature

BusinessWeek Lifestyle

234 TURNING SPAM INTO MINCEMEAT

New software helps you control
unsolicited e-mail

236 THE DARK SIDE OF SOY

Supplements can be risky

BusinessWeek Investor

237 THE MUTUAL FUND VANISHES

What to do when your fund merges

240 A TALK WITH MR. VALUE

John Schneider's favorite stocks

242 THE BARKER PORTFOLIO

An IBP buyout plan smells funny

245 MARCIAL: INSIDE WALL STREET

Features

12 UP FRONT

16 READERS REPORT

17 CORRECTIONS & CLARIFICATIONS

21 BOOKS

Tierney: *Darkness in El Dorado*

68 IN BUSINESS THIS WEEK

246 FIGURES OF THE WEEK

250 INDEX TO COMPANIES

252 EDITORIALS

BusinessWeek online

www.businessweek.com
America Online Keyword: BW

Updated every business day at www.businessweek.com



Winner of the 2000 National Magazine Award for General Excellence in New Media

VIDEO VIEWS

Original streaming video featuring industry experts and BW editors

■ **BUYING ONLINE:** BW's Heather Green talks about where to find the cyber bargains during this holiday shopping season



■ **TRW'S TAKE:** Recently arrived TRW president and CEO David Cote says he's girding for a "coming recession" in auto sales

TOOLS

■ **CAPITAL GAINS CALCULATOR:** Here's how to figure if you should hold, or sell and reinvest



■ **MBA SEARCH:** Which is the right business school for you and your needs?



■ **SALARY SURVEYS:** How much money should you be paying your staff?



■ **YOUR PORTFOLIO:** Check on the health of your investments



INTERACTIVE FORUMS

■ Join in ongoing discussions on B-schools, assistive technology, investing, info tech and more—or start your own

HANDHELD EDITION

Put us on your Palm! Get news from Daily Briefing, S&P data, and more. Powered by PricewaterhouseCoopers



Find quick links to everything on this page at the Dec. 18, 2000, issue's table of contents online, or go directly to www.businessweek.com/2000/00_51/online.htm

Bear vs. Bull

Is the economy heading toward recession, or is it just landing softly? BW Online's Amey Stone (bear) and Margaret Popper (bull) go head to head



DAILY BRIEFING

Business and investing news, commentary, and analysis

www.businessweek.com/bwda

ANALYSIS: Internet incubators CMGI, Safeguard, and ICG are frantically shedding dead weight

STREET WISE: After a boffo 2000, Boeing may be cruising at maximum altitude

cmg

INVESTING

Investing insights powered by S&P Personal Wealth

www.businessweek.com/invest

BARKER ONLINE: Finding value with PIMCO's John Schneider
SOUND MONEY: Are Investors fleeing the markey? Not really

SMALL BUSINESS

A resource for entrepreneurs

frontier.businessweek.com

ENTREPRENEURS: Boston's Zipcar provides clean, reliable, no-fuss vehicles for members who need wheels only some of the time



TECHNOLOGY

State of the art coverage of info tech

www.businessweek.com/technology

COMPANY CLOSEUP: Grassroots.com tries change at the top by hiring former Clinton press aide Mike McCurry



B-SCHOOLS

Business Week's exclusive rankings and profiles

www.businessweek.com/bschools

GETTING IN: INSEAD's Myriam Perignon discusses the application process

GLOBAL BUSINESS

In-depth coverage of Asia, Europe, and Latin America

www.businessweek.com/global

EYE ON JAPAN: How would Team Bush tackle Tokyo? Very gently
top adviser Lawrence Lindsey has his way

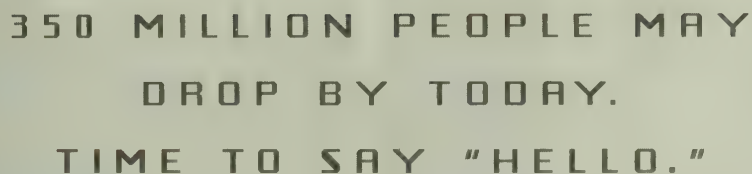
CAREERS

Advice and tools for upper-management job seekers

www.businessweek.com/careers

EXECUTIVE MEMO: Two new studies show a disconnect between many financial chiefs and their companies' IT czars—and that could be big trouble for the tech execs





350 MILLION PEOPLE MAY
DROP BY TODAY.
TIME TO SAY "HELLO."



PSINet®
THE INTERNET SUPER CARRIER



Up Front

EDITED BY ROBERT McNATT

PAY CHECK

A SELF-INFLICTED BONUS CUT

WHEN HEWLETT-PACKARD announced it had missed its fourth-quarter earnings target by a full 25% on Nov. 13, Wall Street was not happy. Well, it turns out that CEO Carleton "Carly" Fiorina shared the pain. Although HP was within range of the goals specified in its bonus program, Fiorina told the board days later that she would repay the \$625,000 second-half bonus granted to her in the pay package that brought her to HP in mid-1999, say insiders.

Her seven-person executive committee followed suit, foregoing about \$1 million in bonuses for the latest six-month period. "I was very proud of the way she handled it," says an HP director. "Good



FIORINA
gives up
\$625,000

for her," says comp expert Andrew West of WestWard Pay Strategies. "It's probably unprecedented."

Since June, Fiorina has been hammering home the need for the troops to focus on results. "If you miss your numbers, there are going to be consequences—and that means everyone," she says. Of course, she can afford the gesture. Besides a \$1 million salary and a \$3 million signing bonus, she also received stock that's now worth \$37 million. *Peter Burrows*

THE LIST NO SCROOGES HERE

Corporate giving hasn't kept pace with corporate profits this year (page 164). Gifts from individuals in 2000, however, should be about the same as in 1999, says Dwight Burlingame, of the Center on Philanthropy at Indiana University. Here are some large gifts in the fourth quarter:



DONOR	GAVE... MILLIONS/DATE	TO
LEONARD RIGGIO CEO, Barnes & Noble	\$25 Nov. 3	Dia Center for the Arts
KENNETH BEHRING Real estate developer	\$80 Sept. 19	National Museum of American History
JOHN KLUGE Founder, Metromedia	\$60 Oct. 5	Library of Congress
MARGARET McDERMOTT Widow of Texas Instruments' founder	\$32 Sept. 26	University of Texas at Dallas
JOHN BELK CEO, Belk Inc.	\$28 Oct. 6	Davidson College in North Carolina
ELI BROAD Chairman, SunAmerica	\$20 Sept. 7	School of the Arts & Architecture at UCLA

DATA: THE CHRONICLE OF PHILANTHROPY

TALK SHOW "The carriers will have to cross that sty when they come to it."

—FAA spokesman Jim Peters, commenting on the agency's decision that a pig had the right to fly first-class with its owner

CAR TALK

A KOREAN ACCENT FOR NEON?

THE 1995 NEON SUBCOMPACT symbolized the spirit of a resurgent American Chrysler after its near bankruptcy. With Chrysler once again in money-losing mode, the Neon may soon symbolize something



NEON: SOS
mission

else: an international rescue mission. The Neon, says a source close to the company, could end up being built by Hyundai.

With DaimlerChrysler (which owns 10% of Hyundai) desperate to cut costs, its Chrysler unit is open to any

idea, says Richard Schaefer, Chrysler product-development executive v-p. And it includes sharing parts and hidden platforms.

Schaum wouldn't comment on the Neon, but Chrysler may build next-generation Neons with Hyundai—perhaps as soon as the model year.

auto market is already said to be talking about a supply project. Fueling report: Dai

Chrysler has Thomas Sidlik, Chrysler executive v-p for procurement & supply and a DaimlerChrysler management board member, on Hyundai's board. One of Sidlik's former duties. He ran Chrysler's small program. *Jeff O*

AIR LINES

UNITED MAY HORN IN ON FEDEX

UNITED AIRLINES HAS HAD jetloads of trouble getting passengers to their destinations on time for months now. However, UAL's CEO James Goodwin thinks he has a way to make up for some of his airline's lost business. In late December, United launches door-to-door, same-day package delivery.

Conducted with shipping service start-up NextJet, the plan works like this: A customer goes to either company's Web site, places his order, and a courier comes to put the package on the next flight out. The box is picked up and delivered at the other end by another courier. UAL follows AMR's American Airlines, which began similar service with NextJet on Dec. 4.

NextJet says it can customers away from FedEx with its premium service like FedEx, which only guarantees same-day service certain pickup times, guarantees it anytime. also picks up directly customers, operates 24/7 the clock, and has access more flights. So the se



DELIVERY VAN: UAL sty

isn't cheap: Shipping a pound package from Chicago to New York costs \$200. it's unsettling to think your package could have easier and faster trip to you. *Michael*



UNEXPECTED GROWTH
WAS A PROBLEM.

MEET THE SOLUTION.

STORAGE FORCE

HELLO TO THE SUN STOREDGE™ T3 ARRAY. A STORAGE SOLUTION DESIGNED TO KEEP INFORMATION WHERE IT BELONGS. ON THE NETWORK, IN YOUR FACE. THE SUN T3 ARRAY IS A SCALABLE DYNAMO THAT COMES PRE-CONFIGURED AND READY TO ROCK. IT CAN EFFORTLESSLY SCALE 3 DIFFERENT WAYS, DELIVERING MIND-BOGGLING LEVELS OF PERFORMANCE, CAPACITY AND AVAILABILITY TO MATCH YOUR SWIFT GROWTH CURVE. WITH THE STOREDGE T3 ENTERPRISE ARRAY, START YOUR NETWORK SMALL OR LARGE WITH 1/2 OF THE SPACE, 5 TB OR EVEN 10 TB, AND THEN GROW IN THE INCREMENTS YOU NEED UP TO 170 TB. NETWORK MANAGEMENT STAYS SIMPLE WITH EVERY TERABYTE YOU GROW. YOU GET FULL REDUNDANCY RIGHT OUT OF THE BOX, KEEPING DATA SECURE AND ALWAYS AVAILABLE. INFORMATION GETS DELIVERED ANYWHERE, TO ANYONE, AT ANY TIME. TO BECOME A FORCE TO BE RECKONED WITH, VISIT WWW.SUN.COM/STORAGE.



We're the dot in .com

NETWORK IS THE COMPUTER.™ WWW.SUN.COM/STORAGE ©2000 SUN MICROSYSTEMS, INC. ALL RIGHTS RESERVED. SUN, SUN MICROSYSTEMS, THE SUN LOGO, THE JAVA COFFEE CUP LOGO, STOREDGE, THE NETWORK IS THE COMPUTER, AND WE'RE THE DOT IN .COM ARE TRADEMARKS OR REGISTERED TRADEMARKS OF SUN MICROSYSTEMS, INC. IN THE UNITED STATES AND OTHER COUNTRIES.

Up Front



I-WAY PATROL

CREDIT-CARD NUMBERS TO GO

IT'S A CYBERSCAM, SAYS THE government, that has cost some unnamed banks millions of dollars in a single weekend—and has also been used by small-time gangs operating overseas to grab a quick \$10,000 or so. The folks at the Treasury Dept. say, too, that it's one of those illicit operations that is hard to stop dead in its tracks.

Forget fake credit cards. In cyberspace you only need

the credit-card number. And several easily obtainable computer programs on the Web use formulas to generate those numbers. In the past, this scam didn't work well. Stores usually turned down charges of cards with no name or expiration date.

But now the scammers set up bogus merchant accounts online, make charges to the card numbers they have generated, and collect the cash.

"Anyone can become a merchant today, which is a whole new dynamic in fraud," says Norman Willox, chairman of the National Fraud Center, a consulting group in Philadelphia. The credit-card issuers are developing ways to beat the number generators, but right now they can only spot the fake charges after the fact. So is there anything that cardholders can do? "There really isn't," says Willox. "That's what's so unique about it." MasterCard would not comment on the scam. Visa did not return calls for comment. *Roy Furchgott*

OVER THERE

MAYBE THE EURO ISN'T A STUMBLEBUM

SINCE ITS INCEPTION IN 1998, the euro has fallen 30% against the dollar. A new study from the National Bureau of Economic Research, however, calls investors' rush to judgment on Europe's crossborder currency premature. After all, it took 150 years for the U.S. to achieve monetary integration. But that was before governments knew how to run a good P.R. campaign.

Hugh Rockoff, a Rutgers University economist, writes that after the U.S. adopted a

dollar standard in the late 1700s, monetary union was not truly effective until the advent of such measures as federally insured bank deposits in the 1930s. So what's the forecast for the euro? Rockoff doesn't say.

But Marie Bussing-Burks, an economist at the University of Southern Indiana who peer-reviewed Rockoff's paper, thinks euro-strength is close. Why? Because the currency itself comes out in 2002 and an upcoming ad blitz is designed to make Europeans "familiar, comfortable, and informed about their new currency." Who knows? With modern marketing, the baby euro may be on its feet in less than a century. *Laura Cohn*



DRAWN & QUARTERED



THE BRAIN DRAIN

A TRACKER TO HELP HUNT HEADHUNTERS

WITH CEOS BITING THE DUST at a relentless pace, good help is getting hard to find. Worse yet, companies must sort through and choose from hundreds of executive-level search firms to help fill those spots.

Enter the Internet. Businesses from fish markets to auto-parts makers already have online buying sites. Now it's the headhunters' turn. Recruiterlink.com, started by consultant Hunt-Scanlon Advisors of Stamford, Conn., offers a database of 400 executive headhunters, from major players like Korn/Ferry and Heidrick & Struggles to the boutique recruiters. All fill jobs with annual pay of \$125,000 and

up. The searcher plugs the specialty, geographic specifications, and other criteria to locate the ideal cruiser, whose fees, gross rules and recent assignments are constantly updated. Recruiters pay Hunt-Scanlon a \$500-a-year fee.

ROCHE
appreciates help

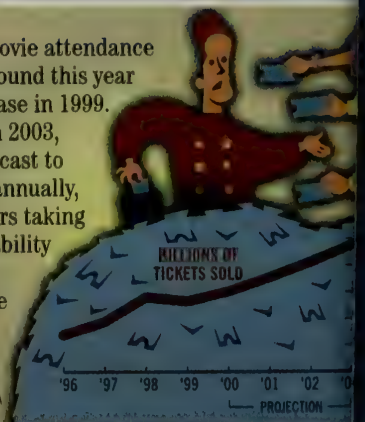


Even a headhunter of the magnitude of Heidrick's Gerry Roche, nabbed Lou Gerstner of IBM, for one, endorses recruiterlink: "Ultimately, face-to-face and flesh-prong. But this helps get us that point." Which is, of course, key to the power of the Net. *Joan O.*

THE BIG PICTURE

MOVIE MANIA Movie attendance is expected to rebound this year after a 1.1% decrease in 1999. From now through 2003, moviegoing is forecast to rise at least 2.5% annually, with more filmmakers taking advantage of the ability to order tickets in advance, via phone or Internet.

DATA: VERONIS SUHLER, THE PUBLISHING & MEDIA GROUP, MOTION PICTURE ASSOCIATION OF AMERICA



FOOTNOTES Average time men spend looking for the perfect gift: for their boss, **3 hours**; for their spouse, **45 minutes**

What do the largest ISPs know about antivirus?



Trend Micro.

For Internet Service Providers, protecting network availability is especially crucial. Slowdowns or crashes caused by viruses or spam could impact not just their own business but countless others—including many for whom the Internet is more lifeline than luxury.

That's why many of the largest ISPs and ASPs rely on Trend Micro for antivirus protection. Trend Micro's InterScan VirusWall® stops viruses at the enterprise's border—the Internet Gateway. It's part of a complete enterprise solution that scales to any size, yet can be easily managed through a single console. And it's backed by the kind of global support that helps IT managers sleep at night.

If staying online is mission critical for your company, talk to Trend Micro. We'll show you why we're the leading choice of enterprises that know security best.

For a free copy of our "Safe Computing Practices" white paper and a free evaluation CD for Trend Micro antivirus and content-security solutions, call 1-800-238-9983 or visit www.trendmicro.com



**TREND
MICRO**

your Internet VirusWall®

RECTIONS & CLARIFICATIONS

ng to take into account Emmis Communications Inc.'s 2-for-1 stock split on 25, the table in "Can Liberty Media's groove back?" (Media, Nov. 27) rectly calculated Liberty Media's loss investment in Emmis. Liberty's stake e company was valued at \$131 mil- a loss of \$19 million from its initial tment.

on of sampling for actual voting be legal, or politically acceptable, ther question.

Wolf Illing
Ottawa

LECTORAL COLLEGE ANACHRONISM

le there are some legitimate con- with abolishing the Electoral Col- it need not yield the electoral envisioned by the authors of "The of one person, one vote" (Cover Nov. 27). They paint a bleak pic- delayed inaugurations and "Pres- interruptus" because no one can- receives over 50% of the vote. re are, however, at least two well- solutions to this problem. Coun- such as France have a second of voting restricted to the top ndidates if no one candidate re- more than 50% of the popular [his guarantees that one candi- ways receives more than 50% of te. It also eliminates one of the erious problems in our current : the millions of voters who don't or their candidate of choice be- they don't want to "throw away ote" on a third-party candidate. second solution involves voting t-, second-, and third-choice can- on the same ballot. In this sys- here is an "instant runoff" be- the top two voter-getters if no ate receives more than 50% of it-choice ballots. The second- and hoice ballots are counted to de- e the winner. Either system tes the winner more than 50% popular vote—adding legitimacy new President—and would make ellent replacement for the onistic Electoral College.

Daniel Gonneau
New York

ECTING THE LAND

disparity between the popular d the Electoral College points : increasingly sharp division oc-

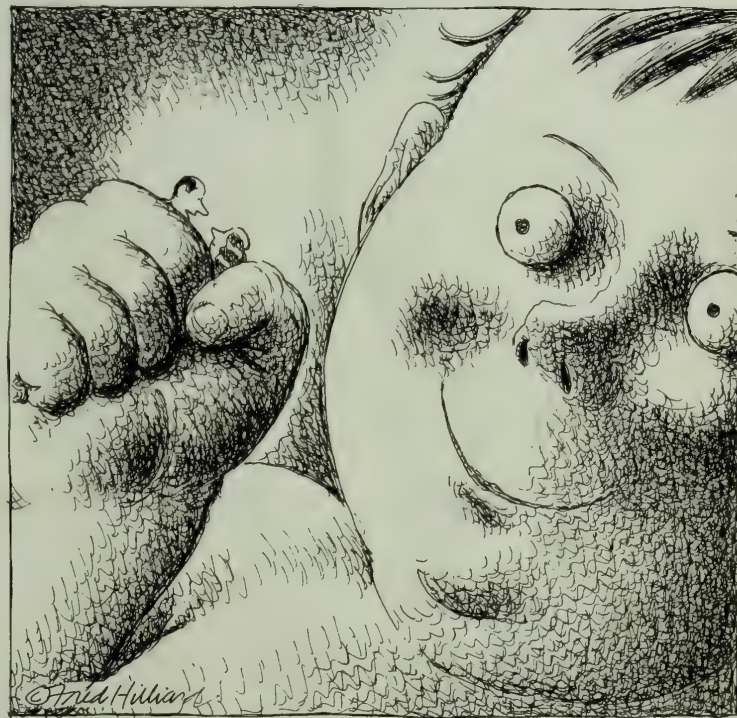
curing in this country ("Why the elec- toral college lives on," Cover Story, Nov. 20). Even more revealing is a map showing the counties that voted Re- publican vs. those that voted Demo- crat. When shown in red for Republican and blue for Democrat, the vast ma- jority of the land mass of the U.S. is red. The blue areas are the heavily pop- ulated areas.

This division is getting wider every day. There is a sort of "reverse dis- crimination" among our urban elite. In

today's urban centers, someone who lives in a rural area, has been married to the same person since high school, has children, likes to hunt and fish, at- tends church, has kids in scouting, etc., is looked upon as some kind of dinosaur. If not for the Electoral College, the en- tire nation would be governed by New York and Los Angeles. Thank God it hasn't come to that yet.

Out here on the West Coast, Seattle controls the politics of the entire state of Washington; Portland governs Oregon;

©2000 The Williams Companies, Inc.



"Though in its infancy, this customer has outgrown us, Vera. Luckily, it's not too late to link with Williams, the BIGGEST next-generation network in the U.S."

Come and grow with Williams Communications. And never worry about customers outgrowing you. We help ISPs enter markets fast. Or ASPs deliver bandwidth-hungry apps ASAP. We empower companies with big-time bandwidth, plus innovative equipment solutions.

Williams
COMMUNICATIONS™

1-800-WILLIAMS • WWW.WILLIAMSCOMMUNICATIONS.COM • NYSE: WMB & WCG

Readers Report

L.A. rules rural California. The cities have no right to make the rules for all of us. But that's exactly what happens when a handful of large cities elects the vast majority of our politicians. We not only need to keep the Electoral College, we need to expand on the ideas it represents.

Jon Robson
Battle Ground, Wash.

THE SEC'S VICTORY IS A HOLLOW ONE

Regarding "How Levitt won the accounting wars," (News: Analysis & Commentary, Nov. 27): With all due respect, Arthur Levitt has won nothing. Those of us in the accounting profession doubt seriously whether the status quo will be changed at all. In the end, the Big Five will be able to maintain their monopoly on public companies. With some exceptions, local and regional firms are shut out from auditing public companies—other than so-called Bulletin Board companies [very small companies trading on the NASDAQ]. The real issue, which Mr. Levitt failed to address, is whether it is wise to have the entire reporting system of our pub-

lic financial market controlled by those firms. The Securities & Exchange Commission should propose a plan to break the stranglehold these accounting giants have on their public clients by opening up the competition to other qualified firms.

Any plan the SEC might propose in this regard should address the reasons why the Big Five have a monopoly. Neither the exchanges nor the SEC prohibit a local or regional firm from providing an audit of a public company. Instead, the underwriters in an initial public offering or secondary offering usually insist that a Big Five firm (or at least a large national firm) audit the company's statements so as to avoid a negative reaction by the financial analysts. Above all else, what an analyst should be concerned with is the depth of the accountant's pocket if the statements are wrong. Most local firms carry errors and omissions insurance of less than \$10 million, which is far less than any Big Five firm. If the SEC saw fit to empower more qualified accountants with oversight responsibilities of public companies, it should work with the American Institute of Certified Public Accountants to create an insurance pool for non-Big

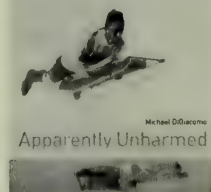
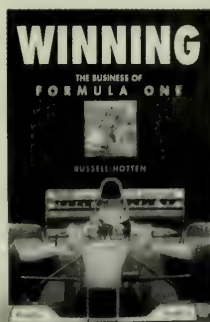
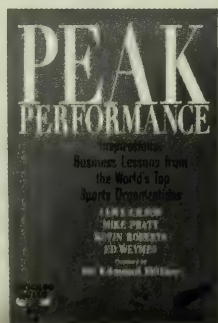
Five firms to audit public companies.
Stephen P. M...
Managing Par...
Squar, Milner, Reehl William...
Newport Beach, C...

THIS BUNNY IS HARDLY WINDING DOWN

I was disappointed at how little seemed to understand the story of Playboy Enterprises Inc. ("Playboy's no energized bunny," News: Analysis & Commentary, Dec. 4). The article seemed to revolve around four points. The company keeps changing its strategy. 2) The magazine is in trouble. The brand is aging and hasn't connected to younger consumers. 4) Our expansion into television and online has failed. Every one of those conclusions is wrong.

Since I became CEO at the end of the 1980s, we have consistently proclaimed our strategy as being one of leveraging the magazine brand into the high-growth, higher-margin electronic entertainment businesses. And *Playboy* remains the best-selling monthly magazine for men in the U.S. and the world, closing a third year of advertising revenue growth at a rate base of 3.15

Intelligent sports fans, 4. Dumb jocks, 0.



Four thought-provoking books about the world of sports, from leadership lessons of leading teams, to the inside secrets of Formula One; from the rugged arena of professional soccer, to St. Moritz's extreme Cresta Run. More at www.etextere.com

TEXT



Business Week

Digital Economy Conference

*Tune into this special
Nightly Business Report
Interview Series on your
public television station
December 12, 13 and 14*

**NIGHTLY
BUSINESS
REPORT**

**Television's #1
Daily Business News Program.**

Nightly Business Report is produced by
WPBT2/Miami in association with BRIDGE
Nationally underwritten by:
A.G. Edwards, Inc.,
Compaq Computer Corporation,
and Franklin Templeton Investments

lion, at which it has been for five years, and has projected profit growth for the year. And it has been a strong year in terms of editorial coups, from Jesse Ventura to Darva Conger.

As to No.3, the magazine remains among the most favorite magazines by men in their 20s, according to the *Cassandra Report*. Between spring, 2000, and fall, 2000, Market Research Inc. reports, *Playboy* experienced a 22.8% increase in readers currently attending college. Our online business, which attracts more than 4 million unique visitors each month, is built on its appeal to the 18-to-34-year-old audience. We have had a 100% increase in apparel sales through such hip stores as Fred Segal, Patricia Field, and Urban Outfitters.

Regarding No.4, we are the only magazine company to have successfully transitioned into the lucrative world of cable TV. Through the first nine months of this year, Playboy TV Networks made \$18.5 million in operating income, and its results didn't "slide" from last year. Last year included the first payment of a \$100 million deal for international TV rights. But your writer seems to be penalizing us for the fact that the payment stream was front-loaded and doesn't even mention the remaining \$70 million, paid this year through 2004.

As to online, we never projected a profit this year. We are on plan investing \$25 million this year. Now that we're out of registration, we've been able to share our plans for cutting the loss in half in 2001 and being profitable in 2002. We doubled revenues again for the first nine months, and in a world full of all kinds of sites, including all those pornographic sites mentioned in the piece, *Playboy.com* is the No.1 lifestyle and entertainment destination on the Web for men.

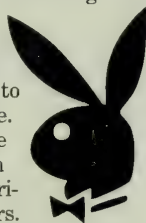
Christie Hefner
Chairman & Chief Executive
Playboy Enterprises Inc.
Chicago

STARWOOD'S STAR ISN'T RISING THAT FAST

"At Starwood, the CEO is in the details" (People, Nov. 20) reports that Starwood Hotels & Resorts Worldwide Inc. is "pushing ahead of its rivals in market share." Nothing can be further from the truth, and this claim does a disservice to the two industry leaders, Hilton and Marriott.

According to the latest data from Smith Travel Research, the facts are

these. When looking at the half of the U.S. hotel industry that includes the upscale and midscale segments (where the big companies like Hilton, Marriott, and Starwood compete), Hilton and Marriott and the brands owned and operated by these companies, each claim about 15% market share. Starwood and its brands bring up the rear at approximately 5%.



Just as important is each company's share of new construction in the upscale and midscale segments. Hilton and Marriott each command approximately 22%, while Starwood is under 3%. In other words, Hilton Hotels Corp. and Marriott International Inc. are each gaining market share, while Starwood is, in reality, losing market share.

Marc A. Grossman
Senior Vice-President
for Corporate Affairs
Hilton Hotels Corp.
Beverly Hills, Calif.

Editor's note: We should have stated that Starwood is gaining on its rivals in terms of occupancy rates not market share. In the third quarter, Starwood reported that its occupancy rate for North American owned hotels grew 3.3 percentage points, to 77.7%. Hilton reported that its occupancy rate for U.S. owned or operated hotels increased 2.4 percentage points to 76.9% during that time. Marriott International reported that its occupancy rate for U.S. operated hotels increased more than one percentage point to 79.7% in the third quarter.

WHAT GUN MAGAZINES DON'T REVEAL ABOUT GUN OWNERSHIP

Regarding "New ammo in the gun debate" (Economic Trends, Nov. 27), I see a serious problem with Mark Duggan's use of circulation data of one of the nation's largest gun magazines as a proxy for gun ownership levels and shifts.

The focus of Duggan's study is the criminal uses of guns. It would seem self-evident that when crime is low, most people buy guns to hunt, target shoot, and the like. Personal defense may be an issue, but it is most often a minor one. In this situation, the circulation of a large gun magazine should be an excellent proxy for gun ownership, because it is hunting, target shooting, and gun collecting that are the topics of most of the articles.

As crime rises, however, more and more people buy (or steal) guns to commit crimes or buy guns to defend themselves. These new gun owners typically have little or no interest in the sporting

uses of firearms. As a result, they have little or no interest in or motivation to buy a large-circulation gun magazine.

Thus Duggan's measurement of gun ownership seems fatally flawed by its disconnect between the various uses of guns. He might just as well have tried to prove a connection between crime and gun ownership by studying the circulation of *BUSINESS WEEK*.

Bruce D.
Calabasas Hills, Ca

Mark Duggan assumes that most readers of gun magazines must necessarily own guns; indeed, I've found opposite to be true. Most people who read gun magazines are people who, for various reasons, do not or cannot own guns. Minors, for one, make up a significant segment, perhaps a majority of this group. Many boys find guns fascinating, but federal law prohibits anyone under 18 from purchasing and possessing a firearm. Equally important, many people simply cannot afford the generally high cost of the firearms showcased in such magazines.

By Duggan's logic, most readers of the many racing magazines on the market must own race cars, or most readers of aviation magazines own airplanes.

William and Melissa Jor
San Jose, C

BusinessWeek online

The full text of Business Week, the Business Week Daily Briefing, and five years of BW archives are available on the World Wide Web at:
www.businessweek.com
and on America Online at Keyword: BW.

HOW TO REACH BUSINESS WEEK

LETTERS FOR READERS REPORT

All letters must include an address and daytime or evening phone numbers. We reserve the right to edit letters for clarity and space and to use them in all electronic and print editions.

Mail: Business Week, 1221 Avenue of the Americas
43rd floor, New York, NY 10020

Fax: (212) 512-6458

Internet: bwreader@businessweek.com

America Online: readersbw

SUBSCRIBER SERVICES

For individual subscriptions, corporate subscription renewals, changes or problems, and single copies.

Phone: (800) 635-1200 or (609) 426-7500

Fax: (609) 426-7623

Internet: bwcsvt@businessweek.com

Library fee-based services: (212) 512-6704

REPRINTS AND COPYRIGHT PERMISSIONS

For custom reprints (minimum order of 1,000) contact:
(212) 512-3148

Fax: (212) 512-2337

Internet: www.businessweek.com/reprints/

For permission contact:

Phone: (212) 512-4801

Fax: (212) 512-4938

NESS IN EL DORADO:

Scientists and Journalists Devastated the Amazon

Patrick Tierney
n • 417pp • \$27.95

TROCITIES IN THE AMAZON?

I never forget the drama of flying over the dense Amazon jungle in a Brazilian army helicopter and landing in a remote clearing. We followed a band of Yanomami Indians down a steep bankment, across a stream, and through tangled vegetation until we reached a large, oval *shabono*, the hemispherical communal dwelling at the center of the village. Inside the dark, smoky interior, the two Indian affairs agency doctors were accompanying examined two men lying listlessly in their hammocks, feverish with malaria. One doctor stayed overnight to diagnose other cases, while the other waited out the next day. The other doctor and I raced back to the waiting helicopter and on to another settlement at Paapiu.

It was 1991, and I was there to write about the environmental destruction and the introduction to the area by tens of thousands of gold miners. These invaders were working illegally in the virgin forest of Brazil and Venezuela where some 24,000 members of the Western hemisphere's most primitive and isolated tribe lived. At the time the miners appeared to represent the greatest danger to the Yanomami way of life. But in a new book that has shocked waves through academia, investigative journalist Patrick Tierney makes a persuasive argument that anthropologists for several decades engaged in unethical practices that put Yanomami culture at even greater risk. *Darkness in El Dorado: How Scientists and Journalists Devastated the Amazon* is a highly readable, damning work that has prompted the American Anthropological Association (AAA) to announce a probe of the allegations.

Tierney shows how anthropologists and documentary filmmakers thoroughly corrupted the Yanomami by showering them with coveted steel goods—machetes, knives, guns, and cooking

utensils—that apparently helped spark conflicts with rival communities. Zealous documentary filmmakers paid Indians to stage mock battles, complete with faked sound effects and stage-set “villages,” then presented the onscreen fighting as authentic. A *Nova*/BBC crew flew in an extra camera from London to film the weeks-long agony of a dying mother and her newborn baby—but callously failed to transport them to a nearby clinic. The highlight of the film, *Warriors of the Amazon*, was the mother's cremation ceremony.

Tierney became interested in Latin American culture in 1968, when anthropologist Napoleon Chagnon published *Yanomamo: The Fierce People*. Giving graphic details of the Indians' hallucinogenic drug use, warfare, and women-stealing raids on other villages, Chagnon argued that violent Yanomami men had more female partners and more offspring, and thus became dominant in their communities. His book became a classic in anthropological literature, selling over 1 million copies, more than Margaret Mead's legendary *Coming of Age in Samoa*. Chagnon became a larger-than-life figure to a generation of anthropologists.

But after spending 11 years researching his story on the Yanomami in the field, Tierney, initially an admirer, came to loathe Chagnon's practices. Tierney's not the first critic: Over the years, a number of anthropologists have cast doubt on Chagnon's thesis that the Yanomami are particularly fierce. (Indeed, Chagnon removed his subtitle *The Fierce People* from later editions.) But Tierney offers painstaking research—including hundreds of interviews with

missionaries, anthropologists, and the Yanomami themselves—presenting difficult-to-refute evidence that Chagnon and others misrepresented the nature of the indigenous group to suit their own agenda. Tierney's calculations indicate Chagnon may have vastly overstated the “violence quotient” of some villages by failing to count all of the men.

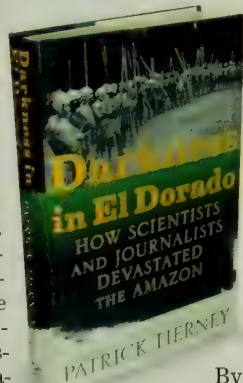
Chagnon, now retired from the University of California Santa Barbara, says Tierney's accusations are “preposterous.” His supporters have posted point-by-point rebuttals of Tierney's conclusions on the Internet (www.anth.ucsb.edu/chagnon.html), noting that he is not a trained anthropologist and thus is ill-equipped to challenge Chagnon's established thesis on Yanomami violence. But few have stepped forward to defend Chagnon's research methods. Even more serious than Chagnon's “checkbox anthropology,” which rewarded cooperative Yanomami with everything from fishhooks to outboard motors, was his method for tracing the group's lineage: Tierney says he paid people to tell him

the names of their dead ancestors, a revelation that is taboo in Yanomami culture. If that failed, he approached rival communities to get the information, aggravating tension. Far from being a quiet observer, Chagnon was a dominant presence: Villagers say he would descend into communities, God-like and armed with a shotgun, via helicopters that sometimes blew the roofs off buildings.

By the early 1990s, anthropologists in Brazil and Venezuela had come to resent Chagnon for perpetuating the myth of Yanomami violence, because it provided both governments a pretext for withdrawing protection for the tribe against encroaching gold miners. For the past decade, they have blocked Chagnon from visiting the Amazon.

But Chagnon wasn't the only outsider in Yanomami land. Tierney describes at length the debauchery of a French anthropologist, Jacques Lizot, who allegedly had sexual relations with young Yanomami boys during his 25 years of field research.

Tierney's assertions have drawn support from a number of academics. Ter-



SCIENTISTS AND THE MEDIA, TIERNEY WRITES, CORRUPTED AND HUMILIATED THE YANOMAMI

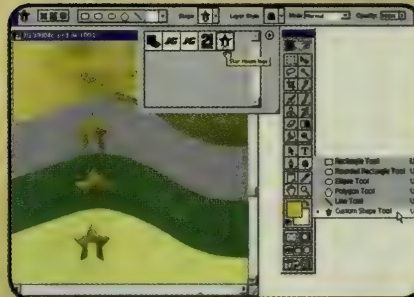
Draw a line from the application to

1.



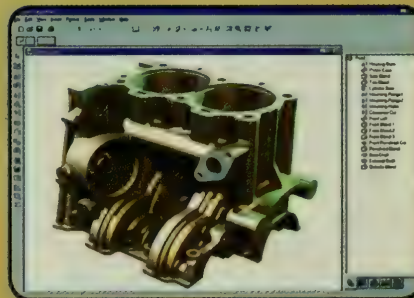
Microsoft Office 2000

2.



Adobe Photoshop 6.0

3.



Unigraphics Solutions' Solid Edge

processor that can now run it faster.

A.



B.



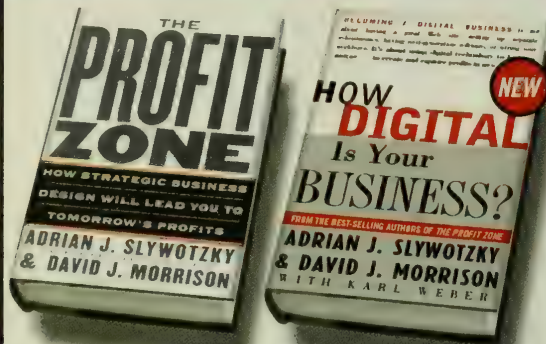
C.



Whatever applications you choose, run them on a PC based on the new, faster, 1.2 GHz AMD Athlon™ processor. AMD Athlon was the first processor to break the gigahertz barrier. And with performance-enhancing cache memory and faster speeds, they're better than ever. No wonder 4 of the world's top 5 computer manufacturers rely on AMD Athlon processors. To see how you can increase your productivity and run applications faster, head straight for www.amd.com/faster.

Solid Edge is a trademark of Unigraphics Solutions, Inc. Other product names used are for identification purposes only and may be trademarks of their respective companies.

Looking for your profit zone in the digital economy? You just found it.



MERCER
Management Consulting

Also available as an ebook and a Random House AudioBook



The Profit Zone showed
you how exceptional
companies reinvent
themselves to stay
ahead of the competition—
and in the profit zone.
Now, *How Digital Is Your
Business?* offers insights
on how to capture your
digital profit zone—by
harnessing technology to
create new and unbeatable
value propositions for
customers.

For more information and
to download excerpts, visit:
www.howdigitalisyourbusiness.com

Almost as bright as the sun...

Night Piercer II™

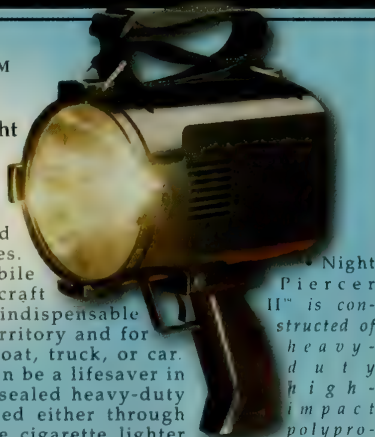
1 Million CandlePower Halogen Spotlight
only \$79⁹⁵*

*But read this ad for an even better deal!

The Night Piercer II™ casts a focused beam that can be seen for many miles. It is 20-times brighter than automobile headlights, more luminous than aircraft landing lights. This powerful light is indispensable for tracking and exploring unknown territory and for any contingencies at night, in plane, boat, truck, or car. With its red gel, the Night Piercer II™ can be a lifesaver in any emergency. The unit contains two sealed heavy-duty lead-acid batteries and can be recharged either through your household current or through the cigarette lighter socket of your car, RV or boat. Both adapters are included.

We import Night Piercers II™ in very large quantities and are therefore able to bring you this outstanding accessory for just \$79.95. (Compare with our competitor's price of \$99!). But we have an even better deal: Buy two for just \$159.90 and we'll send you a third one, with our compliments—absolutely FREE! The Night Piercer II™ should be your companion on all your travels. Don't leave home without it—order it today!

You may order by toll-free phone, by mail, or by fax and pay by check or Visa/MasterCard. Please give order number #1088F875. Add ship./ins. charge of \$9.95 for one unit or \$19.90 for three units (plus sales tax for CA delivery). You have 30-day refund and one-year warranty. We do not refund postage. For customer service or wholesale information, please call (415) 643-2810.



Night Piercer II™ is constructed of heavy-duty high-impact polypropylene. It comes with a super-bright 100-watt halogen bulb and red gel for use as warning light. 110-volt and 12-volt rechargers are also included.

since 1967
haverhills®

2360 Third St., San Francisco, CA 94107

Order by toll-free phone: (800) 797-7367 or (fastest!) by fax: (415) 643-2818
Visit our website at www.haverhills.com

Books

ence Turner, an Amazon expert now at Cornell University, told Tierney that 'warned the AAA back in 1994 that 'have no right to castigate the gold rers, the military, the missionaries, the governments of South America we're afraid to look at the role of own anthropologists in the Yanom tragedy. Unfortunately, Napoleon Chagnon has caused a great deal harm to the Yanomami and the chances of survival.'

But Tierney falls short when he launches his most damning charge: Chagnon and the late University of Michigan human geneticist James H. H. deliberately tested a dangerous measles vaccine on the immune-weak Yanomami in 1968, causing hundreds of deaths. Tierney believes—but cannot prove—that Neel wanted to see if an isolated group had adequate immune protection to survive such an outbreak. Although the measles vaccine Neel used, the monkey B live virus, was later discontinued, scientists say there is no evidence that it could cause an epidemic. The National Academy of Sciences issued a rebuttal of Tierney's measles epidemic charges and says his book is riddled with factual errors and innuendo.

However, the Academy did not rule out another of Tierney's claims: Neel and Chagnon acted unethically in collecting thousands of blood, urine, stool samples from the Yanomami in 1965 to 1972, presumably without full consent. Neel was working for the Atomic Bomb Casualty Commission, and these samples allowed him to conduct the gene mutation rates of an isolated population group with those of bomb survivors in Japan.

Tierney underwent a four-day grilling at the November AAA colloquium in San Francisco, during a symposium called to discuss his book's charges. While acknowledging that he may have ruined some reputations, Tierney made no apologies for his own role: blasting the scientific community for its carelessness in studying—and exploiting—the Yanomami, and censuring journalists who readily went along with Chagnon's myth of the ignoble savages.

Although some of *Darkness Before Dawn*'s claims may well be disputed, the volume is a valuable contribution to the debate over anthropological ethics. Certainly, those who read this book will never again watch a film on indigenous groups without wondering how much of the action has been staged.

BY GERRI

Mexico City bureau chief Smith
in Brazil for seven years.

The path to e-business success is easy to follow.

BusinessWeek online



BusinessWeek
e.biz

*Get on the fast-track with BusinessWeek e.biz, our resource
for everything you need to know about e-business.*

ebiz.businessweek.com

Business moves at lightning speed. To stay ahead of it, I need e.biz at businessweek.com. The channel that's passed at offering timely information, analysis, and tools an use every day. BusinessWeek e.biz's in-depth coverage archives let you look into the future and learn from the Our award winning editorial staff makes sure you know s important on a daily basis. And best of all, it's all free

to BusinessWeek subscribers. One click and you're armed with the power only BusinessWeek Online can offer to help make your e-business ventures successful. And make you a leader worth following. Activate your free subscription today.



**2000 National Magazine Award Winner
General Excellence in New Media**

Keyword: BusinessWeek
Net Keyword: BusinessWeek ebiz

A Division of The McGraw-Hill Companies



SIEMENS



If you ride this, you need

Automation • Automotive Electronics • Energy • Information and Communications • Lighting • Medical Systems • Power Generation • Transportation

As long as people and goods are moving from Point A to Point B, chances are they're riding with Siemens. Siemens technology is part of major transportation projects in every corner of the world. Whether it's locomotives or commuter

trains, ship engines or automotive electronics, highway traffic management or complete mass transit systems, Siemens is either making it, or making it happen. We're the company that keeps everything moving.

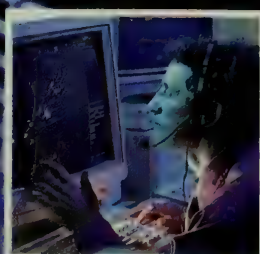
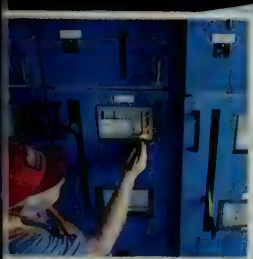
We're Siemens. We can do that.™



this

this

and this.



www.us.siemens.com

BY STEPHEN H. WILDSTROM

tech&you@businessweek.com

A BROWSER FOR NOTHING-BUT-NET FOLK



Until Netscape 6, Net gizmos made do with an insufficient browser from Spyglass

When Netscape announced in November that the latest version of its Web browser was finally finished, my temptation was to yawn. After all, Netscape's once overwhelming share of the browser market was down to 25% and falling. And many application and Web site developers have stopped trying to accommodate Netscape's deficiencies and now recommend Microsoft Internet Explorer instead.

As far as desktops or laptops are concerned, my ennui was well justified. Netscape 6 for Windows, Macintosh, and Linux is a big improvement over its two-year-old predecessor. But it has some major defects that effectively rule it out for most corporate users who use Netscape Communicator for mail. All the new features really do is allow Netscape to catch up with IE.

Fortunately for Netscape, the new version really isn't about PCs but Internet appliances, which are designed to cruise the Web, handle e-mail, and not much else. I have been disappointed by the recent crop of Net appliances, mainly because of their underpowered and out-of-date browsers. Microsoft has largely stayed on the sidelines of the non-PC market by limiting the use of its lightweight browser to products such as the Compaq iPAQ Home Internet Appliance that run only on Microsoft's online network, MSN. While waiting for Netscape 6 and a competing browser from Norway's Opera Software, appliance makers have had to make do with a bare-bones browser from Spyglass.

HELP COMING. You will be seeing several products built around the new Netscape browser early next year. They include the Connected Touchpad from Gateway and America Online (Netscape's parent company) and the Dot.Station from Intel. 3Com plans use the automatic upgrade ability of its Ergo Audrey appliance to move from a Spyglass browser to Netscape once it has adapted the Netscape software.

If the appliance adaptations of Netscape 6 can

retain the key features of the desktop version can make an important difference. On PCs, version 6 is the first highly customizable Netscape offering. For example, its standard look of metallic blue trim and modernized buttons, for those like me who prefer it, there's an option to make it look just like previous versions of the browser. An optional customizable palette down the left side of the browser window shows stock tips, favorite Net destinations, an AOL buddy list, or assorted other goodies. (Or make them disappear.) This flexibility runs much deeper and will let appliance makers shape the program to their needs.

Other important changes are invisible to users. The past couple versions of Internet Explorer have supported new Web technologies such as dynamic HTML that give increased flexibility to designers. For one thing, they make it relatively easy to update elements on a page without reloading the entire page—and thus, they make complicated screens display very quickly. These technologies are especially important for Web-based applications such as Intuit's Quickbase online database (www.quickbase.com). Netscape has finally caught up, but it may be too late to stem the defections to IE. The ability to handle these complex pages properly would be a breakthrough for appliances.

COMMUNICATION BREAKDOWN. On the desktop, however, the new Netscape version actually



regresses in some ways important to corporate users. All versions of Netscape's integrated mail program for the past couple of years let users type in a name that was then matched to an e-mail address using a corporate directory. This feature has been left out of Netscape 6. Also lost is any convenient way to download whole folders of messages for work offline, say, while on an airplane. Netscape says that version 6 is intended as a consumer product, not one that corporate features such as directory services and secure mail would be

restored in the next version. Meanwhile, corporate users are stuck with older, buggy versions. Or they can join the migration to the Outlook Express mail program.

It's very unlikely that Netscape can ever capture the ground it lost to Microsoft on the desktop. Fortunately for Netscape, however, its new browser is well-positioned to be a hot product in what could become the fastest growing market. Internet appliances have been held back for lack of a good browser, and now they may have one.

BusinessWeek online
FOR A COLLECTION OF
PAST COLUMNS and
online-only reviews of
technology products, go
to Technology & You at
www.businessweek.com/technology/



Keep pace.



Find peace.



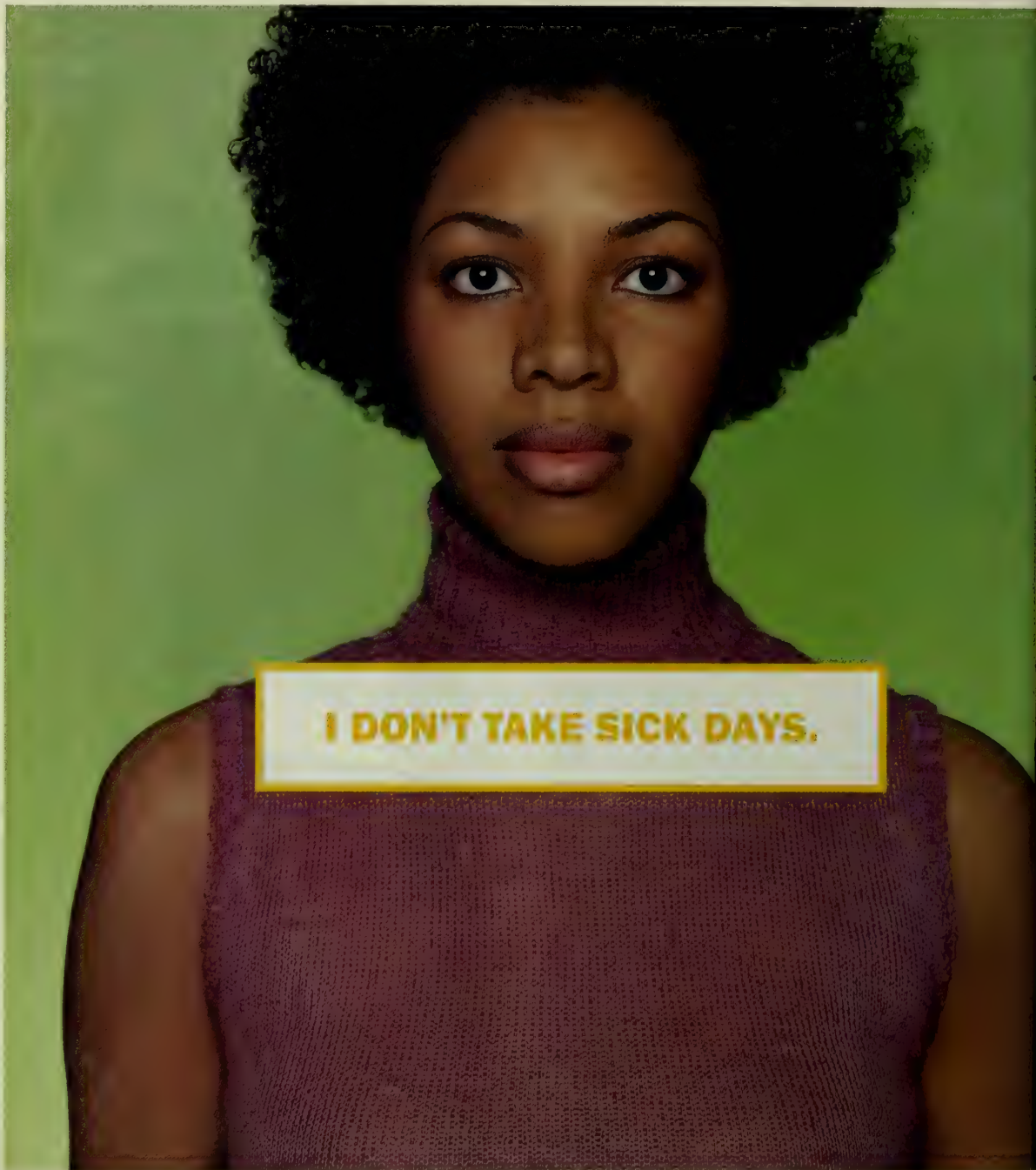
Hear about the all-new Mercury Mountaineer.

Whether you're charging hard or just recharging — the completely redesigned 2002 Mercury Mountaineer adapts to fit your needs. With innovative features like a standard third-row seat that folds down and available power adjustable foot pedals. The 2002 Mercury Mountaineer premieres spring 2001. So you can get a closer look now — plus receive a gift — by visiting the Web site or calling 888 748-8804. For more information and a gift, visit www.2002mountaineer.com/a



Mercury
LIVE LIFE
IN YOUR
OWN LANE

Not recommended. Offer valid until 4/30/01 or while supplies last. Limit one gift per household. Must be 18 years or older with valid driver's license. Mercury not responsible for lost or undelivered mail. 2002 Mercury Mountaineer available spring 2001.



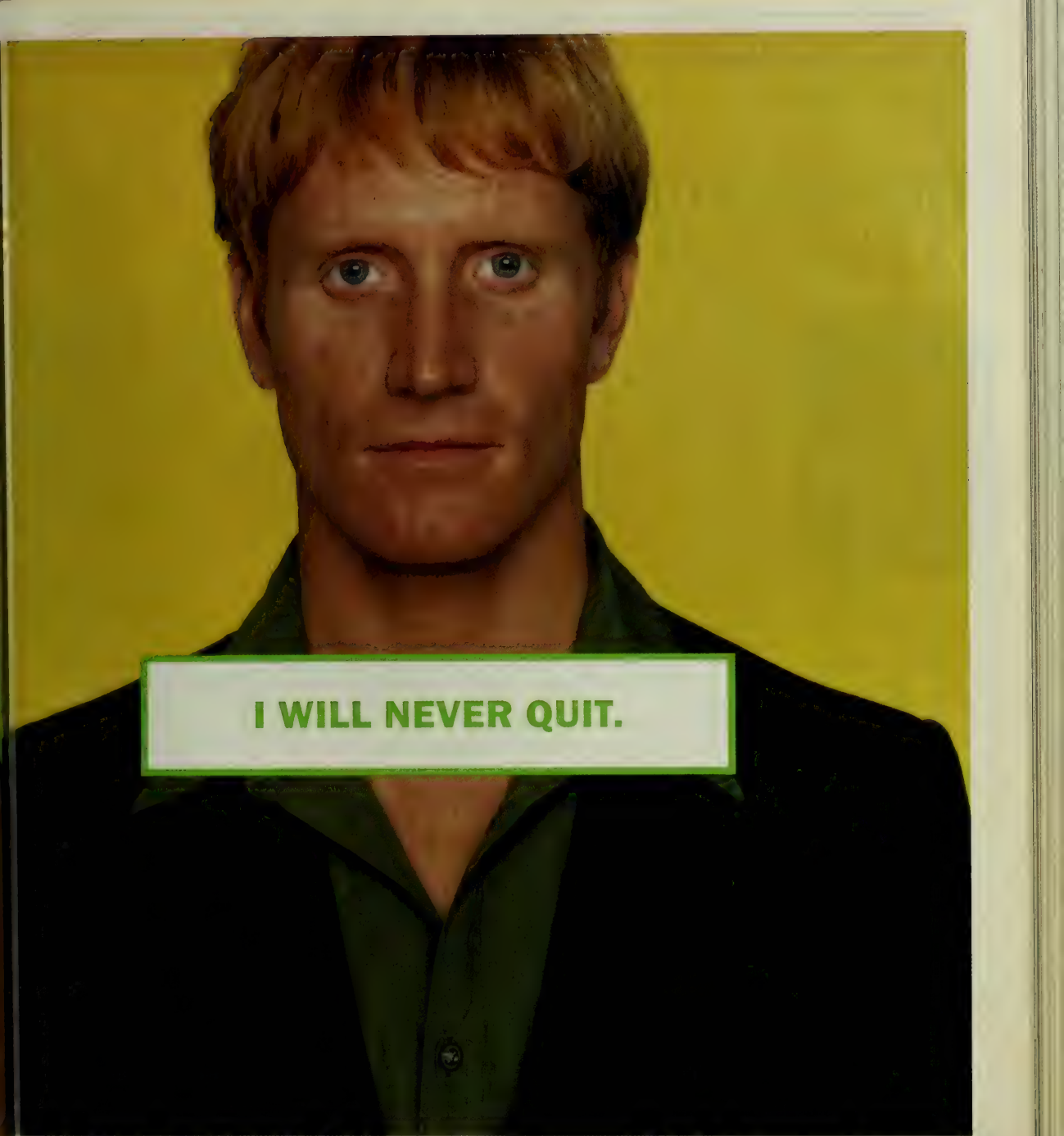
I DON'T TAKE SICK DAYS.

CHANGE WHAT YOUR SOFTWARE IS CAPABLE OF DOING

Today's business needs the reliability of Microsoft® Windows® 2000 Professional. If you want your people to work faster. Work mobile. Work smarter. They need the most reliable PC operating system that works all the time. Windows 2000 Professional is up to 30% faster and, based upon NSTL test results, 13 times more reliable than Windows 98.* So at a time when any competitive edge can make a difference, your people will spend far less time calling the help desk, and far more time working.



*For full reports and test results see: eTesting Labs (formerly ZD Labs) test results November 1999 (<http://cgi.zdnet.com/slink?18431>), and NSTL, February 2000 (www.nstl.com/html/windows_2000).
© 2000 Microsoft Corporation. All rights reserved. Microsoft, Windows, and the Windows logo are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
The names of actual companies and products mentioned herein may be the trademarks of their respective owners.



I WILL NEVER QUIT.

DO YOU CHANGE WHAT YOUR PEOPLE ARE CAPABLE OF DOING.

productive. Windows 2000 Professional was designed specifically for
internet-based technology and gives your people the reliability, speed,
ability required to do their jobs. Microsoft Windows 2000 Professional.
ness. All the time. For information on upgrading your business, talk
professional or visit microsoft.com/windows2000/pro
for the Agile Business.

Microsoft

BY JEFFREY E. GARTEN

THE WAR FOR BETTER QUALITY IS FAR FROM WON



TOO BUSY?
Execs today are obsessed with short-term share prices and reaching new markets at warp speed. Quality is no longer a top priority, but it should be

Whatever happened to the hoopla surrounding quality control in Corporate America? Has the issue slipped from the front page because the war against big-time defects has been won? Or could Corporate America be deluding itself into thinking that quality no longer is the huge problem it once was?

It was only a decade ago that CEOs from Motorola, Ford, Xerox, and other U.S. companies undertook a herculean effort to improve their products in the face of such formidable Japanese competitors as Toyota, Canon, and NEC. They embraced such concepts as Total Quality Control, quality-focused teams, and new ways to find and fix problems on assembly lines. Quality gurus such as W. Edwards Deming achieved star status. New research centers sprang up, and with great fanfare the Commerce Dept. established the prestigious Malcolm Baldrige National Quality Award.

Little of this excitement remains. John Yochelson, president of the CEO-laden Council on Competitiveness, explains why. He says his members no longer look at quality as a competitive differentiator because they now understand it is merely the price of entry. Roger G. Ackerman, chairman and CEO of Corning Inc., believes that we hear less now about quality because it has become deeply embedded in most companies' processes. The same goes for Robert A. Pritzker, CEO of the privately held Marmon Group, consisting of more than 100 companies in businesses ranging from railway equipment to medical devices.

Ray Stata, chairman of Analog Devices Inc. and a founder of the Center for Quality of Management in Cambridge, Mass., provides another perspective. He says that since most of the technical problems of manufacturing have been solved, the emphasis has shifted to the quality of management and organization. Harry S. Hertz, who administers the Baldrige Award, agrees.

TIRE FIASCO. There has been other progress too. Robotics have reduced manufacturing flaws, and certain microchips can spot problems before consumers do. International certification of minimum quality standards is also on the rise.

But surely it's too soon to say that the manufacturing sector is in great shape. Just think about recent events: the Firestone tire fiasco, new investigations into Goodyear, crashing servers at Sun Microsystems, recalls of circuit boards by Intel. Consider Federal Aviation Administration charges of systemic manufacturing control problems at Boeing Co., or the nearly

10% of cars on the road regularly being recalled.

But even if these don't represent widespread manufacturing shortcomings, America is predominantly a service economy, and as a BUSINESS WEEK cover story revealed ("Why Service Stinks," Oct. 23), surveys show that an increasing number of customers feel poorly treated by banks, airlines, hotels, and retailers. Other kinds of quality problems in services include lapses in compliance and monitoring of illegal deposits by such institutions as Citigroup, or the number of poorly managed audits.

As we enter the Internet Age, moreover, there is as yet no rigorous analytical framework for the new range of quality problems relating to e-business. What are we to make of the high rate of product-delivery failures from e-tailers last Christmas (16% by some accounts)? When it comes to new business-to-business auction markets for supplies, how will buyers ensure the highest quality when the products they purchase are often designed and made by companies they do not have established track records and with whom they have never dealt?

Finally, there is a need for higher quality standards for the biotechnology revolution. Can in point: the genetically modified animal feed that has mysteriously found its way into food sold by Taco Bell, Wendy's International, Safeway, Kraft, and others.

In fact, key aspects of the New Economy culture may be antithetical to a fundamental focus on quality. As Laurance A. Bossidy, former chairman of Honeywell International Inc., recently said about an oft-used quality-control technique called Six Sigma: "If a CEO doesn't speak about all the time, then it wanes." But chief executives are hard-pressed to sustain a continuous emphasis on quality today, because they are preoccupied with other challenges more crucial to their perceived success—or survival.

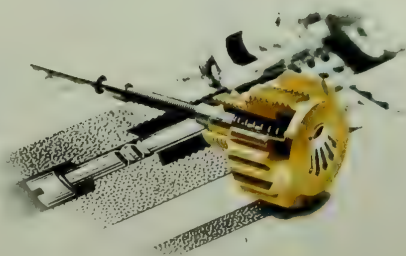
Among the 40 top business leaders I interviewed for an upcoming book, the word "quality" wasn't mentioned once as a major strategic challenge. No wonder; they are obsessed with boosting short-term share prices, reaching new markets at warp speed, and ramping up sea through mergers or alliances. There also is a limit to how much they can press a workforce that is stretched, stressed, lacking in corporate loyalty, and highly mobile. No one would say CEOs don't care deeply about quality. But how do they twist what they would like to do and what they can actually deliver, given the other pressures on them, could the gap be actually widening?

Jeffrey E. Garten is dean of the Yale School of Management. A former investment banker, he was Under Secretary of Commerce for International Trade in the first Clinton Administration (jeffrey.garten@yale.edu).



Virtually impervious
to dust, dirt and water, not to mention
the shifting winds of fashion.

Watches are generally
most vulnerable where
the stem enters the case.
But with patented "Twinlock"
winding crowns that screw
down into the Oyster case
as securely as the hatch



of a submarine, these elegant
Rolex timepieces are all
but impregnable to
the elements. And with
their classic design,
they are in no danger
of ever going out of style.

Rolex Oyster Perpetual Day-Date and Lady-Datejust both in 18kt gold. For the name and location of an Official Rolex Jeweler near you,
please call 1-800-36ROLEX. Rolex, the crown logo, Twinlock, Oyster, Oyster Perpetual, Day-Date and Lady-Datejust are trademarks. www.rolex.com



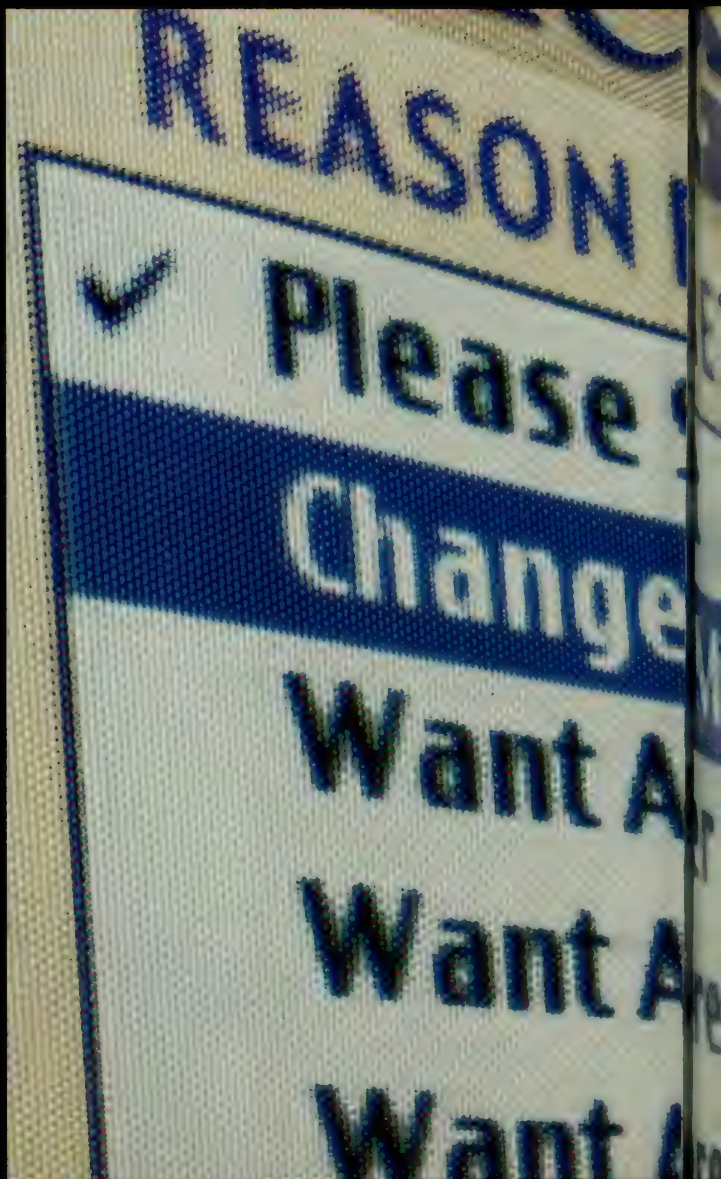
ROLEX

COOL YOUR CUSTOMERS BUY AT WEB WAY COOL UPS NOW HELPS YOU HANDLE E-R

Announcing point-and-click returns. UPS now offers the quickest, simplest way to handle your e-returns. A new, customizable solution that allows your customers to print return labels directly from their PC—shrinking the process from five days to five minutes. In addition, you'll be able to route your returns to the right vendor and rapidly restock your inventory, with full visibility tracking throughout. It all adds up to fewer customer inquiries, lower operating costs and much happier returns. How cool is that? To find out more, visit us at ec.ups.com



MOVING at the SPEED of BUSINESS®



ED.

URNS JUST AS FAST.



BY GENE KORETZ

BAD-NEWS BEARS GET VOCAL

More economists use the "R" word

Most economy-watchers regard the recent spate of downbeat economic news as a cloud with a bright silver lining. It indicates that the Federal Reserve is finally getting the soft landing it has been seeking. A small but growing group of economists, however, have begun to use the dreaded "R" word with increasing frequency.

In their view, the odds have now shifted in favor of an outright recession in the next year. "We will need a lot of luck to avoid a downturn in 2001," says David Levy of the Jerome Levy Economics Institute of Bard College.

Other outspoken economic bears include Lacy H. Hunt of Hoisington Investment Management in Austin, Tex., and economic consultant A. Gary Shilling. While all three economists have often been more pessimistic than the consensus in the past, their views have darkened considerably in the past month.

In general, they sketch a similar recessionary scenario, but differ somewhat in their arguments. Hunt, for example, notes that the leading indicators have now been trending down for nine months—the longest such decline since the last recession. And both Hunt and Shilling stress that the lagged effects of monetary restraint, which can take as much as a year to appear, are finally starting to really bite.

All three bears agree that the sharp plunge in technology stocks and the widening market decline now threaten the expansion. Whereas the huge wealth increases generated by rising stock prices led households to stop saving and take on debt, the absence of

those increases already is hurting sales of cars and other durable items. "As people realize they need to resume saving out of their paychecks, debt loads will feel heavier, and the sales picture will get uglier," says Levy.

The market decline is also curbing investment spending by high-tech companies that find venture capitalists more wary and by Old Economy companies whose lenders are spooked by the impending slowdown. At the same time, notes Hunt, the huge buying binge by both businesses and households of durable goods and capital equipment during the long expansion implies that pent-up demand has been satisfied.

"With private borrowing now totaling a record 130% of gross domestic product," he says, "many will decide it's time to pay off debt and digest those acquisitions." Since business investment, especially of high-tech items, has fueled half of recent growth, the expansion may lose one of its major engines.

Two other developments that have increased the downside risk for the U.S. economy are the runup in energy prices, which has drained purchasing power from households and businesses the world over, and widespread signs of slowing growth overseas. Where economists once assumed that pickups abroad would offset sluggishness in the U.S., the new threat, says Levy, is that "each slowdown will reinforce the other."

Can a recession be avoided? Shilling is dubious, but the others think it's still possible if the Fed moves soon to lower interest rates. "From a policy standpoint," says Hunt, "the window of opportunity is rapidly closing."

WHEN DIRECTORS HAVE A BIG STAKE

Shareholders benefit big, too

Lately, more and more companies have been giving stock to outside directors as part of their compensation. But does this really improve corporate performance? The answer—according to a study by Donald C. Hambrick and Eric M. Jackson of the Columbia Business School—is yes, but only if the directors acquire significant equity stakes.

Using data collected by McKinsey & Co. on 40 sectors of the economy from 1986 to 1997, the researchers identified two companies from each sector whose stock market performance was similar in 1987 but then diverged sharply over the next decade. One member of each

pair was a "star," whose stock return far exceeded its sector's average, the other was a "laggard."

Hambrick and Jackson report that pair members were similar in board size, number of outsiders, ages, director tenures, and even the size of equity holdings by insider directors. But they differed markedly in the amount of shares held by outside directors.

Among the stars, the outsiders' median holdings in 1987 came to 1.3% of company stock. Among the laggards, it was 0.1%. Some 45% of the stars had at least two outside directors who owned \$500,000 or more worth of stock, compared with only 16% of the laggards.

The authors conclude that the outsiders' large initial stakes in the stars had a major impact on their subsequent superior performance, and they advised companies to structure compensation that new outside directors can quickly acquire meaningful stakes. As one director put it: "I'm in for half a million dollars, and I can tell you I'm a heck a lot more attentive to this company than I have been to the others."

CHANGING JOBS DURING A BOOM

In the '90s, did the desire wane

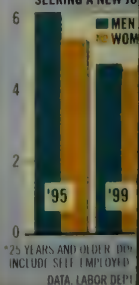
You might think more workers would start looking for a better job as the economy expands and unemployment falls. But in the second half of the 1990s, the share of employed workers actively searching for a new job slipped to 5.6% to 4.5%, notes the Labor Dept.

The drop occurred among workers of all ages, but was more pronounced among those under 25. Job-search activities were always highest for workers in their 20s and decline as people age. Similarly, highly educated workers are more likely than the less-educated to be looking for a different job.

Workers who lack health coverage or an employer-provided retirement plan are twice as likely to be seeking a new job as those who enjoy such benefits. And the most likely by far are those who are working part-time involuntarily.

A DECLINE IN JOB SEEKERS

PERCENT OF EMPLOYED WORKERS ACTIVELY SEEKING A NEW JOB



**WORKING ON WALL STREET
DOESN'T MAKE YOU
AN EXPERT IN
BUSINESS AND FINANCE.**

HAVING THE RIGHT ADDRESS DOESN'T
MAKE YOU AN EXPERT. WITH EXP BUSINESS
AND FINANCE EXPERTS YOU'LL GET REAL,
CUSTOMIZED ADVICE AND SERVICES, FROM
ACCOUNTING TO TAXES AND HUNDREDS
OF OTHER TOPICS.



exp.com

REAL EXPERTS. REAL HELP.™

LEARN ABOUT YOUR MOTHER
YOUR DAUGHTER
YOUR FRIEND
YOUR SELF

**That's The
Changing Face of
Women's Health—
a major new
exhibition at the**

expl**atorium**
san francisco

October 7 - December 31, 2000
(415) EXP-LORE www.exploratorium.edu

This exhibition is generously funded by:



Metropolitan Life Foundation



by JAMES C. COOPER & KATHLEEN MADIGAN

GREENSPAN TO THE MARKETS: STOP WORRYING SO MUCH

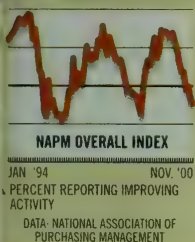
Credit is tightening. But that's a "by-product" of a soft landing

U.S. ECONOMY

Relax, Chicken Little: No less than Federal Reserve Chairman Alan Greenspan says the sky is not falling. For a nervous Wall Street, all but frozen by its fears that the economy was headed to hell in a handbasket, Greenspan's unusually clear assessment of business conditions on Dec. 5 was a welcome dose of reality.

The Fed chief's analysis mirrored the pattern of the recent data: They show that less-accommodative financial conditions, the result of past Fed tightening, are remaining, not bludgeoning, the interest-sensitive sectors of the economy. Demand for cars, computers, and other durable consumer goods is growing more slowly. Orders and output in key technology industries are also slowing. As a result, the manufacturing sector is getting hit disproportionately hard (chart), as it usually does when the Fed raises short-term interest rates. Notably, housing has fared relatively well, supported by low mortgage rates and healthy consumer fundamentals.

MANUFACTURING ENTERS THE SOFT LANDING ZONE



Nevertheless, Greenspan strongly implied a shift in the Fed's thinking: It is becoming less concerned about inflation and more about the extent of the slowdown. His remarks increase the chances of a rate cut next year, but they don't guarantee it. A possible cut is a key reason for the market's warm reaction to his words.

The Dow Jones industrial average

rocketed up 339 points on Dec. 5, and the Nasdaq edged 274 points, the biggest one-day gain ever, although it remains 43% below its March peak.

The chairman, however, made it clear that the economy's current circumstances are "in no way comparable to those of 1998." Yes, credit conditions are tighter, investors reevaluate the risks associated with handing over their money. But unlike the systemic risks posed by 1998's financial near-meltdown, Greenspan said today's credit-tightening is "the expected by-product" of the economy's transition to a more sustainable pace of growth, compared to the previous boom.

WHILE THIS IS NOT 1998, the economy is starting to look a lot like 1994. That was the last time the Fed succeeded in bringing a fast-growing and potentially inflationary economy down for a soft landing. For exam-

ple, the recent softness in manufacturing, the slower trend in consumer goods outlays (chart), the rise in initial claims for unemployment benefits, and the fall in the index of leading indicators, are all—so far—following patterns similar to those in 1994-95.

The déjà vu is particularly striking in the purchasing managers' index, a composite of industrial activity that measures output, orders, employment, inventories, and delivery speeds. The index fell to 47.7% in November, and it has plumbed that level only twice since the 1990-91 recession: in 1998, following the Asian crisis and its sharp drag on exports, and again in 1994, as the Fed was lifting rates. Both times manufacturing was essentially in its own recession, but the broader economy held up.

Also, the factory weakness is showing up in other data. The increase in jobless claims reflects factory layoffs, especially in the auto industry, as Detroit cuts output to pare inventories that have gotten out of line with sales. Also, five of the ten components of the index of leading indicators directly reflect the ups and downs in the manufacturing sector. The index fell 0.2% in October, and it has been in a downtrend since March.

WHERE CONSUMERS ARE PULLING BACK



EVEN WITHIN MANUFACTURING, the pain of Fed tightening does not fall evenly. While activity in the technology industries has slowed somewhat, nontech is really struggling. Through October, orders in the 89% of manufacturing that excludes computers, peripherals, communications equipment, and electronic components have not grown since the start of the year.

Meanwhile, the composite trend of tech orders, the remaining 11%, shows only a little easing, but no sudden or severe weakness. As Greenspan noted, some slowdown in tech orders is to be expected. "The orders and output surge this past year in a number of high-technology industries, amounting in some cases to 50% or more," he said, "was not sustainable, even in the more optimistic new economy scenarios."

A replay of 1994 is also evident between manufacturing and the rest of the economy. That is, the huge service sector, about half of gross domestic product, continues to plow ahead. The divide is especially clear in

consumer spending. Outlays for services over the past year are growing slightly faster than they were this time in 1999, while goods purchases have slowed sharply, led by durables.

ONE SECTOR STANDS as an anomaly in the Fed's effort to cool this economy. Housing, usually the central bank's other victim, has remained quite solid in the face of tighter monetary policy. In his speech, Greenspan pointed out that although homebuilding has declined through much of the year, "more recently, demand appears to have largely stabilized" in response to a drop in mortgage rates since the spring.

True, new home sales fell by 2.6% in October, to an annual rate of 928,000. But that slip followed an 11.9% surge, and October sales are above their year-ago pace. Other data suggest that housing should end the year on an upbeat note. The Housing Market Index from the National Association of Home Builders has been creeping higher since June. And new-home mortgage applications were still high in early December (chart).

Why hasn't Fed policy pummeled housing yet? One reason is that credit conditions for consumers have not tightened all that much. The average rate for a 30-year fixed mortgage is about where it was when the Fed began lifting short-term rates in June, 1999, and at 7.65%, the rate is a percentage point below where it stood last May. The Fed's own survey of senior loan of-

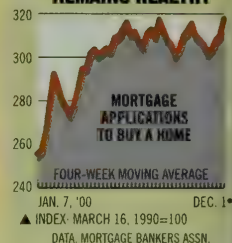
ficers shows that banks have not tightened their credit standards on mortgages one iota, even as they have raised the bar for business borrowers.

Equally important, consumer fundamentals still haven't fallen to the levels associated with a soft landing. The downturn in job growth is nowhere near as severe as it was from 1994 to 1995. Real incomes are currently rising at a yearly rate of 3%. They grew at about 2.4% during that soft landing. And consumer confidence, though down from its recent peak, is much higher than it was six years ago.

That's not to say that the housing market is totally insulated from risk in 2001. Jitters in the bond market could boost mortgage rates. A renewed uptrend in prices could cut into real income growth. And a sharp sell-off in the stock market could further squeeze consumer confidence and the wealth effect.

Greenspan recognized that an economy shifting to slower growth is at risk for unanticipated events. In his speech made it clear that a batch of soft numbers does not mean a recession is around the corner. All fears of economic collapse are overblown.

HOUSING DEMAND REMAINS HEALTHY



AUSTRALIA

TIGHTENING BEGINS TO BITE

After experiencing a lift to their economy from the Summer Olympics, Australians should prepare for less than a gold-medal performance in coming months.

The economy is slowing around the edges, although not to any worrisome degree. Consumers are cooling off, and housing remains weak compared with a year ago. The economy's biggest engine is exports, and that should continue into 2001. But after real gross domestic product soared at a 4.7% average annual rate for the past three years, growth is likely to slow to 4% for the year ending June, 2001.

That at least was the word from Reserve Bank of Australia

Governor Ian Macfarlane when he testified before Parliament on Nov. 30. He said domestic demand would have a "substantial slowdown," growing by about 3% instead of the current 6% pace. But

a weak Aussie dollar would bolster exports.

A softer economy worries Australia's executives. Business confidence plunged in the fourth quarter. And the profit outlook is the lowest in 10 years.

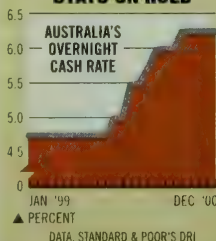
With signs of a slowdown increasing, RBA policymakers kept rates unchanged at its Dec. 5 meeting. The RBA had raised its overnight cash rate by a total of 1.5 percentage points from November, 1999, to August, 2000, but now

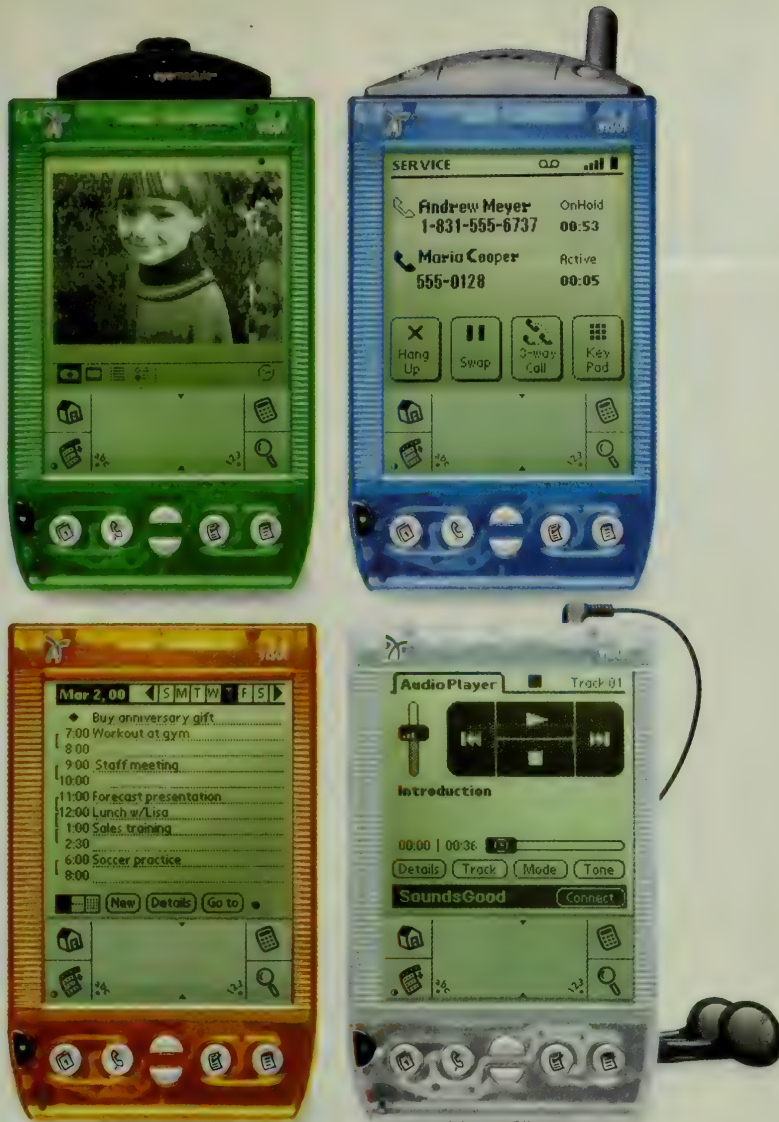
policy bias is in neutral (chart).

The RBA's tightening moves were aimed at keeping inflation in check. Although a 25% jump in oil prices has boosted total consumer prices, inflation was rising even before fuel costs spiked. In the third quarter, consumer prices were up 6.1% from a year ago, but the rate was skewed by the introduction of a 10% sales tax.

Macfarlane said the RBA expects inflation to settle down to 3% by mid-2002. That rate would be at the upper limit of the RBA's inflation target. The high inflation rate is partly the result of the weak Aussie dollar, which will lift import prices. Indeed, the RBA could face a tough challenge next year. It may have to strike a balance between the weak Aussie's benefits to exporters and its cost in the form of higher inflation.

THE RESERVE BANK STAYS ON HOLD





VISOR

what you make it.

Just insert an optional module and your Visor turns into a digital

camera, a phone, an MP3 player or whatever you need it to be. What

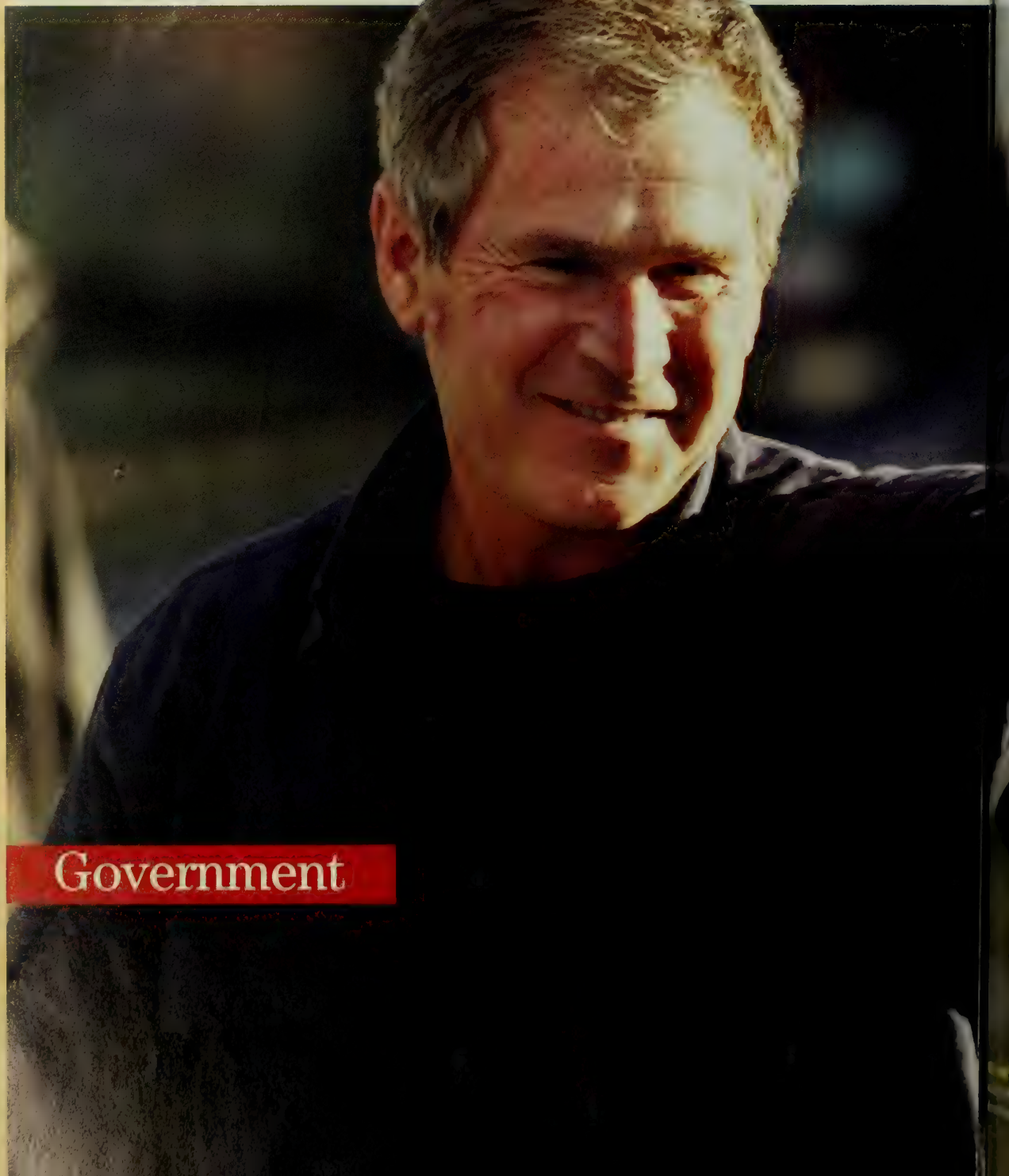
more could you want from technology? Visit us online for availability.



www.handspring.com

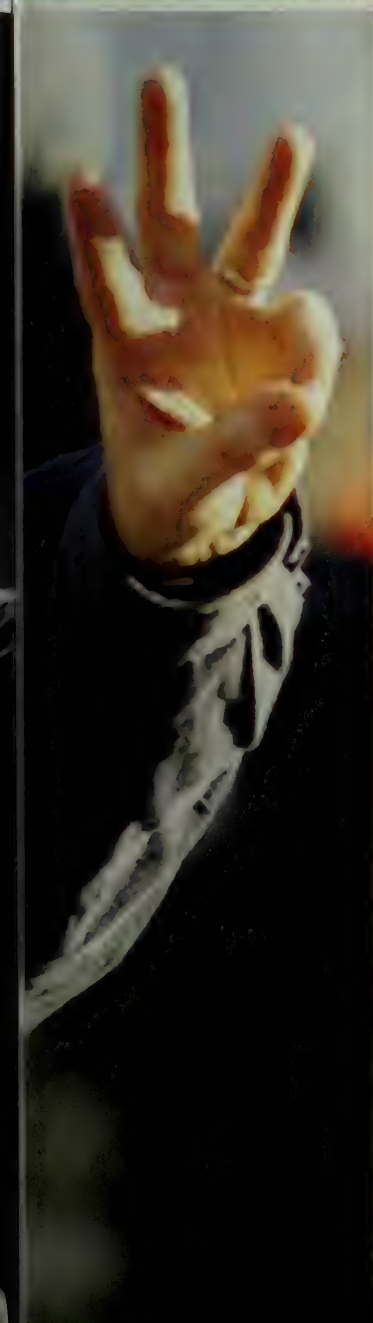
ELECTION
2000
THE PRESIDENCY

HOW BUSI



Government

WOULD LEAD



DOING THE "W" SIGN:
History of being
overestimated

He'd face a slowing economy, divided Congress, and uneasy nation. But don't judge George W. yet

Right about now, a slightly shell-shocked George W. Bush may be wondering just what it was, besides an urge to uphold the family honor, that drove him to launch his White House bid in the first place. For weeks, the Texan has been fretting and fidgeting, struggling uncomfortably to shape a Virtual Presidency while Democrats launched legal challenges to Florida's electoral votes. Now, with rival Al Gore just about out of time and legal options to overturn the election, Bush can finally close his eyes and entertain visions of black-tie soirees and Inaugural parades. Bye-bye, "Governor." Hello, "Mr. President."

But will it be a dream fulfilled—or the beginning of a four-year nightmare? No U.S. leader in more than 100 years would take office under more divisive circumstances. Not only did Bush lose the popular vote and see GOP congressional allies punished at the polls, but his ascension will have been rendered an anticlimax because of legal wrangling. The result: Inauguration Day will be more a moment of national relief than of celebration.

If George Walker Bush takes the oath of office on Jan. 20, he will lay claim to a bitter prize: a divided nation, a hamstrung Congress, and a weakening economy that might demand quick reflexes in a capital littered with land mines. "It looks like a rocky road," says pollster John Zogby, expressing the prevailing view in the political community. Even before Bush sets foot in the Oval Office, Zogby fears he is typecast as a pol "without much

political savvy and with no clear direction from the public."

It seems like a formula for frustration. But you might want to hold off a bit on the requiems for a failed Presidency. Although his public career has been brief, Bush has acquired a reputation as one of the most underrated politicians in the country. Partly, this is due to a clenched, taciturn speaking style that owes more to Midland, Tex., than New Haven, where Bush navigated Yale University without much pause for reflection. Partly, it's attributable to Bush's fondness for delegation of authority, a trait foes mistake for laziness.

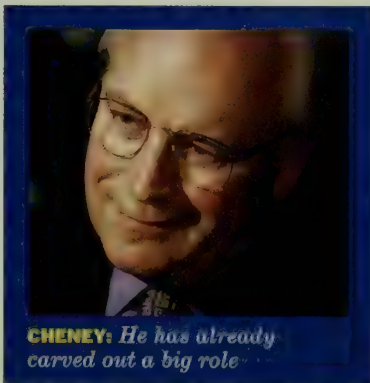
BATTLE-TESTED TEAM. In reality, Dubya has proven to be a savvy negotiator, a tough campaigner, an artless but effective debater, and most of all, a man with the discipline to win. With his early personnel picks of Washington veterans such as running mate Richard B. Cheney, Chief of Staff-designate Andrew H. Card Jr., and Secretary of State-in-

waiting Colin L. Powell, he is building a battle-tested team for a tough slog (page 44).

If Bush actually listens to the people he's hiring and adopts the public mood of cautious incrementalism, he could skirt the abyss. Far from a preordained catastrophe, a new Bush Administration could achieve a

modicum of success in the face of long odds.

For business executives, the immediate concern is pragmatic: Can Bush, whose communication skills during the post-Nov. 7 interregnum struck many as uninspiring at best, rally the country? Can he resist the tendency to equate



CHENEY: He has already carved out a big role

victory with validation and condense an ambitious conservative platform into a sparer, more centrist agenda? Most important, can he turn those paeans to bipartisanship into reality, overcoming resistance from GOP hard-liners by bringing Democrats into his coalition?

For the moment, business leaders are

Government

bucking themselves up by insisting Bush will grow in office, but their fingers are crossed. "Bush will have an easier time moving forward than Gore would have," says Matthew E. Massengill, CEO of Western Digital Corp. "The guy can't communicate, but he'll get better at that. His father wasn't exactly a world-class orator either. But he'll be able to say what he needs to say. The meaning is there." Adds Jeffrey T. Leeds, principal of Leeds Equity Partners, a New York buyout firm: "I think Bush will reach out and [build] bridges to Democrats and independents."

For dejected Democratic partisans, the only bridges Bush will be

SLIM MANDATE, BIG HEADACHES: WHAT W WOULD HAVE TO DO

The Battle of Florida will dramatically downsize any grandiose goals of a Bush Presidency



DELAY AND ARMEY: They'll be tough to re-

BUILD CONSENSUS As President, Bush would have to work on his back-room bonhomie with legislators when he was not barnstorming the nation as part of an Endless Campaign. The goal: overcoming deep public divisions over the shape and role of government to build consensus for centrist policies.

RETHINK THE AGENDA Once, Bush thought the election would provide the backing for his dream of a conservative society built upon self-reliance and sharply limited government. But that

vision, and grandiose thoughts of a \$1.6 trillion tax cut and partial privatization of Social Security, would be deferred. Instead, Bush would try to win support from lawmakers around popular ideas such as school reform, new drug benefits for seniors, modest defense spending hikes, and limited tax relief for small businesses and married couples.

ACT BIPARTISAN The new President would pick respected Democrats to fill his staff and Cabinet, avoiding lapsing into tokenism. And he'd have to make good on his promise to restore political credit for legislative accomplishments with the opposition party.

dreary year marked by corporate restructuring and layoffs.

Another reason for the new President's might skirt immediate disaster is that Bush's in-pragmatism could lead to some premature downing. That might whittling back

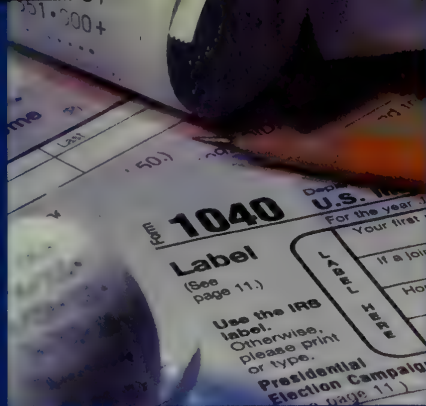
Big Promises agenda in favor of a more modest program that would require passage of only a handful of legislative measures blessed by bipartisan support. Take that \$1.6 trillion tax package built around slashing marginal rates after a token fight, it could become a centerpiece of the campaign. According to a top adviser, a consensus tax package could be constructed around relief for estate tax for married couples, reducing the 55% top bracket to 10%, and a smattering of Gore-style targeted incentives. Under this scenario, plans for collapsing the 39% and 36% tax brackets into a single 33% top tier could be shelved—barring over Bush's ritual protests. Read his lips: Things have changed.

building will be in preparation for an ignominious retreat from Washington. *Bush, the Sequel*, strikes them as a disaster epic on the scale of *Titanic*. Many believe the Texan takes office as a hobbled leader, with his party's grip on Congress too weak to offer much support. "Never has a President started with a harder job," says Andrew L. Stern, president of the Service Employees International Union.

CAMPAIGN RELICS. True enough. But as partisan passions over the close election cool, Bush's road ahead will come into sharper focus and his chances will begin to look better. How? For starters, no matter how polarized Americans are now, there is a tendency to coalesce around a new President in his first year. The period of goodwill may be fleeting

in 2001, but it still represents an opportunity if Bush governs from the center. "Bush is a pragmatist," says Card. "Despite all these expectations of gridlock, he will try to bridge the partisan gap."

Another huge concern is the darkening economic climate—an environment Cheney likens to "the front edge of a recession." Yet it is by no means certain that a downturn—if one materializes next year—would be Bush's undoing. Typically, a slump that hits early in a new Administration is blamed on the preceding White House crew—or on the overexertions of inflation-phobes at the Federal Reserve. A stimulus package and a coordinated show of resolve could permit the new Prez to weather even a



An eagle eye on spending

TAXES: Any massive cut looks doubtful

THE RIGHT IN CHECK Nominees on the Republican side of Pennsylvania Avenue, Democratic Huns at the gate for a congressional takeover in that could lead arch-conservative to immediate action on the list while the getting was good. Bush, at a minimum, would tell hard-liners that his commitment to national unity precluded some of these pet items. He would have to struggle to keep unconservative leaders such as Whip Tom DeLay and his Texas Majority Leader Dick Armey,

PREPARE FOR THAT RAINY DAY

The economy's rapid deterioration has raised recession fears. The bond market and the Fed would be watching closely to see if Bush would keep fiscal policy from spinning out of control, thus making future Fed monetary easing more difficult. Bush claims he would discipline GOP lawmakers and halt year-end spending binges. But if he were to keep calling for his giant tax cut, his credibility would be undermined.

If your goal is to stimulate the economy, you should probably do a middle-class cut," says Representative Robert Matsui (D-Ore.), a member of the House Ways & Means Committee. The key to Democrats' hearts: a threshold that prevents the well-to-do from reaping a windfall. Similarly, the push for partial privatization of Social Security is likely to fade from a high priority to a study topic.

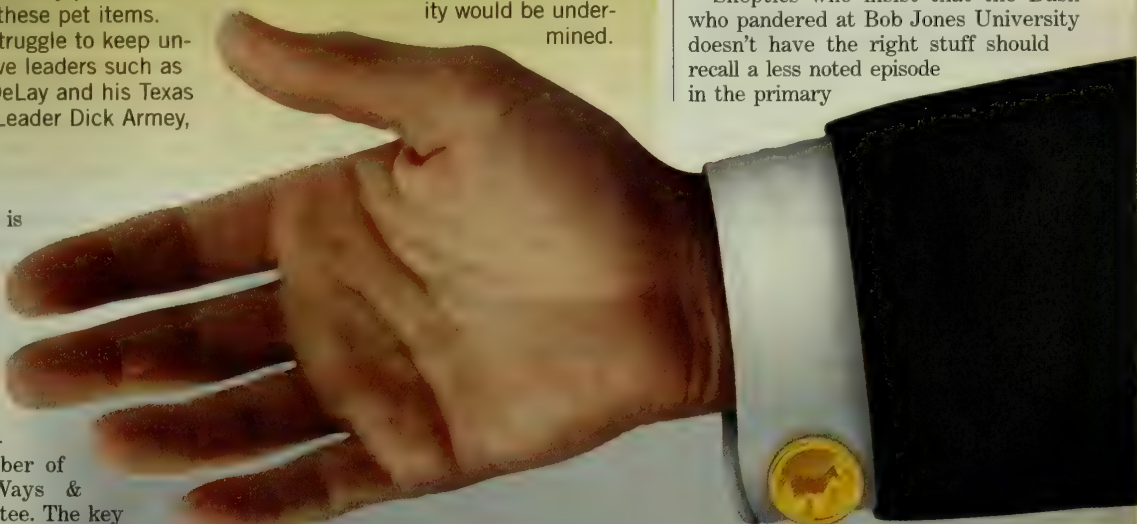
F CHEERLEADER. Other divisive issues, from school vouchers to billions in Star Wars antimissile system, all slide off the agenda in a Congress where delicate coalition-crafting is the name of the game (page 48). "It's going to be tough to get massive packages through," says a Bush policy adviser. "You get half a loaf is pretty good." Actually, the downbeat mood may present an opportunity. "Public expectations are as low as they've been for some time since Harry S. Truman, the failed

there has been prior [bipartisan] spadework. This could be a disaster for Republicans, because we seem to have control but can't make much happen."

Although Bush's path is strewn with challenges, even some Democrats concede that he can still prevail. Says a Democratic lobbyist who served in the Clinton White House: "Things were pretty dark for our side back in '95-'96, yet we survived five government shutdowns and passed a minimum-wage bill, welfare reform, and a health-care bill. A clever President willing to push against his base can succeed."

If Bush can create the climate for a partisan thaw, a trickle of meaningful legislation might find its way to enactment—to the benefit of both sides. It will take finesse. It will take a mastery of the bully pulpit—and the Presidential TelePrompTer—that Bush hasn't shown since his dead-on acceptance speech at the GOP convention in Philadelphia. And yes, it will take Bill Clinton's surpassing skill at triangulation—the art of playing the political fringes off against each other while defending the vital center.

Skeptics who insist that the Bush who pandered at Bob Jones University doesn't have the right stuff should recall a less noted episode in the primary



haberdasher who dared to be President," says American University historian Allan J. Lichtman. "Bush is seen as a weak leader coming in under impossible circumstances. Any accomplishments will exceed expectations."

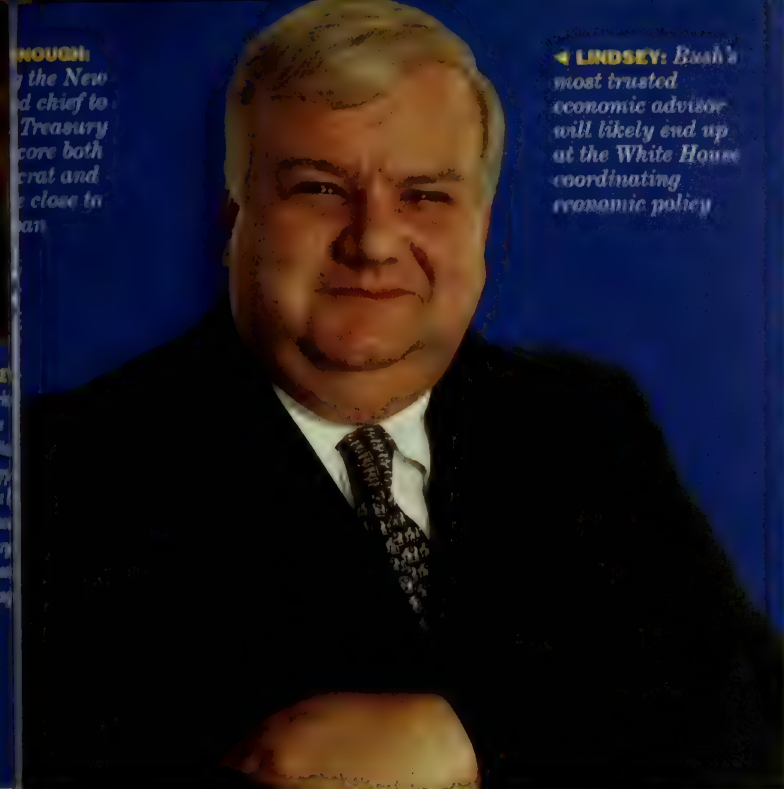
Bush could react by carving out a new role in stark contrast to the one Bill Clinton pursued as Strategist-in-Chief. Meet Just Plain George, Cheerleader-in-Chief. Forced to promote national harmony, Bush could be less concerned about lighting up the legislative scoreboard. "He will call, he will visit, he will do all the right things to be seen as flexible," says one corporate rep who served in previous GOP Administrations. "But ultimately, very little gets done unless

campaign, when right-wingers in Congress pushed a plan to make up a budget shortfall by crunching such popular antipoverty programs as the Earned Income Tax Credit. Bush's response to Capitol Hill Republicans was blunt: "I don't believe you should balance the budget on the backs of the poor." That was enough to kill the plan in its tracks and lend credence to the notion that Bush might actually be a different kind of conservative: one with a heart and a brain. Now, all he has to do is prove it—on a vastly larger and more demanding stage.

By Lee Walczak, with Richard S. Dunham, Amy Borrus, and Rich Miller, in Washington, and with bureau reports

Needed: Strong ties to the Street—and Greenspan

44 BUSINESS WEEK / DECEMBER 18, 2000



LINDSEY: Bush's most trusted economic advisor will likely end up at the White House coordinating economic policy

ENOUGH
y the New
d chief to
Treasury
core both
erat and
e close to
an

Fed board. Lindsey works well with [unclear] span. But Bush's nominees would [unclear] the tone for dealings with the Fed [unclear], blamed by many Bush loyalists [unclear] the recession that cost President [unclear] Bush reelection in 1992. "If they [unclear] a happy relationship, they should [unclear] down with Alan and discuss these [unclear]" says a former central banker.

One conciliatory move under consideration is renominating Clinton appointee Roger W. Ferguson Jr., a banking expert who is the only African American on the Fed board. Trouble is, if Ferguson got a new term, he would have a lock on the Fed's vice-chairmanship until 2003—robbing Bush of a plum that he would need to attract top GOP

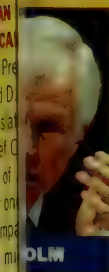
talent. Bush adviser John B. Taylor, an influential monetary economist from Stanford University, would be more likely to join the Fed as the No.2 than to accept a governor's seat.

FREE-TRADERS. If he doesn't go to the Fed, Taylor is the favorite to chair the White House Council of Economic Advisers. Taylor doesn't share Lindsey's strong supply-side leanings, but both men agree that in a slowing economy, a case can be made for accelerating Bush's tax cuts.

A host of lesser economic jobs await the filling of the top slots. Don Evans, a Texas oilman and Bush's genial campaign chairman, is one possibility for Commerce Secretary (table). Another candidate for Commerce is Representative Jennifer B. Dunn (R-Wash.). The U.S. Trade Representative job could go to Treasury veteran Robert B. Zoellick or campaign issues director Joshua Bolten. Both are savvy free-traders with loads of international experience.

As the electoral murk clears, markets will soon be asking what remedies the President has in mind for a slowing economy. The Texan's advisers insist they're not worried because they'll have a stimulative jolt waiting in that big Bush tax program. "The tax cut was designed as good policy for the long run, not as fine-tuning," says one Bush economist. "But a slowing economy certainly adds to the arguments in its favor." It also adds to the urgency to get a top economic team together—ASAP.

By Mike McNamee, with Dan Carney and Laura Cohn, in Washington



DEMOCRATS Representative Charles W. Stenholm, a conservative "Blue Dog" Democrat from Texas, is a leading candidate to run the sprawling Agriculture Dept. Stenholm's fortunes would rise

he stayed in the House, be-
e would be a key player under
Administration. And his West
at could well be captured by
in a special election at a time
Dems are hoping to win a
majority in two more years.
enholm is telling friends he's
mpted to take the post to cap
career in public service.



RELIGIOUS RIGHT Lynne Cheney, wife of possible Vice-President Dick Cheney and former Chairman of the National Endowment for the Humanities, is on the short list for

Education Secretary. Cheney is a favorite of religious conservatives who want one of their own in a Bush Cabinet. Cheney knows education issues and could be relied on to pacify the Right. But some Bush advisers fear Cheney, who was a polarizing figure during the culture wars of the Reagan Administration, would alienate Hill moderates.



HISPANICS Texas Railroad Commission member Tony Garza, a Mexican American, is a leading Energy Secretary contender. He now helps oversee the oil and gas in-

dustry in Texas and also co-chaired Bush's 2000 National Latino Coalition, an effort to drum up Hispanic votes for the GOP. Garza acted as Bush's liaison to Mexico on border issues. In 1988, he was the first Republican elected to countywide office in south Texas. And as W's former secretary of state, he became an expert on state election law.

COMMENTARY

By Richard S. Dunham

THE SEARCH BEGINS FOR A DEMOCRATIC SAVIOR

ELECTION 2000 THE DEMOCRATS

If Al Gore is a goner, will he be a goner for good? While the Veep's popular-vote victory makes him hard to dismiss as a future contender, the impression that George W. Bush is destined to be a one-termer already has plenty of other Dems jostling to get in line for 2004. At the same time, the party faces some serious soul-searching.

As Democrats enter the post-Clinton era, they are looking for a leader who can quell the infighting between centrist New Democrats and the much larger coalition of liberals, union members, and minorities. More important, they must find a way to reach out to the independents, suburbanites, and New Economy swing voters who switched from Clinton in '96 to Bush in 2000. And as the candidacy of Ralph Nader taught Dems, they ignore disgruntled Greens, anti-globalists, and other lefties at their peril.

"THIS IS IT." Without another Clinton, uniting a party going in so many directions would seem to be a mission impossible. But for a brief moment after the Democratic Convention in Los Angeles, Gore seemed to have the right stuff. Now a Gore loss would leave him without elective office, re-

heavyweights. Among the most prominent: Gore running mate Senator Joseph I. Lieberman of Connecticut, California Governor Gray Davis, Massachusetts Senator John F. Kerry, retiring Nebraska Senator Bob Kerrey, and possibly House Minority Leader Richard A. Gephardt (D-Mo.).

Lieberman got the biggest push out of Campaign 2000. Little known before, he emerged with a positive image and earned political chits through his prolific fund-raising. A pro-business pol with a morally

yond the Beltway, the top contender is Davis, California's popular first-term governor. He's clearly interested: Davis has amassed a \$21 million war chest. Considered a liberal before assuming office, he has governed as a consensus-building moderate. He has rebuilt the state's school system after years of GOP budget cuts. That's one reason he's popular with California business—particularly Silicon Valley. But they don't call him Gray for nothing: He's a lackluster campaigner.

Massachusetts' Kerry and Nebraska's Kerrey are both decorated Vietnam vets, but the resemblances end there. The Midwesterner is a maverick who was trounced by Clinton in the '92 primaries, while the New Englander is a wealthy patrician with a liberal voting record. After two Senate terms, Kerrey is quitting Washington to head Manhattan's New School University. But he may be keeping an iron in the fire: This year, he contributed to numerous pols in New Hampshire and Iowa. The Massachusetts Kerry has become a leading voice on tech is-

sues, working with the centrist Democratic Leadership Council on bridging the "digital divide."

If he runs, though, Republicans will paint him as a Ted Kennedy clone.

If Dems want a fresh face, they have a few ambitious fortysomething moderates to choose from: Senator Evan Bayh of Indiana and John S. Edwards of North Carolina. Among the dark-horse contenders: Senator elect Hillary Rodham Clinton of New York, who has promised to serve her six-year term but will be under pressure from the left to reconsider.

Gephardt remains the wild card. As leader of the House Democrats, he has won raves for uniting the party's rowdy factions. He is unlikely to run for President if he becomes Speaker after 2002. If Dems lose ground on Capitol Hill, however, Gephardt might decide to give the White House a shot. This son of a Louis milkman has strong ties to labor and minority elected officials. His philosophy has evolved over the years from tax-reforming, Democratic



conservative streak, Lieberman ran comfortably on Gore's populist platform—and helped Gore come within a butterfly ballot or two of snaring Florida for the ticket. "Lieberman came out of this a real winner," says ex-Oklahoma congressman Dave McCurdy, president of the Electronic Industries Alliance.

If Democrats seek salvation be-



Possible Presidential candidates: Lieberman, Davis, Gephardt, Kerry, and Kerrey

Government

jected in his home state, and defeated in a campaign many Democrats considered easily winnable. All that adds up to a daunting comeback. "Most likely, this is it for Gore," says one top Democrat. "It's hard to imagine having better wind at your back—and he still managed to blow it."

Still, Gore's late campaign surge leading to his popular-vote win "totally changes the calculation that was widely circulated that if Gore lost, he's finished," says Representative David Price (D-N.C.), a prominent moderate. But a Gore-free contest would draw out some Democratic



BLUE MARTINI
O F T W A R E

NOW SERVING TWO TO TWENTY.

Shopping is simply more fun in a group. Now, Blue Martini's collaborative capabilities allow groups to shop online as well. With it, two people in different cities can browse their favorite site together, two dozen people can be taken through an online product demonstration simultaneously and customer service representatives can guide clients through their site. The uses are endless. Browsers turn into buyers. And nobody has to be lonely. To find out how Blue Martini's e-business solutions can improve your customer's experience, visit www.bluemartini.com/group.

Leadership Council centrist to coalition-building tech booster. To appease corporate types, he has embraced fiscal responsibility, increased international trade, and Presidential fast-track trade negotiating rights. If Gephardt tries a second run at the White House in 2004, he would most likely run a Gore-type fusion campaign.

THE FORMULA. As the Presidential jockeying gets started, the ideological warfare will accelerate. Some liberals want to curtail the power of the New Democrats, arguing that Gore's failure was caused by his ties to the centrists, not populist rhetoric. "The Democrats will be tempted to lurch to the left to satisfy Nader," argues Republican consultant Scott W. Reed. And moderates say they will seize the offensive against the Old Guard. "There will be a bloody period of battle and finger-pointing," says Progressive Policy Institute President Will Marshall, a leading centrist. "Gore squandered a winning hand [by veering left]. Democrats are only going to recapture the White House by getting back to the proven [Clinton] formula for success."

But what's the formula? Gore learned on Nov. 7 that even an enthusiastic turnout among union members and minority voters can't guarantee a Democratic victory in the Electoral College. The challenge for the 2004 nominee is to maintain the party's base while making inroads among the ever-increasing number of New Economy voters—particularly the economically conservative, socially liberal, and politically independent brand of affluent young worker.

Still, despite semi-apocalyptic

Government

predictions, the Democrats of 2000 seem far less dejected than after other recent defeats. The reason: They see Bush as a weak President-elect without a mandate, who faces a slowing economy. That could help them retake Capitol Hill in 2002 and go for a clean sweep in 2004. As we know, stranger things have happened.

Correspondent Dunham covered the Presidential campaigns.



CANTWELL: The former RealNetworks exec has instant clout on tech

POCKETS OF POWER IN THE SENATE

A 50-50 split could give rise to agenda-driven coalitions



Senate was rocked by resignations, party-switchers, and accusations of bribery as Democrats and Republicans sought to increase their numbers and gain the upper hand.

With Senate Republicans and Democrats likely to be evenly split again, the hunt for power is on. And considering the messy end to the Presidential race, the odds of a bipartisan truce among party leaders seem long. But many Senators, either out of frustration with years of partisan gridlock or in recognition of the public's divided will and distaste for bickering, are considering a different path. They're looking to form alliances on issues ranging from protecting the budget surplus to expanding health care and reforming public education. These mini-caucuses are likely to form among Senators because of shared experiences and policy interests. No matter who is the President, "these coalitions are life and death for any legislation," says Marshall Wittman, a political analyst with the Hudson Institute, a conservative think tank.

In sheer numbers, Republicans continue to hold a slight edge, though George W. Bush is in the Oval Office. That majority would vest solely in Vice President Dick Cheney's tie-breaking vote. And while Trent Lott (R-Miss.) will continue as Majority Leader, his political clout has shrunk. The Senate, unlike the House, operates on the basis of consensus. Senate rules, for example, require a supermajority of 60 votes to bring almost any measure to a floor vote. The result? Both Majority and Minority Leader Thomas A. Daschle (D-S.D.) both need to borrow at least 10 votes from one another to accomplish much of anything.

If there's one thing that can be accomplished with 50 votes, it's gridlock. Many Republicans learned from their seat loss on Nov. 7 that inaction and partisan sniping don't play well back home. As the majority, they fear another beatdown in upcoming mid-term elections if they don't pass long-promised measures, such as a seniors' drug benefit and a paternity bill of rights. The GOP also must defer Senate seats to the Democrats' 14 in 2002. "The alternative [to bipartisanship] is gridlock," says Senator John McCain (R-Ariz.). "It puts every incumbent at risk."

For the Democrats, swelling ranks will bring a different set of challenges. The party's Senate freshmen are spread across



A TEXAS INSTRUMENTS TECHNOLOGY

PROJECT IMPACT WITH THE CLARITY OF DIGITAL LIGHT.

Catch the wave of the future. Digital Light Processing™ technology by Texas Instruments is revolutionizing the projection industry. With DLP imaging technology, leading manufacturers are creating the lightest and brightest projectors available. In fact, our DLP™ processor is unleashing a new category of ultralight, microportable projectors that are half the weight of your notebook computer. So now you can deliver the impact and crisp clarity of digital quality, wherever your travel takes you. From microportable and large-screen projectors to high-definition home entertainment and digital cinema, TI provides the premier digital solution for all of your projection needs. To find out more about DLP™ technology and the products it enables, visit our Web site or call 1-888-DLP-BY-TI.

www.dlp.com

DIGITAL LIGHT PROCESSING: DEMAND VISUAL EXCELLENCE

 **TEXAS
INSTRUMENTS**

the political spectrum, from Mark Dayton of Minnesota on the left to Delaware's Thomas R. Carper on the right. "The problem will be keeping all your frogs in the wheelbarrow," says one Senate Democratic aide. Lott and Daschle have risen above the partisan fray before, but despite talk of a new spirit of cooperation, "it doesn't look promising," Daschle concedes. Instead, watch for a handful of small power centers to emerge:

■ **The Mavericks:** McCain will lead this populist team, which is gaining in political clout as his status grows. A year ago, McCain was one of his party's least-popular members. But after losing the GOP nomination to Bush, he spent the rest of 2000 stumping and raising money for fellow Republicans. Now McCain has a national constituency, and the party owes him a huge debt.

Already, as Commerce Committee Chairman, McCain is pledging to accept an equal number of Dems on his panel and to evenly split the committee's budget and staff. Expect the mavericks to be among the first to buck the party leadership by trying again to ban unlimited soft-money contributions, which Lott and Senator Mitch McConnell (R-Ky.) kept bottled up this year. McCain's chances are greatly improved with the addition of four Democrats. He and fellow reformers Russell D. Feingold (D-Wis.) and Fred Thompson (R-Tenn.) also will move to cut pork-barrel spending and



CENTERS OF INFLUENCE

THE GOVERNORS

These eight ex-executives will take cues from Democrat Zell Miller of Georgia and GOPer George Voinovich of Ohio. With an eye to federalism, they could broker deals on education spending, welfare reform, and protecting the surplus.



MILLER



TORRICELLI

■ **THE MAVERICKS** No. 1 maverick John McCain will be the star of this unpredictable but populist-leaning bunch. He likely will hook up with Robert Torricelli (D-N.J.) and others on campaign-finance reform, pork-barrel spending, and corporate welfare.

■ **THE TECH TEAM** Freshman Democrat Maria Cantwell just barely eked out a win in Washington State, but she will have instant credibility with this coalition, thanks to her experience as a dot-com exec. Among GOPers, McCain and Robert Bennett of Utah will be influential. This troop will be active on intellectual property issues and trade.

THE CENTRISTS

Southern Democrat John Breaux (D-La.) and Olympia Snowe (R-Me.) already have a long-standing foundation from which to work. This coalition will counter any extremists on fiscal matters.



BREAUX

THE LADIES' LEAGUE

Snowe and Barbara Mikulski (D-Md.) are the deans of this baker's dozen. The women will meet monthly and could change the tenor of debate on health care, education, and social security.



SNOWE

■ **The Tech Team:** The tech industry leading advocate, Michigan Republican Spencer Abraham, suffered a narrow loss to Representative Debbie Stabenow. But former RealNetworks Inc. exec Maria Cantwell (D-Wash.) will be quick to step into Abraham's shoes, even as a first-year Senator. Other allies, such as Senator Robert F. Bennett (R-Utah) who played a lead role on legislation to protect tech companies from Y2K liability lawsuits, could gain in influence. Tech leaders say they'll look to Senators John B. Breaux (D-La.) and Chuck Hagel (R-Neb.) to carry their water on trade liberalization.

And McCain will lead the charge to extend the moratorium on Internet taxation, which expires next October.

■ **The Ladies' League:** Women will number an unprecedented baker's dozen next year, with the arrival of four new Senators, including Hillary Rodham Clinton (D-N.Y.). Barbara A. Mikulski (D-Md.), the group's senior member, hosted a coffee for the 13 women Senators on Dec. 6, the first of many informal meetings they expect to hold. These powerful voices will ensure that a host of measures to help working families finally starts moving through the Senate, especially with Dianne Feinstein (D-Calif.) expected to land a coveted Finance panel seat. But they'll also bear down on such issues as private Social Security accounts and military spending, where debate is now male-dominated. "None of us will be back-benchers," vows Mikulski.

■ **The Centrists:** Also known as the Snowe-Breaux caucus, this group of some 20 fiscal and social moderates could be the Senate's best chance to avoid gridlock. Already, Breaux has contacted Breaux for ideas on how to pull the parties together. The centrists will be a floating coalition that will work together on issues such as estate-tax repeal and military readiness. The group will oppose broad, across-the-board tax cuts and big spending increases.

Breaux will lead the search for a middle ground on Medicare reform and help build a consensus on education spending. But the centrists' success will depend on lawmakers' willingness to turn against their party leaders.

In 1881, it took the assassination of President James Garfield to shake the Senate out of its back-biting gridlock. As national crises go, the Florida furor pale in comparison. This time, it's going to take the determined, independent-minded Senators to break the logjam.

By Lorraine Woellert in Washington

Government

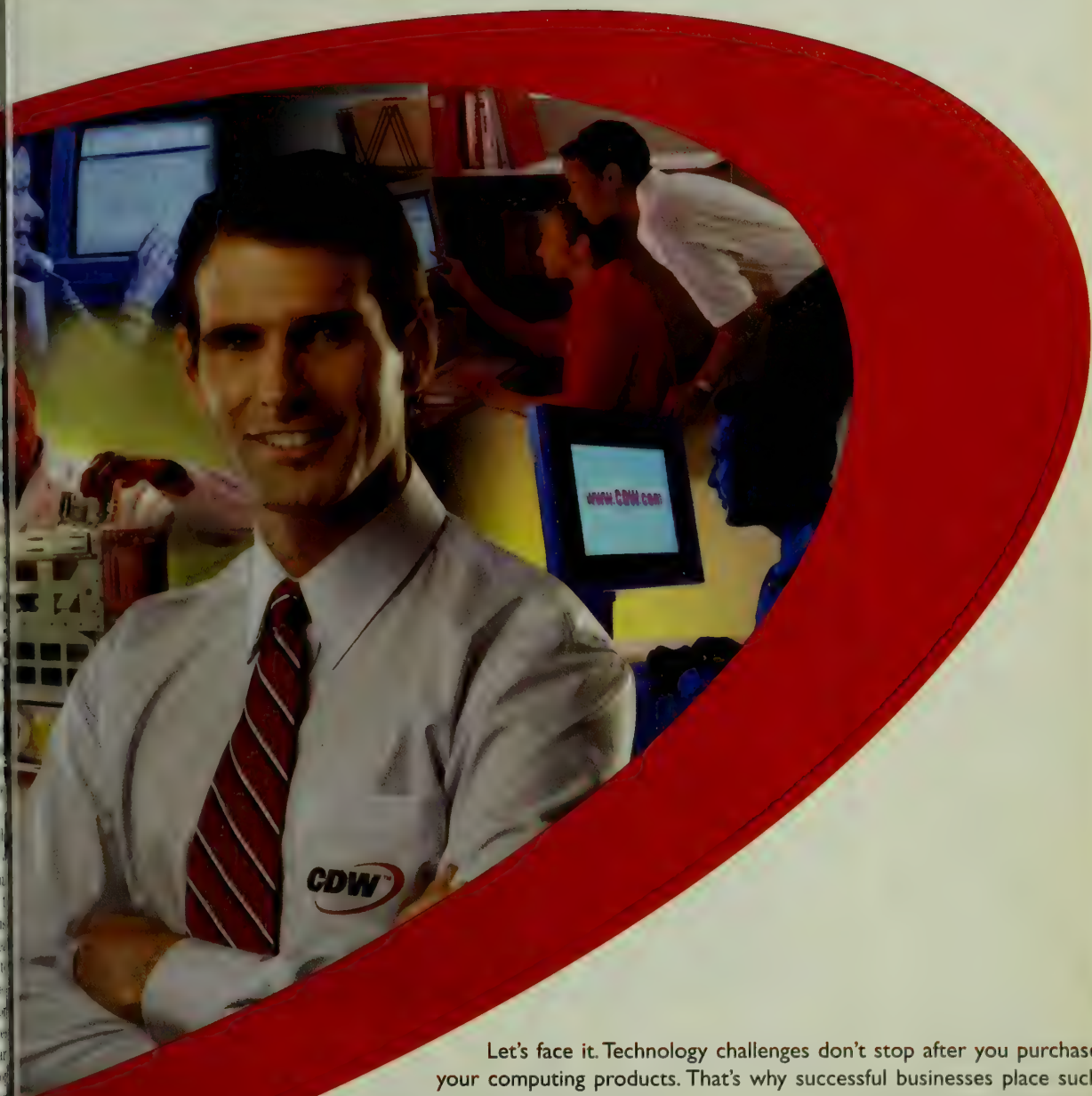
reduce corporate welfare. And this group could be a key ally to Bush if he pushes a military reform agenda.

■ **The Go-Go Governors:** While they number only eight, these ex-state chief executives already are mulling how they might influence the agenda. Party affiliation aside, they have much in common. The guys tend to be fiscally conservative and fiercely protective of the surplus. They are more likely to lean toward a states' rights point of view on issues such as welfare reform and education.

Because this group is accustomed to working with sharply divided state legislatures, it is more likely to agitate for results rather than political point-scoring. Expect ex-guvs like newcomer George Allen (R-Va.) and Zell Miller (D-Ga.) to try to broker a deal on education that blends Democratic demands for more school construction and teacher hiring with the GOP's insistence on teacher testing and more local control over spending.

DATA: BUSINESS WEEK

CDW. Our job is to simplify yours.



Let's face it. Technology challenges don't stop after you purchase your computing products. That's why successful businesses place such value on their personal CDW account manager. Together with a team of experts, your account manager will custom-configure best-of-breed solutions from hundreds of top name brands. Respond to your every need. And save you time and money.

Add CDW.com, our award-winning site, and you have a total computing solutions resource from the industry's only Direct Solutions Provider.TM Call us. We're a trusted Fortune[®] 1000 Company. And we'll give you the 24x7 attention you need to rest easy.

Computing Solutions Built for BusinessTM
1-888-239-8283 www.cdw.com



By Stan Crock

WHAT A BUSH FOREIGN POLICY WOULD LOOK LIKE

ELECTION
2000
FOREIGN POLICY

George W. Bush doesn't have anywhere near the foreign-policy pedigree his dad had. So if he takes the reins of government, he's not expected to be the driving force behind his Administration's national-security policy. Instead, the only MBA ever to be President is likely to act like a chief executive officer, presiding over a strong cadre of veterans from the first Bush Administration, such as General Colin L. Powell and former Pentagon official Paul D. Wolfowitz.

These experienced hands helped bring the Western alliance through the fall of the Berlin Wall, Operation

fowitz, is likely to advocate tough measures to destabilize the Iraqi strongman. Wolfowitz has backed setting up an enclave for Iraqi dissidents, possibly under the protective cover of U.S. troops. More broadly, he believes that internal matters in other countries such as human rights, free markets, and democracy should be of concern to Washington because they affect how a nation conducts its external relations. This "values" school would be assertive in sending troops abroad to promote democracy and free markets.

mitage, a senior diplomat in the first Bush Administration who may get a top Pentagon post, have backed an explicit statement that the U.S. would come to Taiwan's defense in a conflict with China. But Bush and Condoleezza Rice, his National Security Adviser-in-waiting, lean more toward the strategic ambiguity of the Clinton Administration. The Clintonites avoided an explicit pledge for fear it would spur Taiwan to provoke China.

DUSTUPS. Bush's management problems will go beyond these divisions.

The foreign policy crises he is likely to face, such as regional or ethnic dustups, are the kinds of things he has said he wants to avoid. He will also have to comfort European allies concerned that he wants to pull out of peacekeeping efforts in hot spots such as the Balkans. Indeed, in future efforts, Bush would like the Euros to do the peacekeeping on the ground while the U.S. handles the combat—usually from 50,000 feet in the air. "There is a seed there that worries Europeans," says Terence T.

Taylor, assistant director of the International Institute for Strategic Studies in London. Rice has tried to calm fears by saying that Bush won't pull out troops from current efforts until civilian police can take over.

It would all be a tall order for George W. No doubt he would get plenty of friendly advice behind-the-scenes from George *père*. And he would have help from the Bush I team that performed so admirably as the cold war ended. But the world they could confront now is far different from the glory days of the Persian Gulf War, and it will test all their vaunted skills.

Crock covers foreign policy from Washington.

Government

Desert Storm, and the collapse of the Soviet Union. But today's challenges—regional brushfires and weak or failing states—are far different from the geopolitical issues involving major military powers that they faced when last in office. And while all are internationalists, sharp divisions within the team remain over how assertive to be on issues such as human rights and when to deploy troops abroad. Bringing these approaches into the 21st century and reconciling internal conflicts will present Bush *fi*ls with a daunting task. "Bush will have to create coherence because [the team] doesn't necessarily have it," says Chester A. Crocker, a professor of diplomacy at Georgetown University.

The fissures could widen swiftly if Saddam Hussein moves to test the new President's resolve and tries to end the sanctions imposed on his regime. One faction, led by possible Defense Secretary or CIA chief Wol-



BOSNIA Bush would push for new peacekeeping rules in the Balkans



POWELL: As Secretary of State, he would be a cautious pragmatist



RICE: Would-be National Security Adviser is confident Bush could smooth over Europeans' worries

But Bush also has more pragmatic advisers, including the presumptive Vice-President, Dick Cheney, and Powell, the likely Secretary of State. In the past, they have insisted troops be deployed only when there are clear, achievable military goals and an obvious national interest. If the purpose is waiting until the feckless Iraqi opposition storms Baghdad, troop deployment might not meet their standard. They also may care less about the internal workings of countries and more about their external behavior. After all, they left Saddam in power a decade ago after they crushed his ability to invade neighbors.

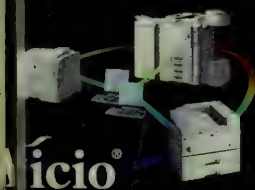
Divisions could also surface over China. Wolfowitz and Richard L. Ar-



SUPPOSE

we increase
your productivity **AND** cut
your printing costs?

Sure, we pioneered digital copiers.
And yes, we're the fastest growing maker of
network printers in key markets.
But what keeps our customers coming back
in more than 120 countries is our uncompromising
dedication to individual output needs.
Talk to us.



aficio

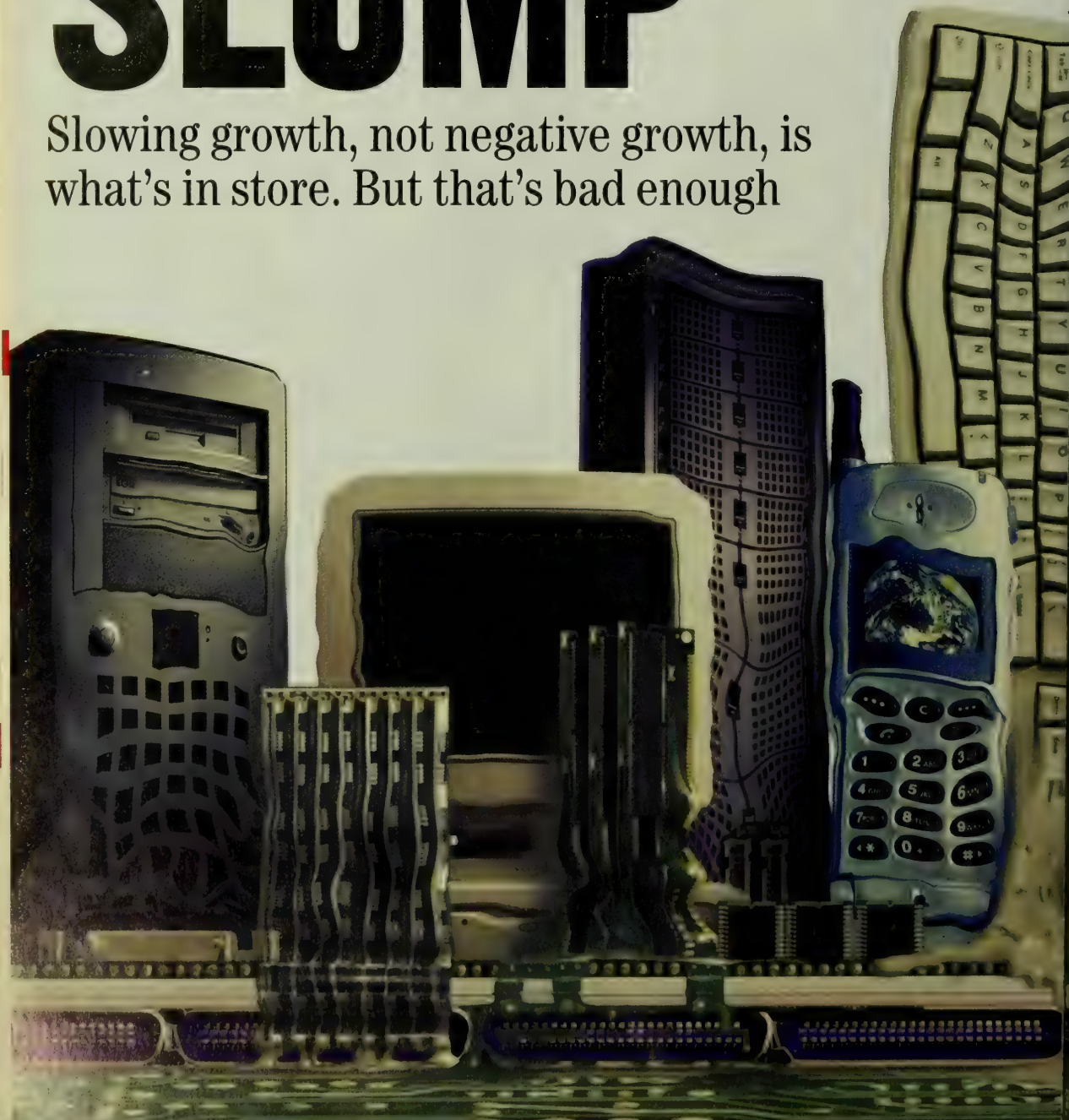
We're in your corner.

RICOH[®]
Image Communication

www.ricoh-usa.com

THE TECH SLUMP

Slowing growth, not negative growth, is what's in store. But that's bad enough



Not long ago, it was easy to dismiss worries about an impending technology slump. Sure, PC sales growth was slowing—but industry bellwethers such as Gateway Inc. and Hewlett-Packard Co. were still expanding rapidly. Yes, chip giant Intel Corp. reported that growth would ease, but only because of the weak euro. Granted, telecommunications companies were slowing purchases of new equipment, but hey, look at networking-gear supplier 3Com Systems Inc.'s 66% growth rate. Technology is way too strategic an investment to cut, right?

Wrong. Suddenly, not even an imminent end to the Presidential fight, a strong hint from Federal Reserve Chairman Alan Greenspan that he may be close to lowering interest rates, and the consequent 10% rise in the Nasdaq on Dec. 5 can banish the awful truth about tech spending: Instead of big across-the-board hikes—a trend that has been going on for years now—countless corporate info-tech officers are scrutinizing every penny. Some are even talking about cutting back the budgets they pour into tech. Clearly, tech spending is no longer the magical elixir that helped supercharge the economy for a record 37 straight quarters.

For now, no one is talking about an actual downturn in overall tech spending. Slowing growth, not negative growth, are in store. But af-

ter the phenomenal performance the sector has boasted in recent years, that will be plenty painful. And every week, new evidence that growth is slowing mounts. In recent days, networking-gear maker 3Com,

PC maker Gateway, and chipmakers LSI Logic and Xilinx, and electronics retailer Circuit City all warned that earnings will fall short of expectations, knocking their stocks down as much as 36%. Then, on Dec. 5, Apple Computer Inc. dropped a bomb, saying that slower-than-expected PC sales will vaporize \$600 million in

fourth-quarter revenues from its original estimate of \$1.6 billion. As a result, Apple will post its first loss in three years,

sending its stock down 16% on Dec. 6, to 14, the lowest level since March, 1999. Says Apple CEO Steve Jobs: "It looks like we're facing a broad economic slowdown that will affect many segments."

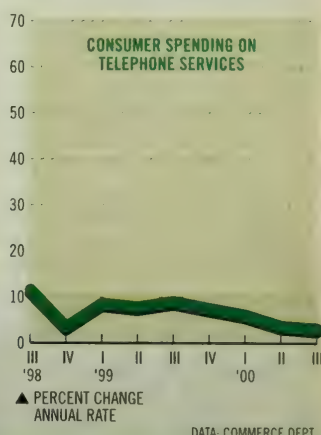
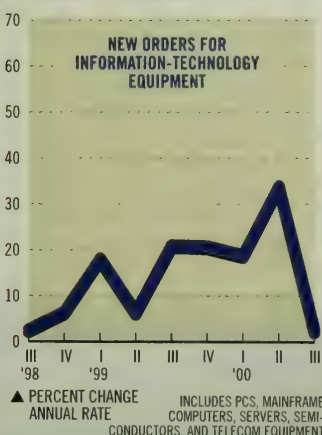
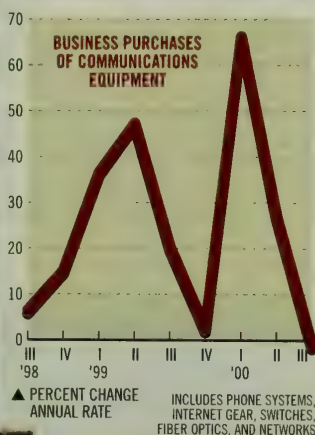
Moreover, the unexpected turn for the worse seems certain to reverberate throughout techdom—forcing consolidation that will extend far beyond the tiny dot-coms that have been the victims so far this year. Unable to survive past the easy-money days, a lot of companies, from niche e-tailers to the umpteenth optical-networking upstart, will simply vanish. "A gigantic scrubbing is going to happen," says Joel Ronning, CEO of Digital River, which runs Web sites for 3M, Novell, and others.

All this has Wall Street analysts backpedaling

Cover Story



TECH SPENDING SLOWDOWN



faster than they can say "Oops." On Oct. 1, according to earnings-estimate tracker First Call Corp., analysts predicted that tech-sector earnings would rise 29% in the fourth quarter. Now, they've slashed that estimate to 15%. Expectations for communications-gear companies are sliding even faster. From a 4% earnings decline expected on Oct. 1, analysts now foresee a 45% plunge. And for 2001, they've cut overall tech earnings projections from 24% to 17%.

That's bad news—and not just for the tech sector. A tech slump would have an outsized impact on the overall economy. Tech spending and the huge productivity gains it has made possible have been the main engines of the record-breaking economic boom (page 62). But now, that tech engine appears to be sputtering. According to recent Commerce Dept. figures,

the annualized growth in new orders for information-technology

Cover Story

equipment fell to a measly 1.2% in the third quarter from 34% just a quarter before. And scaled-back spending by both consumers and businesses is putting an ever-tightening squeeze on tech players. The growth in consumer spending on telephone services, for instance, fell to 3.1%, a third of the rate a year ago. Meanwhile, business purchases of communications gear actually fell 2%, down from a growth rate of 65% in the first quarter. All of this has contributed to a sharp slowdown in gross domestic product. On Nov. 29, the Commerce Dept. reduced its GDP growth estimate for the third quarter from 2.7% to 2.4%, the slowest rate in four years.

BOTTLED UP. No one knows for sure how far tech will fall—or how much it will drag down the rest of the economy. If Federal Reserve Chairman Alan Greenspan moves to lower interest rates, that could free up billions of dollars in capital that had been sidelined, easing the credit squeeze in key tech sectors, such as telecommunications (page 64). But for now, the underlying problem persists: The great pools of money that fueled the tech-buying binge—the market for initial public offerings, the debt market, and corporate earnings—are starting to dry up.

The financial cracks in the tech juggernaut are plain to see. Venture capital is on the wane: Third-quarter venture investments totaled \$25.9 billion, down 6.8% from the second quarter, according to fund watcher Venture Economics—the first drop since 1996. Crosspoint Venture Partners, for one, even dumped plans for a new \$1 billion fund, partly because they can't get returns from IPOs, which have slowed to a trickle. And debt markets, which drove furious investments in telecommunications equipment, have been bottled up as companies have struggled to make adequate returns on the huge investments already made on high-speed networks. Overall, telecom companies had been raising a total of \$8.3 billion a month in debt and equity. Now, that spending has dwindled to a trickle, to just \$1.3 billion in November.

Most damaging of all, however, is the extent to which the



world's largest purchasers of technology, from General Motors to Nestlé to First Union, are casting a cold eye on all their spending. In dozens of interviews with top technology purchasers, BUSINESS WEEK found that many companies are cutting back or rethinking big spending. Especially hard-hit in these purchasing trims: PCs and older telecommunications gear that don't provide much profit bang for the buck. "We will spend significantly less for the next couple of years," says John Hollenbeck, executive vice-president for technology at title insurer First American Financial Corp. "I'd say tech spending will be flat to down."

Even those companies that are holding the line or raising tech spending are focusing strictly on technologies with clear payoff. That includes more efficient computer server, fast networking gear to speed their operations, and Net software that cuts costs or forges stronger links with customers and suppliers.

So far, the cuts are acute in a few big industries. Teleco

ANGST IN THE AIR

Consensus earnings estimates are falling fast

BY FIRST CALL CORP.

OVERALL TECH SECTOR

Oct. 1, 2000 Forecast	Dec. 4, 2000 Forecast
--------------------------	--------------------------

FOR 4TH QUARTER, 2000

29%	15%
-----	-----

FOR YEAR 2001

24%	17%
-----	-----

COMPUTER HARDWARE

Oct. 1, 2000 Forecast	Dec. 4, 2000 Forecast
--------------------------	--------------------------

FOR 4TH QUARTER, 2000

45%	19%
-----	-----

FOR YEAR 2001

26%	22%
-----	-----



the economy, it doesn't take long for CEOs to say: 'Hey, wait a minute, what does this spending do for the bottom line?'" says Ralph Szygenda, GM's chief information officer. "We're just going to become more frugal."

The slowing economy isn't the only problem. Making matters worse, for the first time in 20 years, technology may be suffering from far more than its usual periodic bouts of overproduction that follow boom times. Now, it's on the verge of plunging into a bona fide slowdown.

PLUNGING RETURNS. It's all a far cry from the boom times of just a few months ago. What went wrong? For starters, flagging consumer demand. Some 60% of American households now own at least one PC, according to market researcher IDC. The PC slump is also putting the brakes on chipmakers. They're being forced to cut prices, leading First Call to reduce its estimate of 96% profit growth this year to just 18% next year.

Businesses are feeling the cold chill of winter, too, and they account for most technology spending. Take telecommunications companies. Hoping to tap into new markets such as wireless and the Internet, they've been jacking up capital expenditures by 30% a year for the past two years.

TRIPLE WHAMMY

The pools of money that fueled the tech-buying binge—IPOs, the debt market, and corporate earnings—are starting to dry up

The glut of would-be players, coupled with revenues that have risen only 11% a year, means returns plunged—and now, so is spending. Merrill, Lynch & Co. predicts that telecommunications spending will actually decline 1% next year, to \$238 billion, and fall 5% more in 2002. That huge shift seems certain to wreak havoc with telecom-gear suppliers. Especially vulnerable are those focused on older technologies, such as Lucent Technologies. Telecom suppliers had been counting on 15% to 30% hikes for years to come.

The falloff in corporate IT spending has spread worldwide, too, coming home to roost among American suppliers. In Europe, slow adoption of Microsoft Corp.'s new Windows 2000 software has pulled down corporate PC sales by over 20% this year, according to Context Research International Ltd. in London. That slammed the earnings of tech powerhouses Intel and Dell Computer Corp., which had counted on the European market for a sales boost. "We used to renew our PCs every three years," says Jean-Claude Dispaux, IT director at Nestlé. "Now, we may keep our older Pentium II machines longer."

Moreover, as the dust settles on the dot-com shakeout, it is becoming clear that the frenzied tech spending they unleashed in recent years was like a snowball, gathering up everything in its path. Up to now, even big companies chose



panies, banks, brokerages, and retailers are reducing spending the most, according to Andrew Bartels, a president at tech consultant Giga Information Group. Total spending at U.S. telecom companies such as AT&T Sprint Corp., for instance, has been soaring by 40% any year for the past two years, but that is expected to fall to 3% next year as they face financial pressures and competition. Ditto for banks and brokerages. And retailers are gung up on tech spending as the the fear of being "Amazoned" by e-tailers diminishes by the day.

With GDP slowing, nobody thinks those industries will be the only tech penny-pinchers. For tech suppliers, that is the worst may be yet to come. The tech sector, already taking on water from wave after wave of profit warning and market volatility, could get further swamped if fiscal wild cards such as an escalation of strife in the Middle East and a new U.S. president with a weak mandate further burden the economy. "When there's a slowing of

COMPUTER SOFTWARE

Oct. 1, 2000 Forecast Dec. 4, 2000 Forecast

FOR 4TH QUARTER, 2000

15% 4%

FOR YEAR 2001

32% 25%

SEMICONDUCTORS

Oct. 1, 2000 Forecast Dec. 4, 2000 Forecast

FOR 4TH QUARTER, 2000

48% 51%

FOR YEAR 2001

27% 18%

COMMUNICATIONS EQUIPMENT

Oct. 1, 2000 Forecast Dec. 4, 2000 Forecast

FOR 4TH QUARTER, 2000

-4% -45%

FOR YEAR 2001

45% 33%

to spend huge sums just to keep pace with the dot-com upstarts that seemed poised to eat their lunch. With that threat starting to melt, "there's less pressure on brick-and-mortar companies to spend a lot," says Tom Kucharvy, president of e-business consultant Summit Strategies Inc. "The days of the Gold Rush of the Internet generation are over," agrees GM's Szygenda. "Now, it's 'Show me the real benefits.'"

Compounding that caution is yet another hangover from the '90s high-tech-spending party: slowing investment in some back-office software and hardware upgrades. Even before the Internet and Y2K, corporations through most of the decade were frantically upgrading their back-room systems with new software, such as database programs from

com-service providers. In November, Lucent said it is lowering estimates partly because it might not collect on some of that revenue. "It's absolutely a concern," even for still-booming companies such as Cisco, says Jim Cottle, a technology analyst at the University of California Endowment & Employee Pension Fund, which owns shares of Lucent, Cisco, and Nortel Networks.

To put all this in perspective, however, even with the relentless doom-and-gloom announcements, no one yet believes that technology-spending growth overall is going to turn negative.

Indeed, despite the increasing signs of trouble, market-research consultant GartnerGroup still sticking with estimates it compiled several weeks ago that overall spending on info tech hardware, software, services, and telecommunications as a whole could rise 11.6% next year—just a hair under the 12% expected this year. Moreover, not every company is cutting spending. "We're running at full bore," says Jim Yost, vice-president for corporate strategy at Ford Motor Co., which is one of several large corporations with no plans to trim information-technology budgets. "The need to spend dollars has never been higher."

Maybe. But it's hard to see what hot new products or services might turn the situation around in the short term. In previous tech downturns, new products and lower prices often provided the spark for a rebound. In 1995, the arrival of Microsoft's Windows 3.0 and the advent of low-cost PCs from Apple and others sparked new demand for PCs.

This time around, Windows 2000 doesn't appear to be a barnburner with corporations or consumers, who find little reason to upgrade. Some devices and services, including high-speed

data services such as DSL, handheld computers, interactive units, and DVD players are selling well. But together, the newfangled devices and services are much more than rounding error compared with the PC

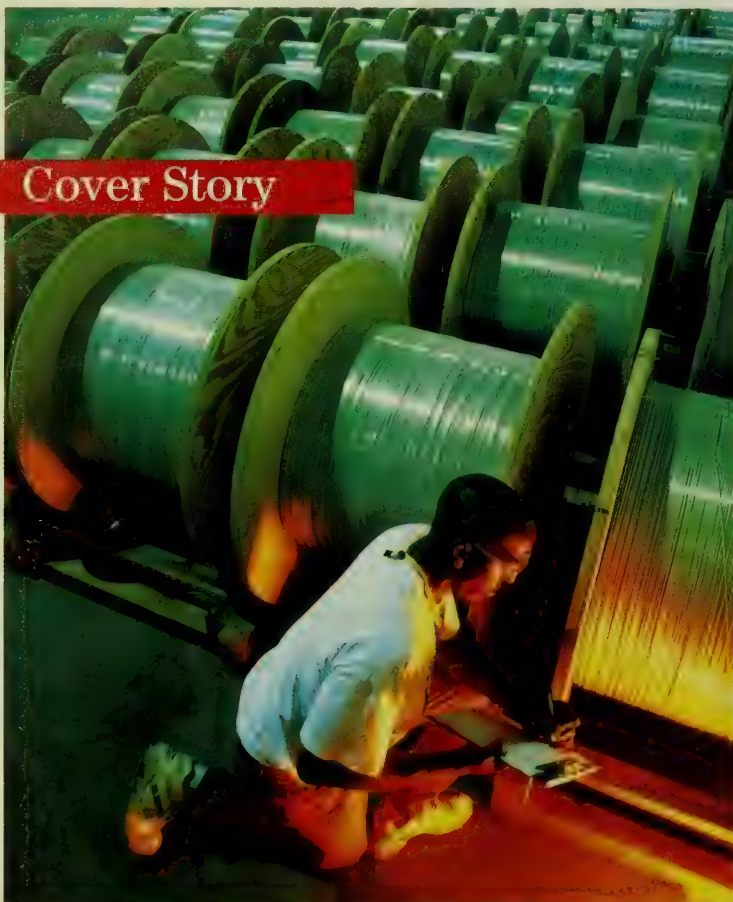
STRICT STANDARD

Even those companies that are raising tech spending are focusing strictly on purchases with a clear payoff

industry. "There's just not many products that cost \$1,000 a year," notes SoundView Financial Group analyst Mark Specker.

That's why investors will be watching tech like hawks from here on out. Michael Kwatinetz, a managing partner at Azure Capital Partners, a San Francisco venture-capital firm, for one, expects the dot-com meltdown to hit even server sales, which have been booming. If so, look out below, says William T. Coleman III, CEO of software maker H. Systems Inc.: "If Cisco and Sun Microsystems start losing sales, then there's real trouble. There's a recession going on. That hasn't happened yet. But until the spending subsides, neither the tech industry—nor the U.S. economy—will be out of the woods."

By Robert D. Hof in San Mateo, with Peter Elstrom, Steve Hamm, and Marcia Stepanek in New York, Willia Echikson in Brussels, Peter Burrows in San Mateo, and bureau reports



Cover Story

Oracle Corp. and enterprise-planning software from SAP. Now, for most large companies, that's done, so growth is slowing. "The internal stuff, reengineering stuff, has been winding down," says David Drew, chief information officer for 3M. "Our information-technology costs will rise slowly, but less than sales growth."

ABSOLUTE CONCERN. As the tech-spending boom unwinds, the problems could accelerate for a little-known reason: Many technology suppliers essentially have been paying for their own sales with aggressive financing of their customers' purchases. Analysts think that's especially a problem in fast-growing areas such as networking gear, where startup customers such as dot-coms suddenly go under and can't pay their bills. That creates a double whammy, because equipment suppliers are not only looking at reduced sales going forward but also at a loss of sales already booked.

Lucent, for instance, extended more than \$7 billion in financing to customers, many of them struggling young tele-



Have you been very, very, very good?

Whoever said it's better to give than to receive was obviously never on the receiving end of a Mercedes-Benz SL 500. Sleek. Sophisticated. Powerful. What more could you hope for this season? The SL 500



Mercedes-Benz

WHO MAY PROSPER DESPITE THE FALL

Despite the gloom gathering over high-tech, Commerce One Inc. CEO Mark B. Hoffman isn't losing sleep. Why should he? In 1990, the last time the technology industry cratered, Hoffman was running fast—building database-software maker Sybase Inc. While the rest of the sector saw timid 10% growth for two straight years, revenues at Sybase jumped 160%. Now, he's counting on the same boost for Commerce One, an e-business software maker.

Little wonder. When corporate

picking up again, says CEO Ross Dove. He just banked \$750,000 by selling off the PCs, furniture, and other assets of now-defunct Petstore.com and Productopia.com.

If anything, high-end software makers look even better positioned to flourish. In 1990 and 1991, while the national economy bottomed out, the three biggest independent makers of databases saw, on average, 30% annual growth. Customers believed they could save money by taking information off old, expensive mainframes and moving it onto the more flexible software sold by the young database companies.

Will the same thing happen for new e-business software makers? Ariba Inc. CEO Keith J. Krach hopes so. Ariba makes software for business-to-business marketplaces and online-procurement systems that can save a customer up to 20% a year on

purchases of necessities such as office supplies. Says Kimberly Knickle, an analyst at Advanced Manufacturing Research Inc. in Boston: "IT project managers are going to have to produce a cost-benefit report to demonstrate that they need the technology," and e-biz software is a proven way to do so.



That's why most Wall Street analysts expect the market for customer-management software, dominated by Siebel Systems Inc., to continue to grow at a 70% clip next year. The market for software that automates supply chains should boast gains of about 50%.

OUTSOURCER BOOST. Likewise, researcher Technology Forecasters expects the market for contract manufacturers to keep growing at this year's 28% clip. And despite its otherwise bearish outlook on the tech sector, Merrill Lynch & Co. thinks outsourcers such as Solecron Corp. in Milpitas, Calif., which makes everything from cell phones to computer networking equipment, will still prosper. "When things slow down, the first thing people look to do is cut costs—and getting rid of factories is a great way to do it," says Michael E. Marks, CEO of contract manufacturer Flextronics International.

Even these downturn-resilient categories aren't immune. "I don't see any sign that [software sales] will slow down. If anything, they are accelerating," says analyst Knickle. "But people are kidding themselves if they think they're recession-proof." A backlash against free trade, for example, could cripple contract manufacturers, who often rely on cheap foreign labor. Hoffman concurs: "I worry, still, that anything from the election to the oil situation to any number of things globally could squelch the economy and lead to a downturn." And if that should turn into a recession, the troubles that are plaguing the rest of the industry won't leave even the most defensive players unscathed.

By Jim Kerstetter, with Peter Burrows, in San Mateo, Calif., and bureau reports

Cover Story

profits get squeezed, high-end software that can automate complex processes heats up. In fact, any spending on tech equipment or services that cut costs and improve efficiency can rapidly change from being a pesky expense item to a downright necessity. Consider it the silver lining in the tech-spending cloud: From contract manufacturers and software makers to purveyors of used computer equipment, some sectors flourish when the rest of the info-tech industry turns down.

GATHERING STEAM. That shift has already begun. On Dec. 6, wireless giant Motorola Inc. announced that to cut costs, it will outsource the manufacturing of more than \$1 billion worth of communications gear, such as handsets. That trend is likely to gather steam. Indeed, while PC makers, chip-makers, and telecom-equipment manufacturers have announced disappointing quarters, few high-end software companies, contract manufacturers, or the analysts who follow them have expressed earnings concerns.

They won't, if past downturns are any guide. Back in 1985, the nascent days of the PC business, dozens of PC manufacturers existed. Two years later, many of them were gone. Despite the contraction, bargain hunters kept technology auction houses such as DoveBid Inc. going like gangbusters. In 1984 and 1985, it sold at least 50,000 computers made by now-defunct companies. These days, the fire sales are



RECESSION-RESISTANT

HIGH-END SOFTWARE It can quickly improve operating efficiencies for customers.

CONTRACT MANUFACTURERS Hardware makers turn to contractors that can build their systems more cost-effectively.

USED-EQUIPMENT SELLERS Old PCs still need to be replaced. Buying hand-me-downs is cheapest, particularly when new models don't offer much more processing power.



the best

PSA Peugeot Citroën

car industry

Pescanova

frozen foods

Inditex

textiles & clothing

Zeltia

biotechnology

and 10000 other companies

...are doing business in **GALICIA** (Spain)

Come and join them in the region with the greatest facilities
and the best investment profitability rate in Europe.



For further information:

HQ: Santiago de Compostela • Ph: +34 981 541 143 • promocion@igape.es

Offices:

Düsseldorf • Ph: 0211 935 0141 • IGAPE-Dusseldorf-U.Schneider@t-online.de

New York • Ph: 212 832 3942 • igape@idt.net

Tokyo • Ph: 03 3584 1861 • igapejap@gol.com

www.igape.es



Galician Government Ministry
of Economy and Finance



IGAPE
GALICIAN INSTITUTE FOR ECONOMIC PROMOTION

TECH LEADS —BOTH UP AND DOWN

Historically, if the tech of the era dives, so does the economy. But they always rebound

COMMENTARY By Michael Mandel

Considered by size, the tech sector seems like the runt of the economy. Business and consumer spending on such items as computers, communications equipment, and home-telephone services totals only 7% of gross domestic product. Tech leaders such as Cisco Systems and Microsoft, employing about 40,000 workers apiece, are dwarfed by industrial giants such as General Motors and General Electric. Even those widely publicized dot-com layoffs are smaller than the statistical error in the monthly unemployment numbers from the Labor Dept.

But size doesn't always matter. Today, more than ever before, the U.S. economy marches to the beat of the tech drummer. In the second half of the 1990s, tech spending accounted for a quarter to a third of growth—and with many nontech companies already slowing and seeing weak earnings, tech spending is even

more important. Indeed, in the third quarter of 2000, consumer and business spending on technology was responsible for 40% of economic growth. Without tech, the rate of economic growth in the third quarter would have been a minuscule 1.5%—not recession level, but close. As a result, any further tech slowdown could cause outsized problems for the economy. And given the relatively fragile state of the economies of Asia and slowing growth in Europe, a downturn in the U.S. could spread to the rest of the world as well.

Equally important, the tech boom has been the major driver of the productivity boom of the past five years that has made it possible for the U.S. to boast faster growth and lower unemployment without triggering an inflationary spiral. A sustained slowing of tech spending, if it happens, would undermine those gains. That could mean a return to the slow-growth, high-inflation days of the 1980s.



How serious is the danger? The U.S. has seen tech slowdowns before, most recently in 1985-86 and 1989-91. But those fluctuations in the tech sector did not have much of macro impact since the information-technology industry was much smaller relative to the U.S. economy as a whole. This time, things are different. A more revealing historical precedent requires looking back to the railroads in the late 1800s and the automobile industry in the 1920s. Like the tech sector today, these were technologically innovative industries that were so important in their heydays that their ups and downs produced booms and busts in the larger economy.

To be sure, an interest-rate cut from the Federal Reserve now would go a long way toward blunting the impact of the current tech slowdown. Telecom and other companies trying to raise funds to continue capital spending would find the going much easier. At the same time, lower rates could put floor under stocks and ease the capital squeeze on young tech companies.

In a Dec. 5 speech—exactly four years to the day after he made his famous “irrational exuberance” speech—Fed Chairman Alan Greenspan made it clear that he is aware of the danger that “weakening asset values in financial markets could signal or precipitate an excessive softening in household and business

Cover Story

TECHNOLOGY BOOMS AND BUSTS



RAILROADS

The railroad boom of the 1800s was punctuated by several sharp downturns, including a near-depression in the mid-1890s. But after each wave of consolidation and bankruptcies, strong railroad growth resumed.





direct effects on the economy. One possible casualty: the consulting industry, which has piggybacked the tech boom by providing assistance to companies implementing the latest technology. After years of rapid growth, the market for consultants is showing signs of weakening. Web consulting firms such as Xpedior Inc. and Marchfirst Inc. are cutting jobs, and the damage could spread to the larger consultancies as well.

Historical analogies to railroads and cars also suggest that a technology-led downturn could be quite bad. Consider railroads, which dominated the economy in the second half of the 1800s, much as tech does today. During this period, any time railroad expansion paused, the economy and the markets suffered. A slowdown in railroad construction helped trigger the panic of 1873 and an economic contraction that lasted until 1879. The failure of railroads, such as Philadelphia & Reading Railroad Co. in 1893 and the resulting financial panic, helped cause the near-depression and widespread layoffs of the 1890s.

In a similar fashion, the expansion of the auto industry was the driving force of the 1920s boom. Car ownership tripled in that decade, creating an overpowering demand for steel, rubber, and petroleum for roads and new homes. But auto demand peaked in April, 1929, because the Fed lifted interest rates and because the car-buying needs of Americans were temporarily sated after a decade-long binge. At first, the rest of the economy seemed to get along just fine. But without impetus from the auto sector, the boom could not continue. The result: the October, 1929, crash and ensuing downturn, which hit the auto industry and its suppliers first and

hardest. It wasn't until the Fed started easing monetary policy years later that the auto industry began to recover.

Still, the past offers some good news for the present. Despite the viciousness of the railroad and auto-led downturns, the industry always came back stronger than ever. The 1890s slump was followed by a resumption of railroad expansion. From 1895 to 1915, the number of passenger miles traveled by rail nearly tripled as Americans took advantage of fast, cheap travel. Meanwhile, cheap shipping costs contributed to

the rapid productivity growth of the early 20th century.

Moreover, like today, the railroad and auto booms led to the creation of too many competitors, many of whom went under when the economy slowed. But these shakeouts did not affect the long-term health of the industry. The collapse of auto sales in the early 1930s brought massive consolidation as well-known carmakers such as Pierce-Arrow went under or were greatly weakened. But overall, the auto industry emerged from the Great Depression with its position at the core of the economy more solid than ever. Sales rebounded in 1936 and 1937, and big carmakers became the major powerhouses of the economy, a role they maintained well into the postwar era.

The implication is clear:

No matter how long the tech slowdown lasts, America will have an information-led economy. But the long-term trend won't stop a technology slowdown from doing great damage today.

*Economics Editor
Mandel covers the New
Economy.*

HOW TO REBOOT

A rate cut would help companies continue capital spending and ease the capital squeeze on fledgling players

ding." The financial markets, which assumed meant a likely rate cut in January, jumped in onse to his words. Yet in the past, such mar-responses to Greenspan's jawboning have ed temporary. His "irrational exuberance" re-c held the market down for only a couple of s before it started climbing again.

ntil Greenspan makes real moves to cut s, it's likely that the economy will remain age to the specter of a tech downturn. Take aufacturing. Over the past year, factory output expanded by a healthy 5.6%. But all of that has come the increased output of high-tech equipment, while non-manufacturing showed virtually no growth at all. qually important, a sustained tech slowdown could erode pace of productivity gains. In recent years, rising pro-ivity has been fueled by a rapid expansion of the stock of utive gear and software, which has grown at an annual of 6.5% since 1995. Any trimming of tech spending d pare those hikes in capital stock, with negative effects roductivity. Forecasts of a 4% sustainable growth rate as-e the continued high investment level of recent years. oreover, any tech slowdown would likely have other in-

TOMOBILES

Is boom was largely by a tripling of auto l the Depression was ed in part by a car buying. But that bounded by the late the industry domi-postwar economy.



COMPUTERS

With a few exceptions, such as the mid-1980s and early 1990s, info-tech industries have known mainly strong growth. Even with today's tech slowdown, the long-term trends driving tech spending are still in place.

By Rich Miller and Laura Cohn

THIS IS YOUR CAPTAIN SPEAKING...



On Dec. 5, four years to the day after warning stock investors about irrational exuberance, Federal Reserve Chairman Alan Greenspan took to the bully pulpit again. But this time the announcement from the economic oracle had an entirely different ring: Beware of irrational pessimism, he as much as warned. In a stunningly direct speech—the equivalent of shouting from the mountain-top for a Fed chairman best known for his opacity—Greenspan declared that the economy is not collapsing.

Cover Story

The sigh of relief was audible. While the presidential election mess has left Washington seemingly leaderless, Greenspan reassured the markets that the Fed is on the job. Wall Street liked what it heard, at least initially. The Nasdaq experienced its biggest rise in its 29 years, while Treasury bond prices totted up their best gain in almost four months. So did Corporate America. "Bush. Gore. Either one, we can work with [him]," says Ford CEO Jacques A. Nasser. "Just keep Alan Greenspan doing what he's doing."

DECCELERATION BY DESIGN. Using the venue of a speech to community bankers, the Fed maestro took on the growing chorus of critics who worry that the country may be headed for a recession. He laid out his case that the economy is decelerating by design, not spiraling into an uncontrolled nosedive. While tacitly acknowledging that the soft landing he's engineered for the economy may end up bumpier than planned, he argued that things just aren't as bleak as the pessimists on Wall Street—and on the Bush team—would have it. Behind the extraordinary round of jawboning: fear that excessive pessimism on the part of investors, consumers, companies, and lenders could

turn a much desired slowdown into an unwanted slump.

Greenspan also made it as clear as a central banker can that the Fed stands ready to cut interest rates. If consumers and companies become too cautious about spending, or if the stock market falls too far, the Fed will be there with easier credit to cushion the fall.

His message was meant not only to reassure financial markets but also to signal some of his more hawkish fellow policymakers at the regional Fed banks that it's time for them to fall in line behind their leader. After six rate increases over the past year and a half, a rate cut could come as soon as the Fed's next policymaking meeting on Dec. 19, experts say. Still, it's more likely to occur in January, after the Fed has had a chance to assess the holiday shopping season.

But critics charge that it's already too late for a rate cut to be of significant help. "The odds of a recession are about 60%," says Brian Wesbury, chief economist at Griffin, Kubik, Stephens & Thompson in Chicago. "Even if the Fed were to cut rates today, they could not stop [the downturn] from happening because it takes time for monetary policy to affect the economy."

Other Wall Street worrywarts are gloomy for different reasons. "It's not just a monetary policy-induced slowdown," says James W. Paulsen, chief investment officer at Wells Capital Management. "It's coupled with a new-era economic slowdown in tech." And while higher rates and tighter financing conditions have played a role in the high-tech shakeout, deeper demand problems will continue to restrain spending



JUST HANG ON

Investors are gloomy despite Greenspan's reassurance that a (bumpy) soft landing is ahead

on telecoms and PCs regardless of the level of interest rates.

Fed officials admit that the satinsmooth landing they had planned for the economy—with growth slowing to 3½% next year from more than 4% this year—now looks unlikely. Oil prices, though down, remain stubbornly high. Corporate profit estimates have been slashed. Inventories of everything from cars to microchips are piling up. And labor costs have been rising.

The result: growth next year could come in closer to 2½%. While that's not bad by historical standards, it's well below the heady growth the U.S. has gotten used to. For many consumers and companies, it will feel like a recession. And if they cut back spending accordingly, it could turn into one.

Miller and Cohn cover the Federal Reserve from Washington.



Ananova – the world's first internet-based virtual newscaster.

Produced with kind permission of the copyright owners Ananova Limited.

Vision. Between a problem and the right solution lies a world of possibilities. We've built a network of 39,000 open minds in 40 countries, all looking ahead at new ideas, challenges and opportunities. With new perspectives on investment banking and securities to offer, UBS Warburg can provide solutions as effective as they are visionary. In technology, in cyberspace, in virtual communications – and in every other business sector. Because we have one common focus. More client success. www.ubswarburg.com

Success demands more.



UBS Warburg

MORE BAD NEWS FOR THE NAZ

A comeback could be months away

Less than a year ago, the Nasdaq Composite Index was heralded as the new, true benchmark for the stock market. Hedge-fund manager James Cramer proclaimed that money managers who couldn't beat the Nasdaq "would get the money taken away." Investors poured cash into "cubes"—

Cover Story

Nasdaq 100 shares—striving to match last year's 86% gain. The glitzy Nasdaq Market-site opened on Times Square, sporting a 13,000-foot video screen and ticker. The Dow Jones industrial average and the S&P 500 looked nerdy next to the "Naz."

Is it revenge of the nerds? The Dow and S&P 500 are both down only about 8% year to date. But despite the Nasdaq's 274-point spurt on Dec. 5, the highest one-day per-

centage and point gains ever, so far this year the index is down 31%. Suddenly value investing is hot, growth is not. And even if the Nasdaq, where tech accounts for 70% of the index, continues to gain lost ground, many investors are wondering when and if it will ever stage a sustainable comeback. Short answer: A bottom in the Nasdaq could be near, but it could take months, and some say a couple of years, for a full recovery.

The culprits are the "three E's"—the election, the economy, and earnings. An election result may be near, but the two other E's linger. Despite the possibility of lower interest rates, tech earnings expectations, especially for big companies, are being revised downward in light of a slowing economy. Earnings for the tech sector of the S&P 500 are expected to grow 17% in 2001, according to First Call Corp., the earnings research firm. That's down from an estimated 24% in early October.

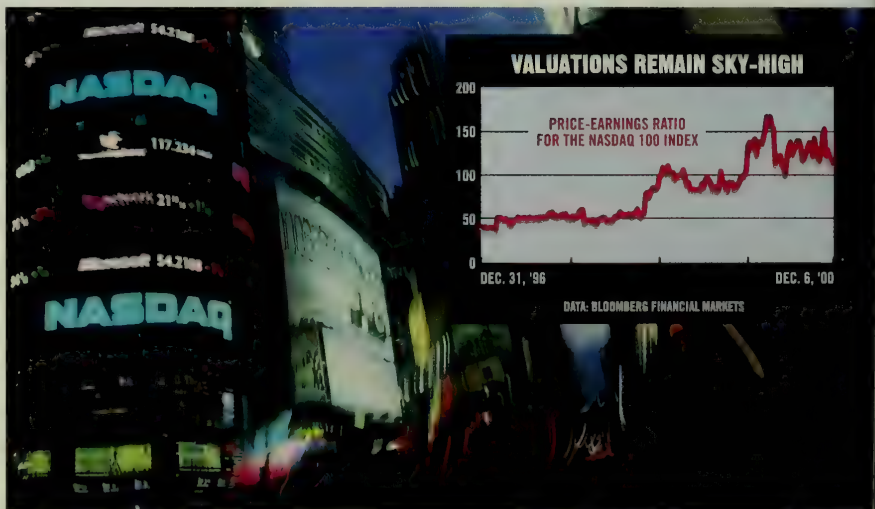
NOT SUSTAINABLE. According to Ronald Hill, equities strategist at Brown Brothers Harriman & Co., when analysts start revising earnings downward, the period of underperformance is generally halfway through. Since downward revisions in the Nasdaq began in October, and the index began to fall last March, seven months before, the Nasdaq will probably underperform until May, according to Hill's analysis. "Tech revenues and profits will continue to slow, and it will be difficult for these stocks to be the leaders until you see a real upturn in the economy," says Hill.

Even now that Federal Reserve Chairman Alan Greenspan has raised prospects of a rate cut—or at least a shift to a "neutral" bias—as early as Dec. 19, it's unlikely that tech stocks will suddenly come bounding back. "It will be 6 to 12 months before lower rates turn into faster earnings growth," says Hill. That's because fundamental problems remain in tech:

Chip shipments have slowed from 60% growth to 40%, cell phone sales have dropped 15%, and PC sales have gone from 20% annually to 12%. And next year, telecoms are expected to buy 13% less from equipment makers than they did in 2000.

Meanwhile, investors are less willing than ever to pay dearly for erstwhile tech darlings. "Perception that growth is slowing is really changing investor sentiment regarding price earnings ratios," says Art Russell, senior technology analyst at Edward Jones Co. True, price-earnings ratios have come down dramatically in tech stocks. But have they fallen far enough? The Nasdaq 100 index, which consists of the largest 100 stocks in the Nasdaq, is now trading around 120 times earnings on a trailing 12-month basis. That's well below the 170 times earnings the index traded for when it hit its peak in March. But on a historical basis, that remains high. The average p-e ratio of the Nasdaq over the past five years is 99, according to stock market newsletter *InvestTech*.

There could be more pain in the Nasdaq. Although the index lost an eyepopping 23% in November alone—its worst performance since October, 1987—it still has a ways to go before it gets back to its historical norms. According to a recent study by Salomon Smith Barney, the Nasdaq would have to fall all the way to 2019, some 30% from its current level in order to revert to its 20-year norm of 18% annual gains. Or, put another way, it could simply post no gain at all until September, 2002. "Five-year annualized gains in excess of 40%



just aren't sustainable," says Jonathan Lin, a technical analyst at Salomon Smith Barney. But if tech earnings pick up down the road, bigger gains could resume in the Nasdaq.

More bad news for investors: This could be a market bubble that takes years to overcome. In the tech bubble of the late '50s and early '60s, computer stocks such as IBM peaked the fourth quarter of 1961, then plunged. They didn't recover until 1964, says a recent study by Salomon Smith Barney. And oil stocks still haven't returned to the peaks they reached during the oil stock bubble of 1980. "There's no reason to think this time will be different," says A. Marshall Acuff, an equities strategist at Salomon Smith Barney.

Despite a few brief rallies, the Nasdaq may struggle for a while. But strategists say potential interest-rate cuts ahead could bring the Dow and the S&P 500 back soon. "There's enough momentum on the upside that the S&P and Dow will make new highs in the first half of next year. But not the Nasdaq—there's just too much tech and it has such a long way to climb back," says Brown Brothers' Hill. Looks like the nerds have it.

By Marcia Vickers in New York





***Bibendum, the Michelin Man,
voted best logo in the world.***

The Financial Times, with the participation of R.O.B. Magazine (Report on Business), recently asked a worldwide jury of experts from the world of art and communication, architecture and design to select the best logo of the century. Their overwhelming answer: Bibendum, or the Michelin Man as he is known throughout the world. Thanks to everyone for their support!



MICHELIN

www.michelin.com

EDITED BY MONICA ROMAN

THE EPA MAY SEND GE UP THE RIVER

GENERAL ELECTRIC'S DECADES-old battle over PCBs in the Hudson River heated up on Dec. 6. The Environmental Protection Agency proposed that GE undertake a \$460 million "targeted dredging" of 500 acres of waterway. GE, which legally dumped the carcinogen for 30 years until 1977, labeled the proposal "absurd" and vowed to continue its fight against the EPA. To be sure, there will be no quick resolution. The EPA has floated a proposal—not an order—that GE do a cleanup. Such an order is months away—if it happens ever. This last-minute environmental action of the Clinton Administration may not

stand or may be substantially changed under a Bush Administration.

A SEA OF PINK AT DUN & BRADSTREET

IT WILL BE A LESS THAN merry Christmas at Dun & Bradstreet. On Dec. 4, the credit-service company announced it would cut 1,000 jobs. That's on top of 300 jobs the company already said it would eliminate. The goal: generate \$100 million in cost savings to help drive earnings growth and fund e-commerce initiatives. An additional \$50 million in cuts is planned for the spring. Prudential Securities analyst James Dougherty says Net services have hurt D&B's higher-cost offerings.

FASB MAKES A GOODWILL GESTURE

JUST IN TIME FOR THE GREAT tech shakeout come easier accounting rules for mergers. The Financial Accounting Standards Board has decided to create a hybrid method for booking mergers that lets an acquiring company carry "goodwill"—the portion of the target company's value that doesn't represent tangible assets—on its books indefinitely. The merged company must periodically assess the items that go into goodwill, such as brands, customer relationships, and other intangibles, and take a write-off if their value falls. FASB is backing down from its earlier plan to require a 20-year write-off of all goodwill.

LIFE SUPPORT FOR OXYGEN MEDIA

IT TOOK SEATTLE BILLIONAIRE Paul Allen to breathe life into struggling Oxygen Media. On Dec. 4, Allen's Vulcan Ventures agreed to pump \$100 million into the struggling

HEADLINER: STEVEN REINEMUND

PEPSI'S NEW GENERATION

Thanks to PepsiCo's \$13 billion deal to buy Quaker Oats and its fast-growing Gatorade brand, Steven Reinemund's elevation to CEO is coming a year and a half ahead of schedule. Not only does he have to make the biggest deal in Pepsi history work, but when it closes, he must fill the CEO shoes of soda legend Roger Enrico.

Can Reinemund stand up to the comparison? The 52-year-old former Marine is known for his excruciating attention to detail and his disciplined runner's physique. A relentless worker, he phones subordi-

nates on their days off to tell them if a product is out of stock at a supermarket. Though Reinemund is a veteran of Pepsi's profitable Frito-Lay snack division, he does not have Enrico's marketing flair, beverage experience, or love of dancing the night away at a good party. But the two executives are quite alike in their demanding nature, both focusing on the bottom line. And Al Bru, CEO of Frito-Lay North America, praises the grasp of detail that makes Reinemund able "to seize an opportunity quickly."

Nanette Byrnes



CLOSING BELL

MENDED NET

Don't call it a comeback—not yet. On Dec. 5, Inktomi stock jumped 57%, to \$34.44, far outpacing the Nasdaq's record single-day jump of 10.5%. The next day it climbed 3 $\frac{1}{16}$, to close at 38. The reason? The Net infrastructure sector served by Inktomi is on the rise. Also helping is Inktomi's traffic-server upgrade with support for the Linux operating system. A fine performance, but the stock is still 84% below its 52-week high reached in March.



women's cable channel and Web business, whose Hollywood backers include Oprah Winfrey and TV producer Marcy Carsey. Is Microsoft co-founder Allen, who invested \$100 million in Oxygen a year ago, just throwing good money after bad? Not necessarily. A day after announcing Allen's investment, Oxygen Chairman Geraldine Laybourne slashed the number of Oxygen-run Web sites from more than a dozen to just four. Laybourne shuttered the company's Seattle office and cut 44 full-time and 21 part-time jobs. With Allen's investment and a tighter focus, Oxygen may not have drawn its last breath. But the company's looking awfully winded.

KNOCKING AT THE SMOKEHOUSE DOOR

IF AT FIRST YOU DON'T succeed, try again. That's the message from poultry king

Tyson Foods, which on Dec. 4 jumped into the bidding war for IBP, the nation's biggest beef processor and No. 2 pork producer (page 242). With the move, \$7.16 billion Tyson, which unsuccessfully experimented with pork and beef businesses in the early 1990s, is angling to become the nation's largest meat company. IBP said it would begin talking to Tyson's proposed cash-and-stock offer of \$2.8 billion at the assumption of \$1.4 billion of debt. This puts pressure on Smithfield Foods to raise its \$2.7 billion offer for Tyson.

ET CETERA...

- Struggling Xerox spun off Gyricon Media from its Palo Alto Research Center.
- Bank of America said it will miss earnings forecast for the year.
- The FAA cut 140 flights in Dec. 4 lottery to ease L. Guardia Airport congestion.

BORN TO BE A LITTLE TOO WILD

How "concept drift" changed GM's radical Aztek into an odd duck



General Motors Corp. has found out the hard way that it's not easy to be hip. Last summer, the carmaker's Pontiac Div. began rolling out its first sport-utility vehicle, the first of several designs that GM hoped would around its reputation for churning nondescript cars and reverse its market-share slide. And the Aztek is nothing but blah. At Red McComb's Pontiac/GMC in San Antonio, the edgy, outlandishly styled vehicle sits in the showroom next to a more conventional Hyundai Santa Fe SUV. But so does the Korean-made Santa Fe is outgunning the Aztek five to one, says Darin Hair, the dealership's sales manager. It's hard to sell many Azteks, Hair says; people love it or hate it." More often today, the Aztek is the vehicle people love to hate. Many dealers who try to sell it can't find kind words for the Aztek's aggressive looks. At \$22,000 to \$27,000, the Aztek is priced for its original twenty-something market. Even the car-

back its annual sales forecast to 50,000, from the original 75,000. Aztek inventories remain almost triple what carmakers like to maintain. "We didn't order any this month," says Frank St. Tomas, general sales manager of Ken Grody Pontiac GMC in Carlsbad, Calif., which has 50 or 60 Azteks on its lot.

That's a rough start for a vehicle that GM had hoped would signal a design renaissance. With Aztek, GM wanted to prove it could transcend its engineering-dominated culture and design a hip, affordable vehicle for young buyers and move it quickly through a traditionally slow-moving bureaucracy. But the ef-

General Motors had hoped its eye-popping new SUV would signal a design renaissance. But Azteks have been clogging dealers' lots

AT THE MEDIA LAUNCH: DESIGNER PETERS WITH HIS STRANGE NEW BABY

enthusiast magazines, which typically review even the worst automobiles with kid gloves, have ripped the Aztek's styling. *Automobile* magazine called the SUV "gut-wrenching to look at." Says James Hall, vice-president at automotive consulting firm AutoPacific Inc.: "Functionally, the Aztek is great. It just looks like six-week-old cottage cheese."

The Aztek's early sales performance has been just as ugly. In its first four months, the Aztek has averaged about 2,000 sales a month—compared with, say, 8,000 a month for Ford Motor Co.'s new Escape SUV. In November, GM slapped on a \$500 rebate and scaled

back its annual sales forecast to 50,000, from the original 75,000. Aztek inventories remain almost triple what carmakers like to maintain. "We didn't order any this month," says Frank St. Tomas, general sales manager of Ken Grody Pontiac GMC in Carlsbad, Calif., which has 50 or 60 Azteks on its lot.

"CHANGE AGENT." GM insists that the Aztek is not a disaster and that the company won't pull in its horns and return to cautious styling. "If we rely on the current engineering-driven rules, we will never be competitive," says Mark Reuss, vehicle line executive for Aztek. Still, its lessons are already being

incorporated into forthcoming vehicles. Says Aztek Chief Designer Tom Peters: "The whole program has been a change agent for the company."

Some outside observers describe the Aztek as the first awkward step toward innovation by a company that has avoided that path. They liken the debacle to Ford's remodeling of its 1996 Taurus sedan—an overly aggressive and costly design that polarized buyers and led to a sharp sales falloff. In that case, though, the damage was worse because the Taurus and its sister, the Mercury Sable, were bread-and-butter cars that had sold 500,000 units in 1995. The Aztek represents a smaller risk for General Motors. Says John Taylor, a GM executive director of design: "There are going to be some balls that don't go out of the park. Overall, I'm glad we did it."

The Aztek started out a far different vehicle. Its inspiration was a 1994 sketch called Project Bear Claw, drawn in GM's now-shuttered design studio in Thousand Oaks, Calif. Bear Claw called for a smaller vehicle, more like a tall wagon with rugged styling. One GM designer describes the original drawing as "an off-road sports car." Even the Aztek show car, which debuted in Detroit in January, 1999, retained some curves in the sides and doors. The production Aztek, by contrast, has a much more pumped-up, angular body.

HAND-ME-DOWN PARTS. The first compromise was made a couple of years after the initial drawings when Detroit designers and engineers dreamed up ways to get the car into production. Bear Claw wasn't conceived for an existing platform or vehicle frame. But engineers decided to use GM's minivan platform to get to market quickly and affordably. Minivan components were available, and GM needed to sell more vehicles with those parts to boost returns for that program. The SUV could be easily built in a new plant in Ramos Arizpe, Mexico. And minivan architecture gave it a flat floor suitable for cargo. That interior space became a key selling point.

The trade-off: The Aztek took on the large, boxy dimensions of a minivan. The angular appearance was only accentuated when it was assigned to the Pontiac division. That ensured it would



ANATOMY OF A COMPROMISE

1994 General Motors' California design studio draws a concept called Bear Claw—a small, youth-oriented sport-utility vehicle. The idea is to combine aspects of a car and an SUV targeted at twenty- and thirtysomethings.

1996 Bear Claw becomes the inspiration for Aztek. Because it wasn't designed with a vehicle architecture in mind, engineers and designers begin looking at truck, passenger-car, and minivan platforms.

1996-98 GM decides the minivan platform could accommodate a spacious SUV while holding down development costs. But sides and doors must have flat panels to avoid production problems. That gives the Aztek a bloated, boxy appearance. Aztek is assigned to Pontiac. Designers work to develop a vehicle that has that brand's sporty look. Top management pressures them to make a bold styling statement that says GM is done with boring cars.

JANUARY, 1999 The Aztek concept car debuts at the Detroit Auto Show to mixed reviews. This version has more curvaceous sides that hide some of its minivan boxiness, but those subtleties are lost by the time Aztek reaches the market.

JUNE, 2000 Aztek production begins as the vehicle debuts with only two-wheel drive on the West Coast and in the Southwest. All-wheel drive will come in early 2001. In the midst of a hot market for SUVs, GM prices the Aztek at \$22,000 to \$27,000—too expensive, critics say, for a youth market.

NOVEMBER, 2000 With sales lagging—only 9,000 sold through November—GM scales back its yearly sales estimates and slaps a \$500 rebate on the Aztek.

get a racy look, with lots of plastic molding strapped around its bottom half. Pontiac designers were urged on by top executives, who wanted to make a statement about breaking from GM's instinct for caution. Chrysler had just wowed buyers with its macho Dodge Ram pickup. With GM getting hammered for bland designs and its overall share dropping from 33% in 1994 to 28% currently, the word was passed to get flashy. One

designer gripes: "It was aggressive for the sake of being aggressive." Counters Peters: "We wanted to do a bold, in-your-face vehicle that wasn't for everybody."

During development, GM research showed that would-be buyers were sharply polarized over the Aztek's styling. But some of the young drivers who were interested may never have gotten past the price tag. That's one reason why the average age of an Aztek buyer is 45, compared with Pontiac's overall average of 42. Pontiac officials insist that a price as high as \$27,000 is fair given the vehicle's size, 185-horsepower engine, and interior versatility. But analysts wonder why the Aztek is so expensive since it uses many existing parts and is built in Mexico. Says Auto Pacific's Hall: "They got greedy. Utility vehicles are hot, and they misjudged pricing."

Privately, some GM officials acknowledge mistakes with the Aztek. Executives say designers now create vehicle concepts with a specific platform in mind and give much more thought to getting to market with fewer compromises. "Concept drift—when you start with one thing and do another—is one concern of ours," Taylor says. Also, several new vehicles in the Pontiac pipeline are being toned down. The Buick Rendezvous SUV due out next year, shares many Aztek parts but will have more mainstream styling. The Pontiac Vibe, a small sport wagon to be built with Toyota Motor Co., will be stripped of some molding. And Pontiac's concept REV sport wagon has a dramatic profile and hood scoops but no exterior plastic.

The Aztek's saving grace may be that unlike Ford's gamble on the Taurus, GM rolled the dice on a lifestyle vehicle that promised only modest sales. Still, the Aztek is generating the wrong kind of buzz.

"It's not a question of lost sales, it's a question of lost brand equity," says Ernie Noble, president of the Car Lab, a consulting firm in Santa Ana, Calif. "It's certainly going to taint the rest of what's in Pontiac dealers' lots." That the risk GM took when it decided to walk on the wild side. Now, the car maker must learn some sobering lessons on the morning after.

By David Welch in Detroit

Bought jacket online -----

Shipped by Priority Mail

Fly Like an Eagle.™



What's Your
Priority?™

USPSPriorityMail.com ©2000 United States Postal Service



UNITED STATES
POSTAL SERVICE

A WIDENING GAP AT THE TOP

Departures make it harder for Gap to turn its numbers around

A lot of retailers are struggling through this crucial holiday season, but few have as big a handicap as Gap Inc. The San Francisco-based outfit is suffering from serious losses in its senior management ranks. Four top Gap executives have left since September as part of a management shakeup, and two others exited earlier this year, including the chief operating officer. With so many departures, "more people are being pulled in more directions, and it's coming at the most critical period of the year for Gap," says Todd D. Slater, a retail analyst at Lazard Frères & Co.

Chief Executive Millard S. "Mick-

ey" Drexler conducted the corporate housecleaning in September and October in an effort to inject new blood into the executive lineup after months of poor results. Why shake up things just before Christmas? Slater says Drexler "had no choice but to act now; business was underperforming. He's under pressure." Still, the exodus has forced him to oversee multiple executive searches while the company is trying to regain its balance after a series of missteps. These included an ill-conceived spring advertising campaign for the Gap chain, too few grown-up clothes at its Old Navy unit, and oddball purple fashions at Banana Republic. Drexler made the mistake of skipping television advertising in the fall, opting instead for a special discount card that customers did not embrace. Now, Gap is back on TV with new commercials.

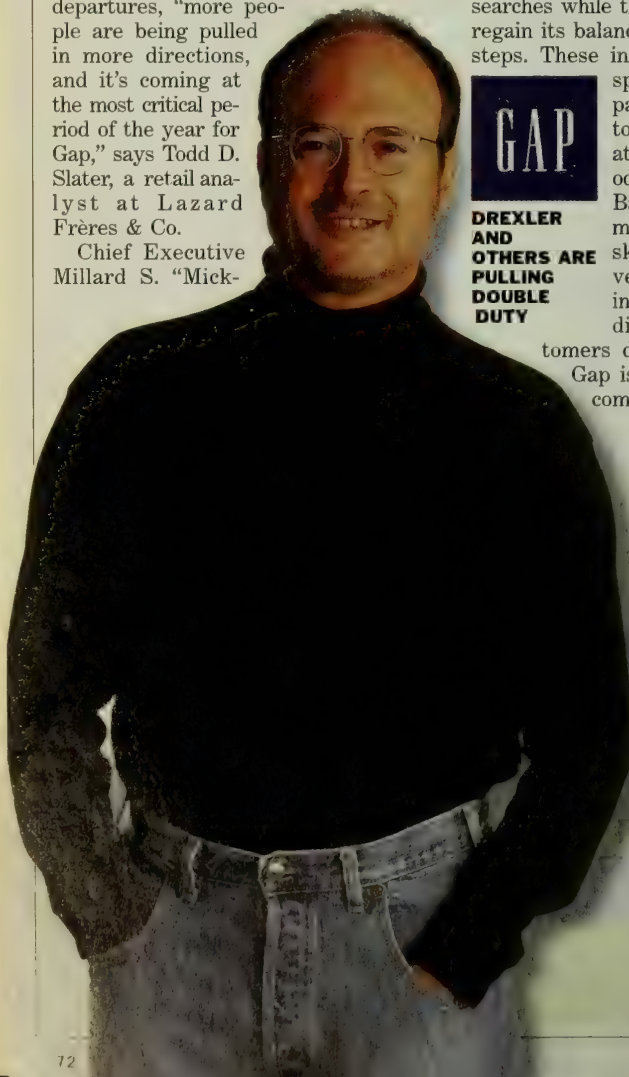
The loss of seasoned managers may be

making it harder to turn the numbers around. Last month, Gap reported third quarter earnings of \$186 million, down 41% from the year before. Overall sales rose 12%, but sales at stores open at least a year dropped 8% (chart, page 74). And the fourth quarter, ending Feb. 3, isn't expected to be much better. Credit Suisse First Boston expects the company to post earnings of \$295.9 million, down 28% from the previous year on an 18% sales gain. For the year, CSF sees Gap posting \$901.6 million in earnings, down 20%, on a 17% sales gain, or \$13.6 billion. Wall Street isn't expecting a turnaround any time soon, and investors have punished Gap, knocking the stock down to around \$26 a share from over \$50 in July.

OPEN SLOTS. Gap isn't saying much about the departures. Drexler declines to be interviewed, and the former executives either won't comment or couldn't be contacted. Gap calls the four departures that were part of the shakeup "resignations" or "mutual decisions." In an October press release, however, Drexler said he was "making appropriate management changes to ensure v



DREXLER AND OTHERS ARE PULLING DOUBLE DUTY



Executive Exodus

Gap CEO Mickey Drexler has seen six of his top executives depart this year

NAME	TITLE	DATE ANNOUNCED
LISA A. SCHULTZ	Executive vice-president for product design and development, Gap unit	October
SCOTT OLIVET	Senior vice-president for real estate	October
JAMES A. NEVINS	Executive vice-president for marketing, Gap unit	September
CHARLES FERER	Vice-president for finance, Old Navy	September
JOHN B. WILSON	Executive vice-president and chief operating officer	April
JEANNE JACKSON	Chief executive officer, Banana Republic and Gap Direct	March

DATA: GAP

 commonsense

www.amdahl.com

AMDAHL

a Fujitsu company

© 2000 Amdahl Corporation. All rights reserved.

People know Pueblo for its...



Snazzy Web Site?
(www.pueblo.gsa.gov)



Famous Hot Salsa?

In Pueblo, the free information is also hot. You can get it by dipping into the Consumer Information Center web site, www.pueblo.gsa.gov. Or calling toll-free 1-888-8 PUEBLO (1-888-878-3256) to order the Catalog. Spice up your life with ready-to-use government information on topics like investing for retirement, getting federal benefits, raising healthy children and buying surplus government property. Sorry, salsa not available through our web site or Catalog.



U.S. General Services Administration

The Corporation

have the best talent to lead our business forward," implying that the executives were asked to leave. As for the two execs who quit earlier this year, former COO John B. Wilson is now a private investor, and Jeanne Jackson, who ran Banana Republic before leaving in March, is now chief of Wal-Mart Stores Inc.'s online business. Some of the most recent vacancies have been filled by current Gap managers, but some key positions remain open, including the marketing head for the Gap unit.

MANAGEMENT CRUNCH. The situation has Drexler and other key officials pulling double duty. For example, Banana Republic marketing chief Amy Schoening is splitting her time to oversee the Gap division's marketing, and Mitch Rhodes, who runs the online unit's marketing, is helping to head up marketing at Old Navy until replacements can be found. This management crunch comes on top of the usual Christmastime operational headaches. Gap typically collects a third of its revenue and 35% to 40% of its net profit during the fourth quarter. Stores load up on temporary employees and extend shopping hours—some locations open two hours early, at 8 a.m.

Drexler, meantime, has taken on some of the duties of ex-COO Wilson, who left in April without a reason being given. Analysts regarded Wilson as the company's disciplinarian in important matters such as distribution—and over the summer, logistics at Old Navy began to falter. The channel for merchandise from factory to distribution centers to stores got clogged, resulting in thinly stocked shelves and double-digit declines in same-store sales.

Gap eliminated Wilson's position, and that worries some investors. Steven Dray, portfolio manager at Strong Capital Management Inc., says going with-

out a COO is "not ideally suited to Mickey Drexler," whose greatest strengths lie in merchandising, not operations. Dray also wonders whether Drexler is overextending himself by not delegating some responsibilities to less-experienced people who were recently promoted. Since April, when he moved up Kenneth S. Pilot from heading Gap's tiny international division to leading the flagship Gap brand, Drexler has overseen the brand's marketing and product development. These are areas that he had previously left to Pilot's more-seasoned predecessor, Robert J. Fisher, who stepped down late last year. To lessen the burden on himself, Drexler may "need a COO, or more senior people in each division," says Dray.

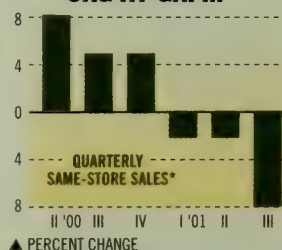
Gap says it is searching both inside and outside the company to fill the empty slots, but that's bound to take time. That might hurt morale, which could

lead to more defections. Any management outflow creates an atmosphere of uncertainty, making managers more open to seeking jobs elsewhere, says Kirk Palmer, a New York retail headhunter. "If it were 24 months ago, I'd have had a hard time taking people out of Gap. But today you'll find more executives willing to listen about other opportunities," he says. "That's not good for Gap."

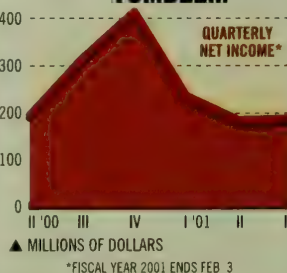
What may be good for Gap is that Drexler already has taken steps to get the company back on track. He's stocking more clothes at Old Navy for Mom and Dad rather than just the kids and opening fewer stores at all three chains next year. Drexler got Gap out of a similar rough patch once before, shortly after he took over as chief executive in 1991. Investors will be watching to see whether he can fill the gaps in his lineup and pull off an encore.

By Louise L. in San Mateo, Calif.

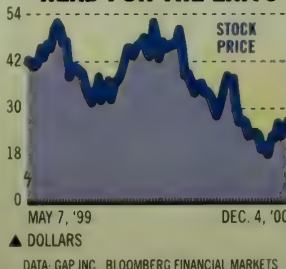
SAME-STORE SALES SAG AT GAP...



...AND PROFITS TUMBLE...



...WHILE INVESTORS HEAD FOR THE EXITS



DATA: GAP INC., BLOOMBERG FINANCIAL MARKETS



— desktop sanitizing station —

MEMO

TO: All Employees
FR: Jack Graves, CEO
RE: Health Care Costs

This year the company's cost for providing health care has risen 12%. In order to keep these costs from cutting into our bottom line we are going to adopt a few new company policies:

- 1) Desktop sanitizing stations will be installed, and sneezing outside the anti-bacterial spray zone is now prohibited.
- 2) Coughing and/or wheezing will only be permitted in the yellow zone located outside of shipping and receiving.
- 3) Handshaking, "high fives," and other forms of physical greeting will be replaced with an audible greeting such as "hey," "hi," or "what's up?"

Jack

Looking for more practical health benefit solutions? Hewitt can help you find quality health care options that reduce costs and improve employee satisfaction. As the largest health care consulting firm in the U.S., we're using the power of the internet and unparalleled resources to create a more efficient health care marketplace, as well as bring back personalized employee choices and service. So, if you'd like to avoid the cost of desktop sanitizing stations and, at the same time, keep health care costs under control, simply contact us.

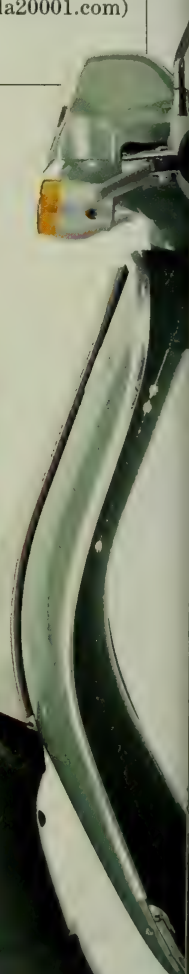
Hewitt

www.hewitt.com

Improving Business Results Through People

GREEN MACHINE

At last—an enviro-chic car. Honda's \$20,000 two-seat Insight runs on a gasoline engine/electric motor combo and gets up to 70 mpg. Honda will build 6,000 cars next year. Rivals have come up with hybrids or plan to do soon.
(honda20001.com)



THE BEST PRODUCTS of 2000

BY ROY FURCHGOTT

This year's best products may have computer chips inside, but they often have a nostalgic look. Convergence is under way: We saw small computers that wirelessly Web surf and a touch-screen, information-manager phone. Home entertainment has converged, too. Popular short films are online, and soon we'll upload live home movies. Some products took on Brancusi-like curves with frosted translucent finishes, others harkened back to the '40s. We even found a new and improved pencil.

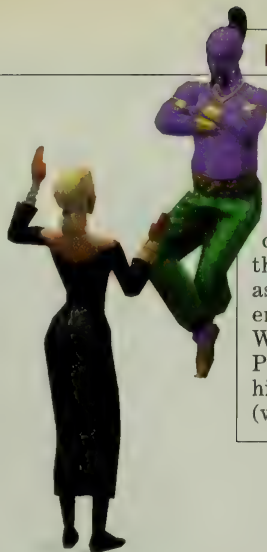


NO STRINGS

Metricom's Ricochet modem (\$99 to \$300, plus \$70 to \$80 monthly) hooks into your laptop and lets you surf the Web wirelessly at 128 kbps—twice the speed of dial-up modems. The service is in only a dozen or so U.S. cities, but next year it should be in 46 markets. (www.metricom.com)

MEET THE SIMS

Get a life—or several—from Electronic Arts' *The Sims*, a \$40 game in which players create neighborhoods, right down to the quirky personalities of the inhabitants. Enthusiasts post free homemade enhancements on the Web—download Elvis Presley and introduce him to your 'hood. (www.ea.com)



FAST LANE

The \$3,150 Italjet Velocifero is the anti-Harley. The five-horsepower, two-stroke scooter merely sips gas, getting around 50 mpg. The refined, stylish model is also in the permanent collection of the Museum of Modern Art. (www.italjet.com)

THE BEST PRODUCTS OF 2000



BUENA VISTAS

Casual shutterbugs will love the Coolpix 880 digital camera. The 3-megapixel point-and-shoot digicam (\$699) automatically sets up tricky shots like sunsets and fireworks. One peeve: It doesn't take standard batteries, so you'll need Nikon's \$100 "optional" battery and charger. (www.nikonusa.com)



HOT WHEELS

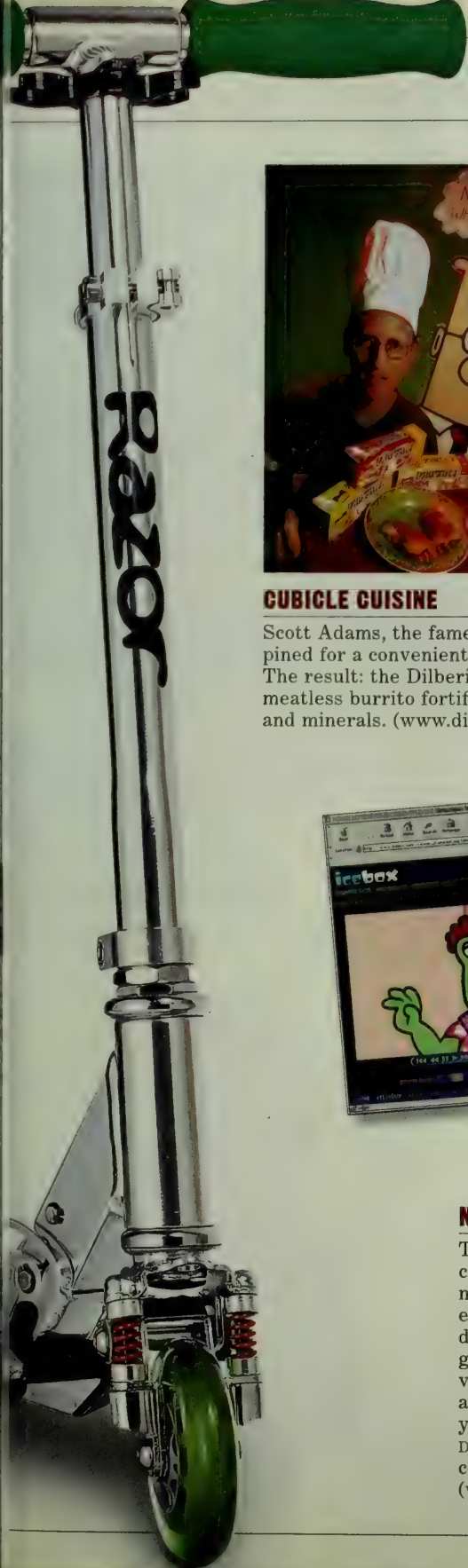
The hippest way to go this year was the Razor (\$99, \$129, \$149). Nasty spills led the Consumer Products Safety Commission to recommend that users wear helmets and pads, but Razors still race off shelves. (razorusa.com)



PAY IT FORWARD

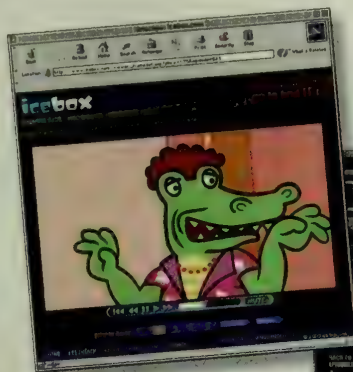
Paytrust goes online bill-paying one better by also receiving bills electronically—all for \$8.95 a month. It'll even nag you by e-mail when payments are due. (www.paytrust.com)





CUBICLE CUISINE

Scott Adams, the famed *Dilbert* cartoonist, pined for a convenient vegetarian meal. The result: the Dilberito, a tasty \$2.70 meatless burrito fortified with 23 vitamins and minerals. (www.dilberito.com)



SHARP FOCUS

Who would have guessed this replacement for the banal Ford Escort would hit it big with trend-setting youth? But Ford promoted the \$13,000 Focus to aftermarket parts shops that milled cool add-ons. (www.fordvehicles.com/cars/focus/)

I-CANDY

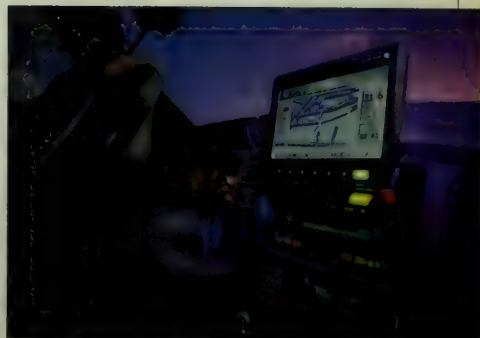
Video-compression technology has made a festival of short films available online, free. Ifilm.com offers fare rated G to X. (Check out the action movie *405*.)

Icebox.com has provocative cartoons, and Heavy.com specializes in parodies.



NEW DIRECTIONS

The Alpine Power NAV, coupled with a multimedia station, puts an electronic map on your dashboard. The GPS-guided navigator has voice prompts at turns and exits and can route you around jams. The DVD unit and screen cost about \$3,300. (www.alpine1.com)



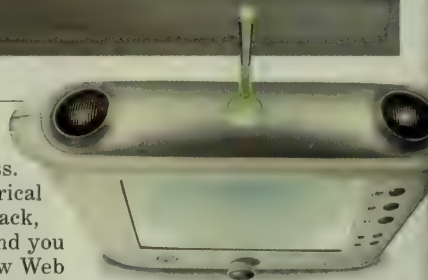
THE BEST PRODUCTS OF 2000

**BURNING UP THE AUTOBAHN**

The BMW Z8 can really haul. The \$130,000 roadster's 394-hp, V-8 engine powers a lightweight, all-aluminum body. And it goes from zero to 60 mph in about 4.7 seconds. The only trouble: BMW plans to sell only 400 in the U.S. In fact, dealers have auctioned the car off for as much as \$250,000. That lends new meaning to the phrase "it's going fast." (www.bmw.com)

PRETTY BABY

3Com's snazzy Net appliance, Audrey, simplifies Web access. Plug it into an electrical outlet and a phone jack, tap on the screen, and you can send e-mail, view Web pages, even coordinate with a handheld computer's calendar and address book. It's a pricey \$499. (www.3com.com)

**PUTTING HACKERS ON ICE**

Twenty-four-hour Internet connections such as DSL and cable modems give computer hackers constant access to your machine—even when the browser is turned off. A \$40 software program, BlackICE Defender, creates a barrier for unwanted visitors. Installation now requires just one set-up screen to put protection in place on most Windows machines. (www.networkice.com)

**THE BEAT GOES ON**

Polar Electro's newest heart-rate monitor, the S210, records performance based on heartbeats, not on time spent exercising. It estimates oxygen uptake—crucial to jocks—but even a flabby novice can use the \$180 device. Sit for five minutes; it calibrates your training range. (www.polar.fi)



There is no 'I' in insurance.



GENERAL LIABILITY



COMMERCIAL AUTO



PROPERTY



WORKERS COMP

Well, you know what we mean: teamwork. The real kind. Ask our customers about the impact of our teamwork. Last year, we helped them save nearly 700,000 disability days, reduce claims by 20% and lower their cost of claims by 10%. Results like these come from partnering with our customers on every angle of insurance, through our unique team process called LibertyWorks™. It's how we evaluate their business from top to bottom, helping them uncover safety and savings opportunities. It's how we customize the best insurance for each individual business. And ultimately, teamwork is how we make your insurance more effective and easier to manage.

INSURANCE IN ACTION To learn about case histories in your industry,
or for more information, call 1-800-4-LIBERTY or go to www.libertymutualgroup.com



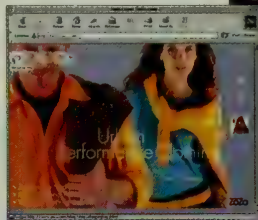
**Liberty
Mutual**

THE BEST PRODUCTS OF 2000



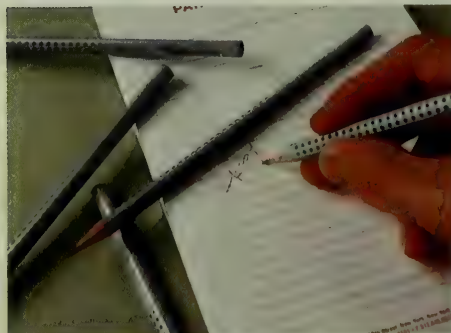
FUNNY NOISES

The \$50 Intel Sound Morpher can help your kids make fun of you. The device records sounds that can be altered by, say, adding an echo or changing pitch. Your darling children can load your nagging voice onto their computer and then edit the words, so that "Didn't I tell you to clean your room," comes out "I didn't tell you to clean your room." (www.intelplay.com)



HIKER CHIC

ZoZa.com offers a unique line of high-fashion apparel made exclusively of fabrics found in outdoor wear. They're comfortable, wrinkle-free, machine-washable, and, yes, even attractive. Among the offerings are a \$250 evening dress that rolls up into a bag and a \$245 fleece blazer suitable for office wear or hiking. For the gadgeteers, there are even shirts and jackets with hidden pockets for cell phones.



THIS PENCIL IS MIGHTIER THAN...THE PENCIL

Germany's Faber-Castell has succeeded in improving the lowly pencil. The \$1 Grip 2001, in cool silver and black instead of mustard yellow, sports an ergonomically designed triangular cross-section. Raised dots give the pencil a nonslip surface that's easy on the fingers. (www.faber-castell.com)

An afternoon sail.

A dinner party at sunset.

Digging for the first course. | Define luxury for yourself.



Lincoln LS | Luxury is more than a hood ornament. It's a feeling you get when you're living by your rules. It's knowing that sometimes the best thing about a 3.9 litre 32-valve V8 is that it gets you to the place where you can slow down faster. Visit lincolnvehicles.com, or call 800-688-8898.



LINCOLN
AMERICAN LUXURY

THE BEST PRODUCTS OF 2000

LITTLE BLUE

The T21 is IBM's thinnest, lightest laptop yet. At 5 pounds, the \$2,649 ThinkPad offers up to a 14-inch display, a Pentium processor up to 850 MHz, and a running time of about three hours on a charge. Cool feature: a little light that illuminates the keyboard. (www.ibm.com)



CULTMOBILE

Before most consumers saw the retro-styled PT Cruiser in person, the waiting list was 300,000 long. The car has achieved cult status, with owners who prize its raffish looks. Chrysler put off thousands of orders until 2001 because it can't keep up with demand. (www.chrysler.com)



OUR FAVORITE CLICKS

In 2000, Web sites disappeared as quickly as they cropped up in 1999. Even a few favorites of the Clicks & Misses section of BUSINESS WEEK e.biz and e.biz Online (www.ebiz.businessweek.com) are no more. So this year, we tended toward well-planned, well-developed sites, although a handful of shoe-string operations still charmed us. A sampler:

■ **NAPSTER.** It was founded by a 19-year-old kid, but Napster has won up to 40 million users the old-fashioned way: by delivering the best experience of the many online music sites in this year's news. Users share a huge trove of songs, and the site is far easier to use than rival approaches such as Gnutella's and Freenet's. If only it were legal.... A settlement with the music industry, beginning with a deal in which Napster accepts an investment from Bertelsmann in exchange for enforcing copyrights, will change Napster, but it's a lot of fun as it is.

■ **AMERICA ONLINE.** Web hipsters derided it as the Internet on training wheels, but AOL didn't become the Web's behemoth by accident. In areas from health and personal finance to news, we thought AOL more than held its own with the Web's best. AOL's edge: carefully thinking through what its broad audience wants. Excellent design helps, too.

■ **VOTER.COM.** Before we all were thoroughly sick of the Presidential election, this site served up news, commentary, and services such as issue questionnaires and campaign-finance records that let smart



voters evaluate their candidates in ways TV or maga-



zines can't. Legendary Watergate reporter Carl Bernstein is its executive editor.

■ **ZOOMCULTURE.COM.** This youth-activism-oriented site gives a Gen-Y take on everything from inter-

national trade protests to extreme biking. Do the kids befuddle you? Look here to watch a generation explain itself.

■ **ZAGAT.COM.** A new upgrade earns this restaurant-review site the only repeat mention from last year's list. The new version is easier to search and lets people organize their socializing with online invitations to friends and the ability to make table reservations. The old virtues remain: It's still as comprehensive as Zagat's regional dining guides and easy for users to submit restaurant ratings and become part of the fun.

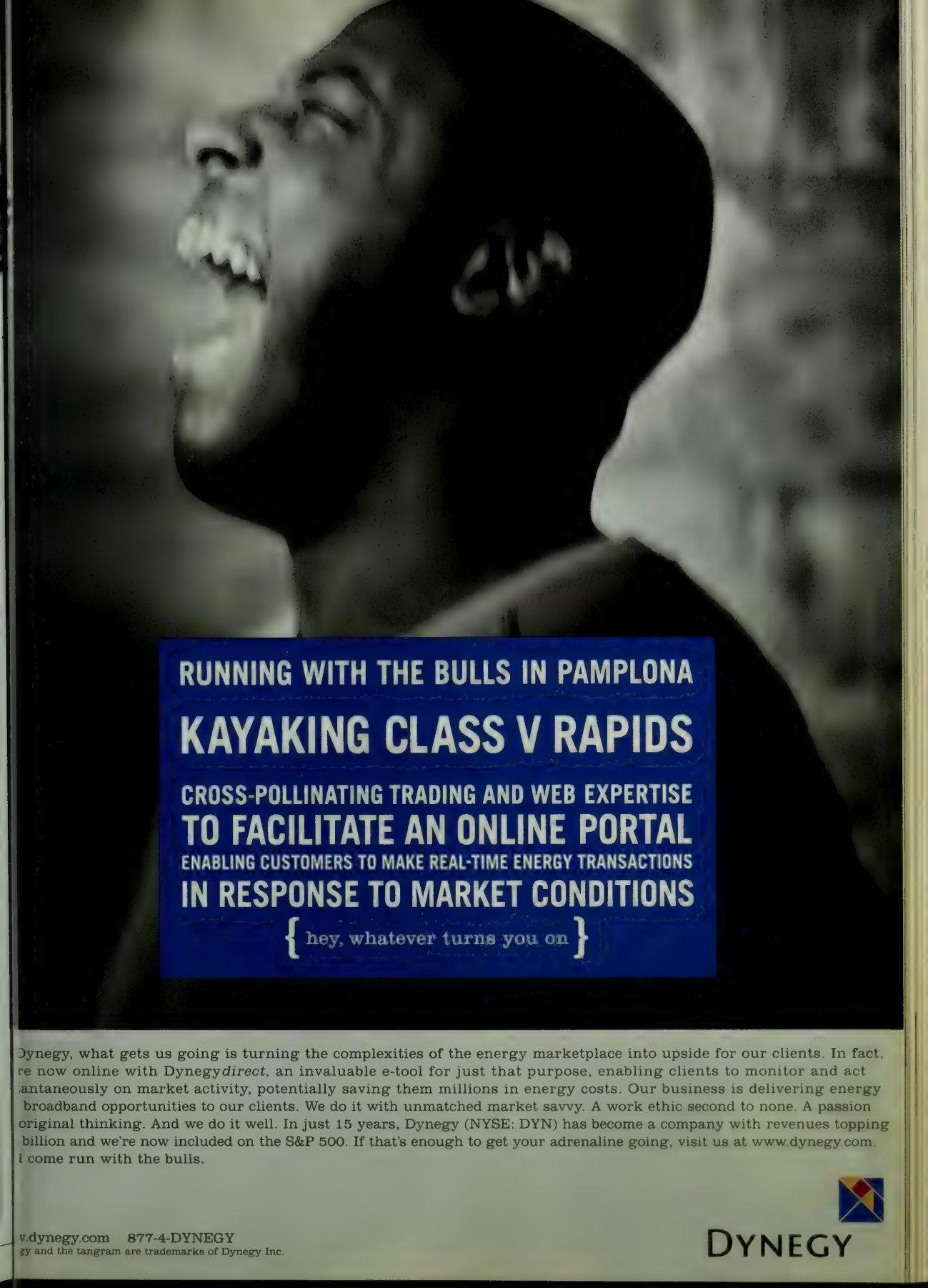
■ **EXP.COM AND KEEN.COM.** Venture capitalists have bet big on these two sites, marketplaces at which experts in different fields can sell their services. We found both to be useful channels to find help with problems as varied as training dogs and financial planning. As is often the case with community-oriented Web sites, some blowhards are masquerading as experts.

But user ratings and other tools help surfers find people who know what they're doing.

■ **TELLME NETWORKS.** Tellme is the best known—and, so far, the best—of the “voice portal” services that deliver Web-like content over the telephone. Tellme lets travelers and local revelers find restaurants, movie times, and other information wherever they happen to be with a call to a single 800 number, using voice-recognition software rather than operators to deliver the information.

■ **SATIREWIRE.** Web denizens need to take a moment to laugh at their own antics. And not much is funnier than SatireWire.com. From pleas written in Sally Struthers' name to send 79¢ a month to “Save the Dot-Coms” to deadpan wire-service reporting on the B2U (that's Business-to-Unemployment) Internet marketplace, it's not to be missed.

By Timothy J. Mullaney in New York



RUNNING WITH THE BULLS IN PAMPLONA

KAYAKING CLASS V RAPIDS

**CROSS-POLLINATING TRADING AND WEB EXPERTISE
TO FACILITATE AN ONLINE PORTAL
ENABLING CUSTOMERS TO MAKE REAL-TIME ENERGY TRANSACTIONS
IN RESPONSE TO MARKET CONDITIONS**

{ hey, whatever turns you on }

Dynegy, what gets us going is turning the complexities of the energy marketplace into upside for our clients. In fact, we're now online with *Dynegydirect*, an invaluable e-tool for just that purpose, enabling clients to monitor and act instantaneously on market activity, potentially saving them millions in energy costs. Our business is delivering energy broadband opportunities to our clients. We do it with unmatched market savvy. A work ethic second to none. A passion for original thinking. And we do it well. In just 15 years, Dynegy (NYSE: DYN) has become a company with revenues topping \$1 billion and we're now included on the S&P 500. If that's enough to get your adrenaline going, visit us at www.dynegy.com. I come run with the bulls.



THE BEST PRODUCTS OF 2000

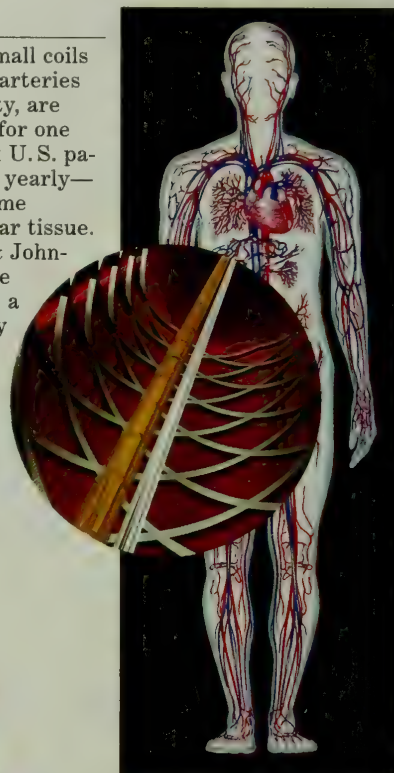
GAME ON

The Sony PlayStation 2 not only plays rip-roaring games, but the \$299 console includes an expansion bay for a hard drive, will eventually link online with other gamers, and will have a browser for limited Web surfing. (www.playstation2.com)



OPEN WIDE

Stents, those small coils that prop open arteries after angioplasty, are lifesavers. But for one out of every six U.S. patients—100,000 yearly—the stents become clogged with scar tissue. Both Johnson & Johnson and Novoste have a solution: a process to apply radiation around the stent to impair tissue growth and prevent those clogs.



SNAP-ON INTERNET

How to out-Palm VII the Palm VII? OmniSky provides loads of wireless functions for the Palm V and the Handspring Visor, including all the special wireless applications developed for the Palm VII. Plus, it lets you fetch mail from any standard Internet service and browse the Web. The wireless modem costs \$99 with a \$200 rebate (through Jan. 31). Unlimited service is \$39.99 a month. (omnisky.com)



THIS MAY BE THE MOST MEMORABLE HOUR OF YOUR LIFE.

**GIVE US AN HOUR AND SEE HOW OUR
EWP WILL CHANGE YOUR COMPANY'S FUTURE.**

Day wants to show you something you've probably never seen before. A comprehensive, global-ready Enterprise Web Platform that doesn't fall short on its promises. One that really can meet all the needs of your Internet strategy — from Websites to corporate portals to digital exchanges. One that already includes multi-language/multi-currency capabilities.

Our integrated suite of products offers our customers dramatically accelerated time

to market, reduced cost of ownership, and consistent worldwide brand protection.

We've done it for Novartis, Roche, UBS, and Zurich Financial Services. Now let us do it for you.

Give us an hour and we'll give you the future. And for once, that's no empty promise. Call 1-866-644-2557 for a demonstration.

www.daycorporation.com

DELIVERING ON THE PROMISE OF e



CONTENT MANAGEMENT COMMERCE PERSONALIZATION COLLABORATION CATALOG

THE BEST OF 2000

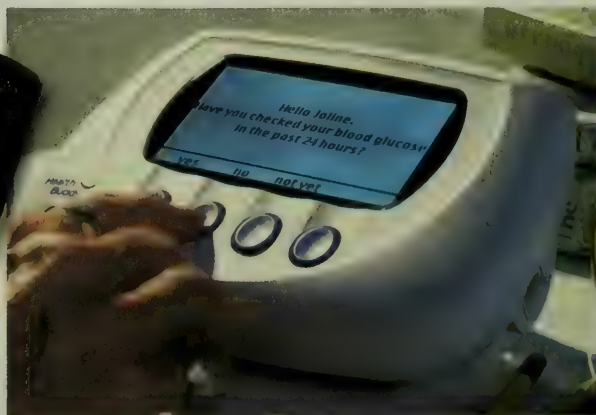
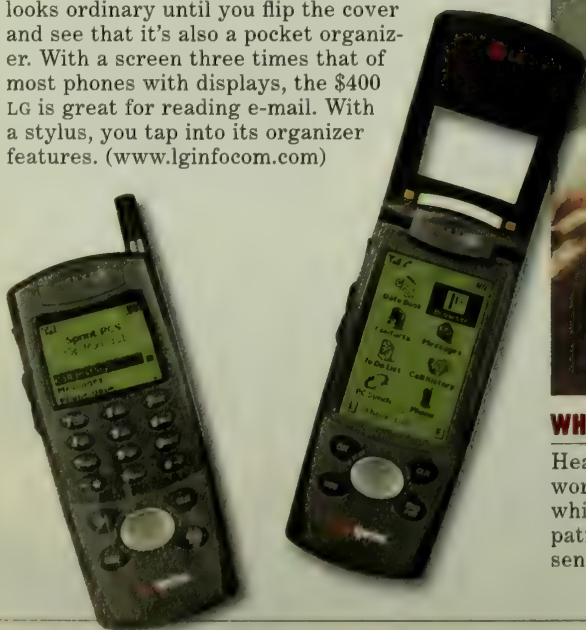


HOTTEST THING ON TWO WHEELS

Honda set hearts racing when it priced its RC51, the street-legal version of its champion Superbike-class racer, at \$9,999. It practically sold out before hitting showrooms in early 2000. The 126-hp V-twin-powered bike will reappear in 2001 for \$10,999. (www.hondamotorcycle.com)

SCREEN GEM

The LG Electronics LGI-3000W phone looks ordinary until you flip the cover and see that it's also a pocket organizer. With a screen three times that of most phones with displays, the \$400 LG is great for reading e-mail. With a stylus, you tap into its organizer features. (www.lginfo.com)



WHAT'S UP, DOC

Health Buddy, from IDEO Labs and Health Hero Network, can help medics monitor patients. The device, which plugs into a phone jack, might ask a question of a patient, who in turn responds by clicking the buttons, sending the doc an instant update. (www.hhn.com)



A box without service is a box.

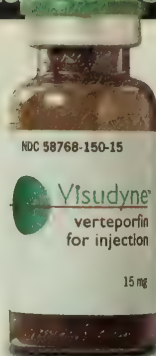
With hp people, hp superdome becomes a solution instead of a server.

Service is comprehensive and included. We handle site planning, integration services, customized training, and monitoring. It's service made simple. So simple, in fact, that we can adjust your capacity over the phone.

Without, ironically, a service call. hp.com/superdome



THE BEST PRODUCTS OF 2000



SEEING IS BELIEVING

A simple drug and laser therapy, Visudyne, offers the first treatment to slow down age-related macular degeneration, a leading cause of blindness in the elderly. (www.visudyne.com)



APPLE CUBED

The Apple Computer G4 Cube (base price, \$1,799) is remarkable for its size—9.8-by-7.7-by-7.7 inches. Drawbacks: It doesn't allow for internal peripherals, and the reset button is on the bottom. (www.apple.com)

PRODUCTS TO WATCH

■ **BLUETOOTH**, a tiny radio transmitter that can communicate over short distances, may soon allow a phone to link to a PC wirelessly and then automatically enter new phone numbers in an address book. One of the first products to use the transmitter will be Motorola's \$300 Timeport 270C: The add-on Bluetooth module, not yet priced, slides onto the phone in place of the battery cover.

■ Born in the '60s, the **TRIUMPH BONNEVILLE** became the epitome of motorcycle handling and style. As of January, 2001, it's back, with modernized components, a 790cc, 68-hp engine, and the looks and performance that made it famous. The price is also modernized: \$6,999.

■ It has been three years since Ford manufactured a **THUNDERBIRD**, but this summer it will release a \$40,000 beauty. With design inspired by the original 1955 and 1957

Digital film that works in nondigital cameras

T-Birds, the classically styled two-seater will have porthole windows and the same silhouette as the original. But this sports car is updated with a 3.9-liter, V-8 power plant, just like the Jaguar S-type sedan.

■ General Motors merged a Suburban sport-utility and a pickup and came up with one cool SUV. The **AVALANCHE**, at about \$32,000, has four doors, storage behind the back seats, and a short pickup bed. A hatch in the passenger cabin opens to the pickup to hold cargo such as lumber or, say, surfboards.

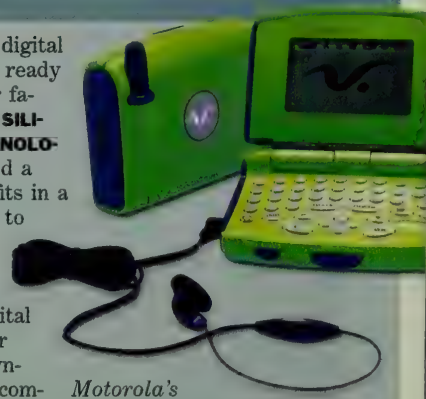
*It's a sport ute!
It's a pickup! It's
GM's Avalanche*

■ Ready for digital photos, but not ready to give up your favorite camera? **SILICON FILM TECHNOLOGIES** has created a cartridge that fits in a regular camera to record digital images. Later, slip the faux film into its digital reader and your images are downloaded to your computer. The \$699 EFS-1 System will initially work with the Nikon F5, N90, and F3, and the Canon EOS 1N A2/5.

■ Sony's \$2,750 **VAIO** GT merges a PC with a camcorder, making it possible to broadcast live video clips over the Internet. Reserve a time slot on the Sony site—at about \$50 per half hour—then relay live footage to friends and relatives.

■ Motorola has packaged a pager, a keyboard messaging device, and a phone into the brightly colored **V100**, which runs about \$160. The phone's headset serves to keep the device compact.

■ A new lens from Canon lets its XL-1 digital video camera film 3-D images. The add-on automatically sets the angle of convergence, which creates the 3-D effect. It takes special pricey monitors to see the effect, so initial use will be industrial only.



Motorola's
V100 phone-pager-messenger





If you're not at capacity, don't pay for capacity.

With the new hp superdome, you can pay less when you use less, or buy more when you need more.

By adjusting capacity with a simple phone call, you pay only for what you use—not unlike how you pay for electricity.

You can run IA-64, you can run multiple operating systems, and because comprehensive service is included,
you can run your business instead of your server. hp.com/superdome





internet

address directory

Reach these Business Week advertisers on the Web:

1GlobalPlace
www.oneglobalplace.com

3Com
www.3com.com

ABN AMRO BANK
www.abnamro.com

Acura
www.acura.com

Advanced Micro Devices
www.amd.com

Alcatel
www.alcatel.com

Amdahl
www.amdahl.com

American Express Financial Advisors
www.americanexpress.com/advisors

americanexpress.com
www.americanexpress.com

Andersen Consulting
www.andersen.com

Aperian
www.aperian.com

Blue Martini
www.bluemartini.com

Boston Consulting Group
www.bcg.com/breakingcompanies

Canon U.S.A.
www.canon.com

CDW, Computer Centers, Inc.
www.cdw.com

Changepoint
www.changepoint.com

Compaq
www.compaq.com

Conoco
www.conoco.com

Corning
www.corning.com

Crown Publishing Group
www.randomhouse.com

Dassault Falcon Jet
www.falconjet.com

Day Corporation
www.daycorporation.com

Dell Computer Corporation
www.dell.com

Deutsche
www.deutsche-bank.com

Diner's Club
www.citibusiness.com

Dynegy
www.dynegy.com

Ericsson
www.ericsson.com

Ernst & Young
www.ey.com

Fidelity Investments
www.fidelity.com

FORD
www.ford.com

Framework Technologies
www.frametech.com

Fujitsu
www.fujitsu.com

Handspring
www.handspring.com

Hummingbird
www.hummingbird.com

i2 Technologies
www.i2.com

IBM
www.ibm.com

IBM
www.ibm.com/eserver

Informix Software
www.informix.com

Intel
www.intel.com

Jeep
www.jeep.com

LeadersOnline
www.leadersonline.com

Lexus
www.lexuscpo.com

Liberty Mutual Insurance Company
www.libertymutual.com

Lotus
www.lotus.com/superhuman/software

Lucent
www.lucent.com

Mercedes-Benz
www.mercedes-benz.com

Metropolitan Life Insurance Company
www.metlife.com

Microsoft / WebTV
www.microsoft.com

MITSUBISHI ELECTRIC
www.mitsubishielectric.com

Morgan Stanley Dean Witter
www.morganstanley.com

myCIO.com
www.mycio.com

National Discount Brokers
www.ndb.com

NEC
www.nec.com

Netjets
www.netjets.com

NetLedger
www.netledger.com

Nokia Networks
www.nokia.com

Oracle
www.oracle.com

PeopleSoft
www.peoplesoft.com

Prudential
www.prudential.com

Qwest Communications
www.qwest.com

Rational Software
www.rational.com

Red Cube
www.redcube.com

Ricoh Company, Ltd.
www.ricoh-usa.com

RightWorks
www.rightworks.com

Robertson Stephens
www.robertsonstephens.com

Samsung
www.samsung.com

SeeBeyond
www.seebeyond.com

Siemens Corporate
www.usa.siemens.com

SilverStream
www.silverstream.com

SmartForce
www.smartforce.com

ST Microelectronics
www.st.com

Starband
www.starband.com

Stonebridge Technologies
www.stonebridgetechnologies.com

Sun
www.sun.com

Texas Instruments
www.ti.com

Texere Publishing
www.texere.com

The Timken Company
www.timken.com

Toyota in America
www.toyota.com/usa

Trend Micro
www.trend.com

UBS WARBURG
www.ubswarburg.com

United States Postal Service
www.usps.com

UPS
www.ups.com

VERITAS Software Corporation
www.veritas.com

Viatel
www.viatel.com

Weyerhaeuser
www.weyerhaeuser.com

Williams
www.williams.com

WorldCom
www.wcom.com

WSJ
www.wsj.com

BusinessWeek

Exceed shareholder & customer demands

See and hear from the experts at
www.sas.com/webcast

The Power to Know.™

sas
e-Intelligence



Because this
is no gift
for an
executive.

This Christmas give the gift every executive wants. For \$54.95 you can present them with a one-year subscription to both BusinessWeek magazine and BusinessWeek Online. That's a cool discount of 72% off the cover price. Plus, each additional gift subscription costs just \$27.50. So don't clutter their space. Expand their horizons.

Save on the present that promises a rich future. To give the gift of BusinessWeek visit our Web site at www.businessweek.com/holidayoffer.htm or call 1-800-635-1200 (please reference number XNB0976).



BusinessWeek

BusinessWeek online

www.businessweek.com

L Keyword: BusinessWeek
erner Keyword: BusinessWeek

A Division of The McGraw-Hill Companies



COMMENTARY

By Joann Muller

WILL THE UAW BE CHRYSLER'S FRIEND IN NEED?

Chrysler Group's new boss, Dieter Zetsche, is warning employees, unions, and dealers of "tough decisions" ahead as he searches for ways to turn around Daimler-Chrysler's struggling U.S. unit. Already, he has ordered the shutdown of half of Chrysler's U.S. and Canadian factories for a week or two in December to clear excess inventory off dealer lots. There's talk of white-collar layoffs and other administrative cutbacks, too. But long term, Zetsche's best hope for reviving profits may lie in his ability to enlist the help of the United Auto Workers.

He's not likely to get much of a hearing from UAW President Stephen P. Yokich. After winning the richest contract terms in years in 1999, union members have little reason to start giving money back. That's in part because, despite Chrysler's deepening problems—it's expected to lose some \$1 billion in the fourth quarter—the German parent remains exceedingly profitable. Even after Chrysler's woes, earnings in the fourth quarter are expected to top \$4 billion and should slip only modestly, to \$3.5 billion, in 2001, analysts say. Chrysler is hardly on the verge of collapse, as it was 20 years ago, when union concessions and a government bailout were the only way to save the company. **QUID PRO QUO?** Still, Yokich has a golden opportunity to foster his union's long-term survival. Rather than reject Zetsche's plea for help, he ought to offer assistance in return for Chrysler's aid in getting what the UAW needs most: more members. Ever since the merger with Daimler Benz two years ago, the union has tried to organize two factories owned by the German company—a Mercedes-Benz plant in Vance, Ala., and a Freightliner Corp. truck plant in Gastonia, N.C. But the efforts have been stymied by resistance from management, union leaders charge, with the blessing of company officials in Germany. The tough stance also led to a recent organizing

loss by the Canadian Auto Workers (CAW) at a Freightliner plant in St. Thomas, Ont.

Yokich would best serve the UAW's long-term interests by opening a dialogue with Chrysler. If Daimler agreed to support the union's recruitment drives, he could look the other way on a formula that requires Chrysler to replace retirees with new hires. Or the UAW could allow Chrysler to temporarily skip payments to its pension funds. The union has taken both steps in the past for Ford Motor Co. and General Motors Corp. Indeed, CAW President Cecil "Buzz" Hargrove says cooperation is a two-way street. When he met with Zetsche on Nov. 28., says Hargrove, the two had a "sharp exchange," and he warned the new boss that "you can't have a good relationship with us on one level and have a difficult rela-

tionship in another part of the company." Both Zetsche and Yokich, who met in Detroit on Nov. 27, declined to comment. But such a deal makes good sense for both unions and for management.

Chrysler officials say privately that they're not asking the UAW or CAW to reopen their contracts, which have three years left. Rather, they're seeking union leaders' input as they consider ways to stanch the bleeding. But "everything's on the table," says one DaimlerChrysler official.

INCENTIVES. Support from DaimlerChrysler would also give the UAW a crucial edge as it prepares an aggressive new recruitment drive among auto-parts plants. Sources close to the union say it's about to launch a national campaign to organize some of the 400,000 workers at nonunion outfits that supply the Big Three. In last year's contract, Detroit auto makers pledged to tell suppliers that they do not encourage them "to resist organizing efforts."

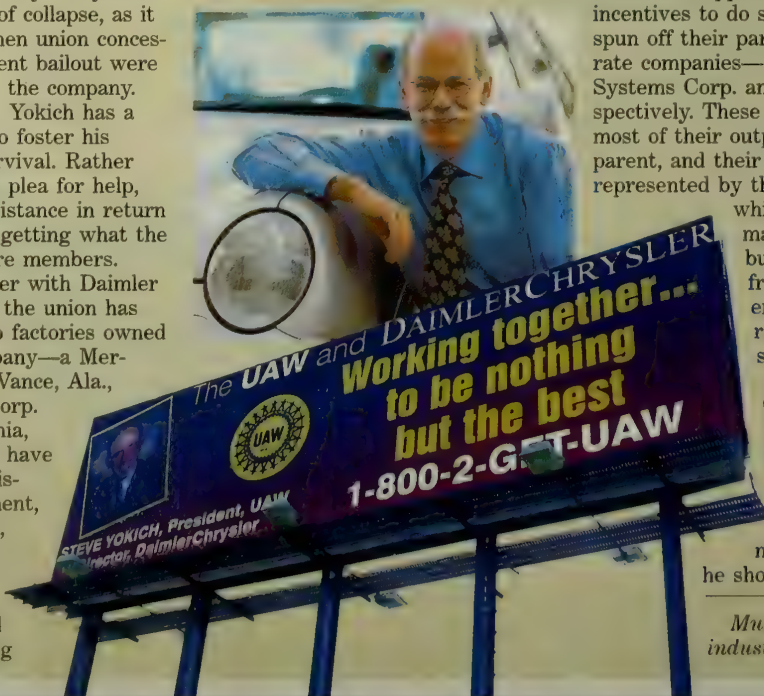
In recent months, both GM and Ford have reacted favorably to the UAW's request to steer contracts to unionized suppliers. Both have big incentives to do so, since they have spun off their parts units into separate companies—Delphi Automotive Systems Corp. and Visteon Corp., respectively. These companies still sell most of their output to the former parent, and their workers remain represented by the UAW. Chrysler, which never built as many parts in-house, buys more of its parts from nonunion suppliers. So it has been reluctant to lean on suppliers.

With DaimlerChrysler CEO Jürgen E. Schrempf fighting for his job, Yokich has leverage to get the help his union needs. It's a chance he shouldn't pass up.

Muller covers the auto industry from Detroit.

CURVES AHEAD

Zetsche will probably require union concessions from workers to turn around Chrysler, but the UAW's Yokich may not play ball



We integrate. You communicate.

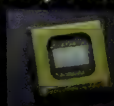
Forecast:
Clear. Very clear.

Digital technology is already there for you at work and on the go. Now see what it can do for you at home.

Check out the new Mitsubishi WD-65000, the world's first 65-inch, high-definition projection television with Digital Light Processing™. Instead of conventional TV tubes, DLP™ technology uses nearly one million micromirrors, mounted on a single chip, to switch red, green and blue light. The resulting image is so true to life you'd swear you were looking through a squeaky-clean window.

And because we've integrated DLP™ with Mitsubishi know-how, the WD-65000 is able to share this eye candy among multiple inputs: from video and games to computer graphics and Internet content.

Our old friend the TV just joined the 21st century.



DLP™ chip.

We integrate. You communicate.

For further information, visit

www.mitsubishi-tv.com



DLP

Mitsubishi WD-65000. A TEXAS INSTRUMENTS TECHNOLOGY



**MITSUBISHI
ELECTRIC**

www.mitsubishielectric.com

DLP™ and Digital Light Processing™ are trademarks of Texas Instruments.



**Has the
second generation
of e-business software
arrived too soon?**

Or right on time? Wasn't it just the other day that we first began hearing the countless claims about e-commerce? Software companies everywhere were quick to cobble together "new" e-commerce applications based on old client/server technology.

The result of these first-generation solutions? Something less than perfect. While these early B2B applications began to help companies streamline their key processes, reduce operating costs, and eliminate inefficiencies, they failed to address the bigger opportunity. Namely, how to help multi-site corporations gain visibility and control over their global spend. And how to become part of a broad, dynamic network of global trading partners across the Internet.

Which is where RightWorks, and the second-generation (2G) of e-business solutions, comes in.

RightWorks 2G powers global trading and true collaboration by providing peer-to-peer global interoperability. So you can connect with partners across your business network or supply chain in real-time, and deploy e-procurement and e-marketplaces to extend your business model beyond traditional boundaries.

Now your company can address the entire business lifecycle, from sourcing to settlement. You can integrate with third-party applications and communicate across language barriers. What's

e-Business Transformation Checklist

	RightWorks	Ariba	Commerce One
100% Internet	●	●	●
Single Data Model	●	●	●
N-Tiered, Multi-Site	●	●	●
Entire Purchasing Lifecycle	●	●	●
Indirect Procurement	●	●	●
Direct Procurement	●	●	●
Project Support	●	●	●
Dynamic Multi-Lingual Support	●	●	●
Multi-Currency with Euro Support	●	●	●
Dynamic Workflows	●	●	●
Business Personalization	●	●	●

more, the whole system operates on a single instance of RightWorks software. This not only speeds up deployment, it makes our new 2G even less expensive to implement and maintain.

How did we do it? By creating RightWorks 2G to support B2B

e-commerce from the ground up. Because it's 100% Internet-based and built on a single data model, companies can tailor their solutions to meet changing demands and analyze key data – to roll it up, view it, and use it.

You'll find RightWorks at work within companies such as Computer Sciences Corporation, eMerge Interactive, Silicon Valley Bank, and Wells Fargo. We invite you to compare the RightWorks 2G solution to that of our competitors. We think you'll find ours to be the one complete enough to transform your enterprise into a true e-business.

And isn't it about time?

To learn more, and to download a Forrester Research white paper, visit www.rightworks.com/2G.

rightworks



GRAND DESIGN

Talbots will open 55 new stores this year and plans 430 more

come skyrocketed 90% to \$82.2 million, while the stock has more than doubled, to \$50. "Almost every other retail stock has—as the Grind would say—stink, stank, stunk," says Ken Zschappel, senior portfolio manager at A.M. Management, which holds a 7.5% stake in Talbots. "These guys are the one standout."

HIGH HURDLE. This performance has only raised the bar for Talbot's Chairman and CEO Arnold B. Zetcher. "The easy money has been made," says Zschappel,

who warns: "They're coming up on some pretty tough comparisons next year. But while conceding that Talbots can't post double-digit same-store sales gains forever, Zetcher says he has a formula that will nevertheless increase earnings at a 15% to 20% clip for years to come. His plan: aggressive expansion that will boost the number of stores some 60% to 1,150, by the end of 2005. Along the way, he plans to broaden Talbots' reach, most notably by pushing into the underserved market for larger women. "Our company has never been stronger," says Zetcher, "but there's plenty of room for improvement."

No doubt. But in the notoriously fickle fashion business, today's perstars can be quickly humbled. Just look at Gap Inc. Nobels knows that better than Zetcher. After a strong run in the early '90s, Talbots' sales started slowing in 1995. In response, it tried to win younger customers with trendier assortments than its normal mix of conservative classics for upscale women aged 35 to 55. But the fluorescent colors and shorter skirts featured in Talbot's 1997 line "were too extreme," concedes Zetcher.

FASHION

TALBOTS HEATS UP BY COOLING DOWN

Returning to classic styles, it goes on a tear

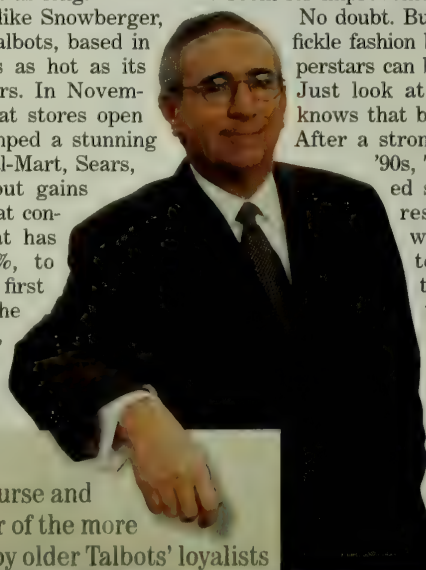
Although the holiday season is in full swing, many of the nation's department stores are acting as if it's mid-January. In a desperate bid to lure shoppers spooked by the slowing economy, they're staging sales and churning out discount coupons. But when Barbara Snowberger, 46, a homemaker from Avon, Conn., set out to spruce up her holiday wardrobe, she left the coupons at home. Instead, she headed for Talbots, where she picked up some white wool slacks, a black wool blazer, and a blue holiday sweater decorated with snowmen—and paid the full price, totalling around \$420, for all three. Snowberger concedes she might have spent less at a department store. "But in the long run, it just isn't worth it," she says. At department stores, "I really have to search to find something I like. And compared to Talbots, their

clothing doesn't last as long."

With customers like Snowberger, it's little wonder Talbots, based in Hingham, Mass., is as hot as its trademark red doors. In November, Talbots' sales at stores open at least a year jumped a stunning 21.9%—even as Wal-Mart, Sears, and Kmart eked out gains of less than 5%. That continues a trend that has boosted sales 21%, to \$1.1 billion, in the first three quarters of the current fiscal year, which ends in January. Over the same period, net in-

NO SLAVE TO YOUTH

CEO Zetcher has reversed course and dumped flashier lines in favor of the more conservative ones preferred by older Talbots' loyalists



*ingenuity*²

We develop software for the intelligent. We create e-marketplaces for the resourceful. We apply our own ingenuity to ingenious companies to make them faster, smarter and exponentially more valuable. So far, we've created more than \$16 billion in value for over 950 companies worldwide. Want some? Contact us at www.i2.com or 1-877-926-9286.



Powering the Bottom Line.™



RADIO NETWORKS

Fine your radio to
 Business Week Business Reports,
 brought to you by
 Business Week
 and ABC Radio Networks,
 and get up to sixteen
 updates a day of the latest
 business news.
 Call 212-735-1111 for the
 station in your area



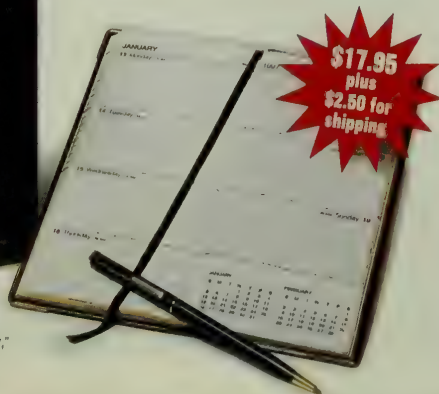
Regular financial checks.

TIME MANAGEMENT DOESN'T HAVE TO BE A BIG JOB.

USA Credit
 card holders may call
TOLL-FREE
800-553-3575.
 Ask for Dept BC31.
 We honor
 AmEx/Diners/Visa/
 MasterCard



Gold blocking of
 your full name add \$4.75.
 Planner size 6 1/2" x 3 1/2" x 1/2"



\$17.95
 plus
\$2.50 for
 shipping

Available in burgundy or black, the 2001
 Business Week Pocket Planner is the handy way
 to keep on top of your schedule. Featuring a
 13-month calendar, week-to-view appointment
 pages, and a useful business/travel information
 section, it's perfect for those who want to seize
 the week.

To order, make check payable to **BUSINESS**
WEEK PLANNER and mail to Dept. BC31, P.O.
 Box 1597, Fort Lee, NJ 07024 U.S.A. Please
 enclose separate sheet with color choice, per-
 sonalization requirements, and delivery details.
 New Jersey residents add 6% Sales Tax. Full
 refund if not completely satisfied.

For customization options and special discounts on larger quantities call Amanda Kane at 201-461-0040, or fax to 201-461-9808.

Marketing

and it turned off long-loyal customers
 like Jane France, 50, of Pittsburgh. "I
 went into Talbots to find some clothes
 for a trip to Europe in 1997," she re-
 calls, "and didn't buy one thing." Same-
 store sales slipped 1.8% in 1997, while
 profits—hurt by the huge markdowns
 Talbots took to unload the losers—
 plunged 91%.

To his credit, Zetcher, a 60-year-old
 retail veteran who has headed Talbots
 since 1988, quickly reversed course. "He
 recognized that while it's very tempting
 to go after younger customers, you have
 to take care of your loyal customers,"
 says Wendy Liebmann, president of con-
 sultant WSL Strategic Retail. To make
 sure their voice was heard, Zetcher
 stepped up in-store focus groups, re-
 quired regional managers to submit
 weekly summaries of customer com-
 ments, and involved senior store man-
 agers in product development for the

AHEAD OF THE PACK



first time. The message: Talbots' true
 and true customers wanted "classic me-
 chandise that is a little fashion-forward
 but not so much that it crosses the
 line," says Zetcher.

MARKETING BLITZ. To translate that in
 a clothing line, Zetcher brought in
 James Metscher—who had left Talbots
 to become president of Liz Claiborne
 retail division—back to the company.
 November, 1998, as chief merchandis-
 ing officer. Metscher calls his cloth-
 ing "modern classics." The aim, he says,
 "to move the customer along with ne-
 silhouettes, fabrics, and colors, but in
 way that is evolutionary, not revolu-
 tionary." Take turtlenecks, a perenni-
 favorite at Talbots. This fall, they're be-
 ing offered with such twists as a fun-
 neck and chunkier ribs and in new col-
 ors like soft coral. Similarly, the class-
 wool flannel jacket is now also be-
 made with a newer fabric known
 stretch wool.

To promote his brand, Zetcher

Discover eBook™

A Gemstar Technology

Imagine

Reading easily on a large, clear screen.

Imagine

Carrying dozens of books and magazines in one portable device.

Imagine

Having instant access to your entire library, without having to use a PC.

Imagine

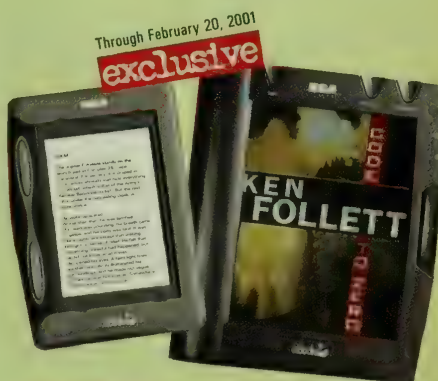
Getting new titles instantly from any phone line, with no delivery charges.

Imagine

Being able to read the latest books from bestselling authors before anyone else* ...

"A classic page turner."

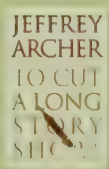
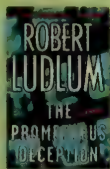
- Booklist



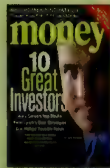
... Now you can, with the Gemstar eBook™ from RCA, a lightweight, electronic device for reading books, magazines and newspapers.

RCA REB 1100 (B&W)
REB 1200 (COLOR)
rca.com eBook-gemstar.com

Read these other **exclusive** new releases, and many more, on the Gemstar eBook™.



Subscribe to and receive these and other leading periodicals instantly, no matter where you are.



*Exclusive titles are available to the Gemstar eBook™ platform, often before they appear in print, up to 90 days before distribution in any other electronic format.

Available at:

CIRCUIT CITY



OfficeMax

Content sold separately.

eBook™
Enjoy Your Reading.

We want more. We want things to be better. Things that haven't even been invented yet, we want them to be better. And faster. And cheaper too. And when we want these things badly enough, we will surely have them. Progress, it turns out, is subject to the laws of supply and demand. And demand for progress never flags.



launched Talbots' largest-ever marketing campaign, hiking spending to \$89 million this year, up 37% since 1997. Talbots' catalog, which will be mailed to 58 million customers this year, remains the core marketing vehicle. But Zetcher has also unleashed an ambitious advertising campaign. The aim of the ads, as understated as Talbots' clothes, "is to make women feel good about being a Talbots' customer," says Zetcher. This fall, for instance, one featured a woman dressed in a red Talbots' suit and pearls at a voting station with young daughter in tow. "Clothes designed for models," the caption read. "Role models." Meanwhile, other ads have promoted Talbots.com, the online store launched late last year that is successfully attracting somewhat younger women.

If the marketing efforts are subtle, the results have been anything but. Same-store sales jumped 8.7% last year and are up 18% so far this year, vs. an anemic 3.6% in 1998. And in a clear sign Talbots is winning new customers, the number of sales transactions is up 16% this year. Many of them are refugees from midlevel department stores, "which have been uninterested in the 30-, 40-, and 50-year-old customer who likes to be well-dressed," says Liebmann.

There has been an equally dramatic turnaround in the backroom. After the 1997 debacle forced the company to conduct a fire sale to unload bulging inventories, Chief Financial Officer Edward L. Larsen trimmed inventory levels 10%. And Talbots is no longer ordering its entire lineup before each season begins, giving it a reserve it can pump into replenishing best-sellers. That reduces risk and is one reason Talbots is selling a staggering 70% of its private-label clothes at full price this year. In contrast, "a lot of department stores would be happy if they sold 30% at full price," says Dorothy Lakner, a retail analyst at CIBC World Markets.

The bottom line: Talbots' operating profit margin equalled 12.4% of sales in the first nine months of this fiscal year, vs. just 1.6% in 1997. And analysts surveyed by First Call Corp. expect the company to earn \$108

million this year, up from \$58.5 million last year, and just \$5.8 million in 1997. "They're knocking the cover off the ball," says Harry A. Ikenson, a retail analyst at Chase H&Q.

Still, even Zetcher concedes those huge comp-store sales increases can't

continue much longer. Indeed, his initial budget for 2001 assumes same-store sales will rise just 3% to 4%. That's almost certainly too conservative, since Zetcher relishes setting targets he can then beat. But even at that level, Zetcher says, total sales will grow 8% to 9% next year and profits 15% to 20%.

BRAKES OFF. That's because the big growth driver will be store expansion. Zetcher put the brakes on expansion during the lean years, opening just 3 stores in both '98 and '99. But this year, Talbots will open 5 new stores, and 78 are on the drawing boards for 2001. By the end of 2005, Zetcher plans 38 more. Over the next five years, the number of Misses stores—Talbots' core business—will grow just 19%, to 490. Zetcher plans a 60% increase in the number of Talbots Petite stores, and he'll more than double the number of both Talbots Kids and Talbots Accessories Shoes stores.

The real explosion will come in Talbots Woman stores, which sell the same classics found in Misses and Petites, for women size 12W to 24W. Talbots has just 14 of these stores. But within five years, Zetcher vows to have 160. It's a compelling opportunity. The average American woman wears a size 14, but few retailers focus on clothing that big. "It's often hard to find clothes [in these sizes], especially for professional and special occasion dressing," says Vicki Gray, 45, vice-president of marketing for a health-care company in Norfolk, Va., who now buys almost all her clothes at Talbots.

To be sure, another fashion blooper, like the one Talbots committed in '97, could send sprawling. But if it continues to pay attention to its customers, it may be able to dodge the woes plaguing most other retailers. The middle-age women who buy its classic clothes are less fickle than younger, trend women. And new concepts like larger-sized clothing and its Website give it lots of room to run. There are no sure bets on women's apparel, but Talbots may be the next closest thing.

By William C. Symonds
Hingham, Mass.



EVERYTHING TALBOTS

The chain opened its first store in Hingham, Mass., south of Boston, in 1947. Today, as the leading retailer of classic women's clothes, it sells its wares through three different channels.

STORES The company has 709 stores and plans to increase that to 1,150 over the next five years. Besides its core misses' apparel shops, it operates stores for petites, larger-size women, kids, and accessories & shoes.

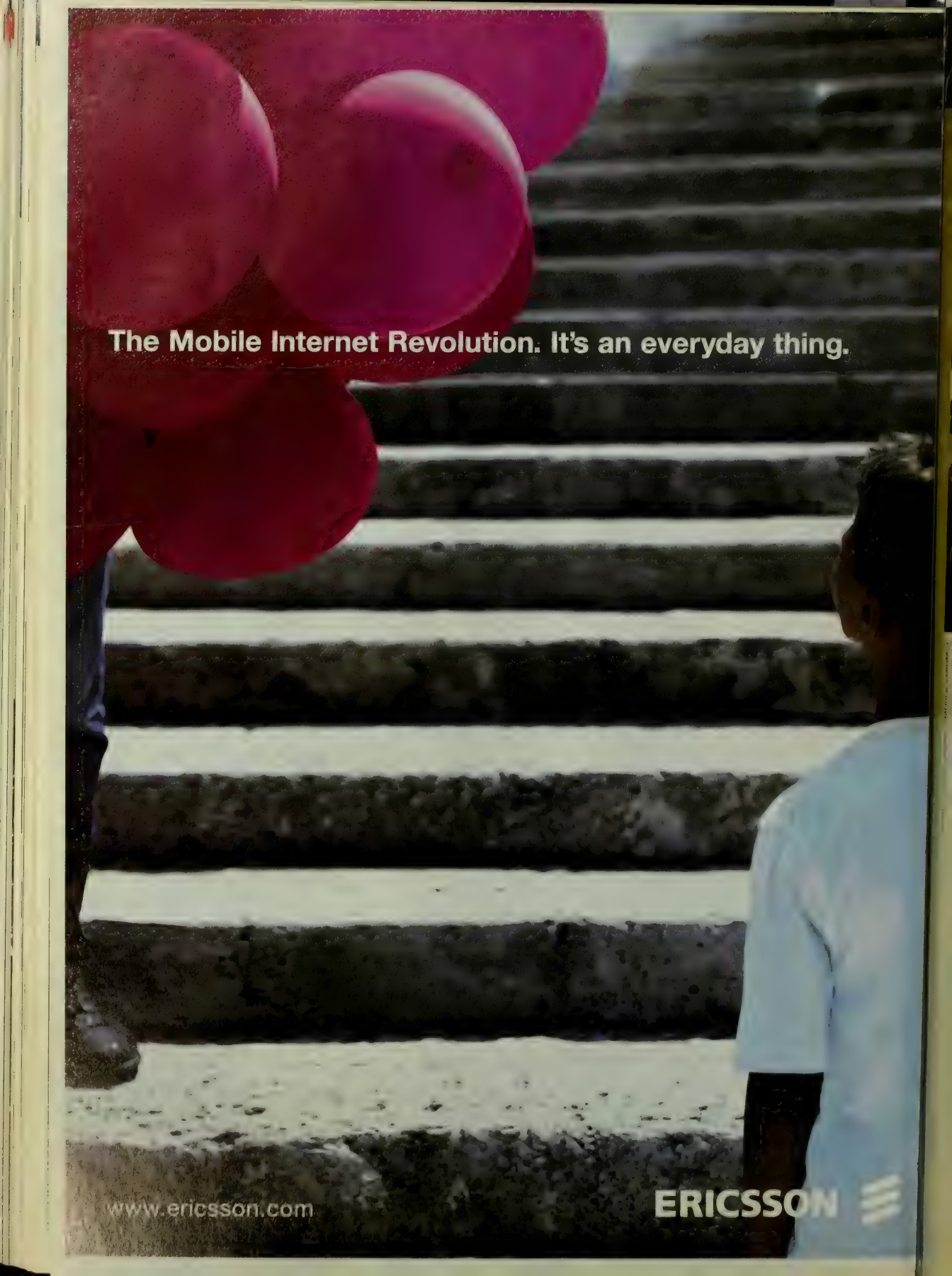
WEB SITE Talbots.com debuted a year ago. Unlike older rivals, it has been profitable from Day One. Talbots says 30% of the site's customers are new to the brand, including many who are younger than its 35-to-55-year-old core customers.

CATALOGS The company will mail out 58 million catalogs this year. Although the catalogs are considered mainly a marketing vehicle, they generated \$191 million in sales last year. So far this year, catalog sales are up 23%.

DATA: TALBOTS

IS THE
Digital
Divide

A PROBLEM OR AN OPPORTUNITY?

A man in a light blue shirt is seen from the side, looking towards a large bouquet of pink balloons. The background consists of horizontal stripes, possibly a wall or a fence. The overall scene is brightly lit, suggesting an outdoor setting.

The Mobile Internet Revolution. It's an everyday thing.

www.ericsson.com

ERICSSON 

A Special Message from **General Colin L. Powell, U.S.A. (ret.)**

We hear much today about the "digital divide" – the gap between those who have access to the wonders of digital technology and the Internet and those who do not. When I address this issue I use an even stronger term: digital apartheid. What is at stake is today's technology "have-nots" – especially the young – and whether they may find themselves marginalized for life because they lack the skills and tools to participate in our globalized, knowledge-based

economy. This is true in America and in the rest of the world.

If digital apartheid persists, we all lose. The digital have-nots will be poorer, more resentful of progress than ever and will not be able to become the skilled workers or potential customers that are needed to sustain the growth of the Internet economy. So the private sector is eager to tear down the wall between the digital haves and have-nots.

One reason why I am an optimist on this issue is my vantage point as Chairman of America's Promise – The Alliance for

Youth. Our mission is to endow young people with the character and competence they need to become successful adults by promoting Five Promises to Youth: caring adults, safe places, a healthy start, marketable skills, and opportunities to serve.

Marketable skills increasingly mean digital skills, and high-tech companies have been among our earliest and most enthusiastic allies in equipping young people for careers in the digital economy. Oracle Corporation created a \$100 million foundation to provide network computers and computer training to students and teachers in American schools. America Online developed a Web site, AOL@School, to help teachers and students tap the educational resources of the Internet. Cisco Systems is setting up 2,000 Networking Academies in high schools and colleges throughout the United States to train students to design, build, and maintain computer networks. IBM will provide \$10 million in technology and technical services as part of its Teaming for Technology program.

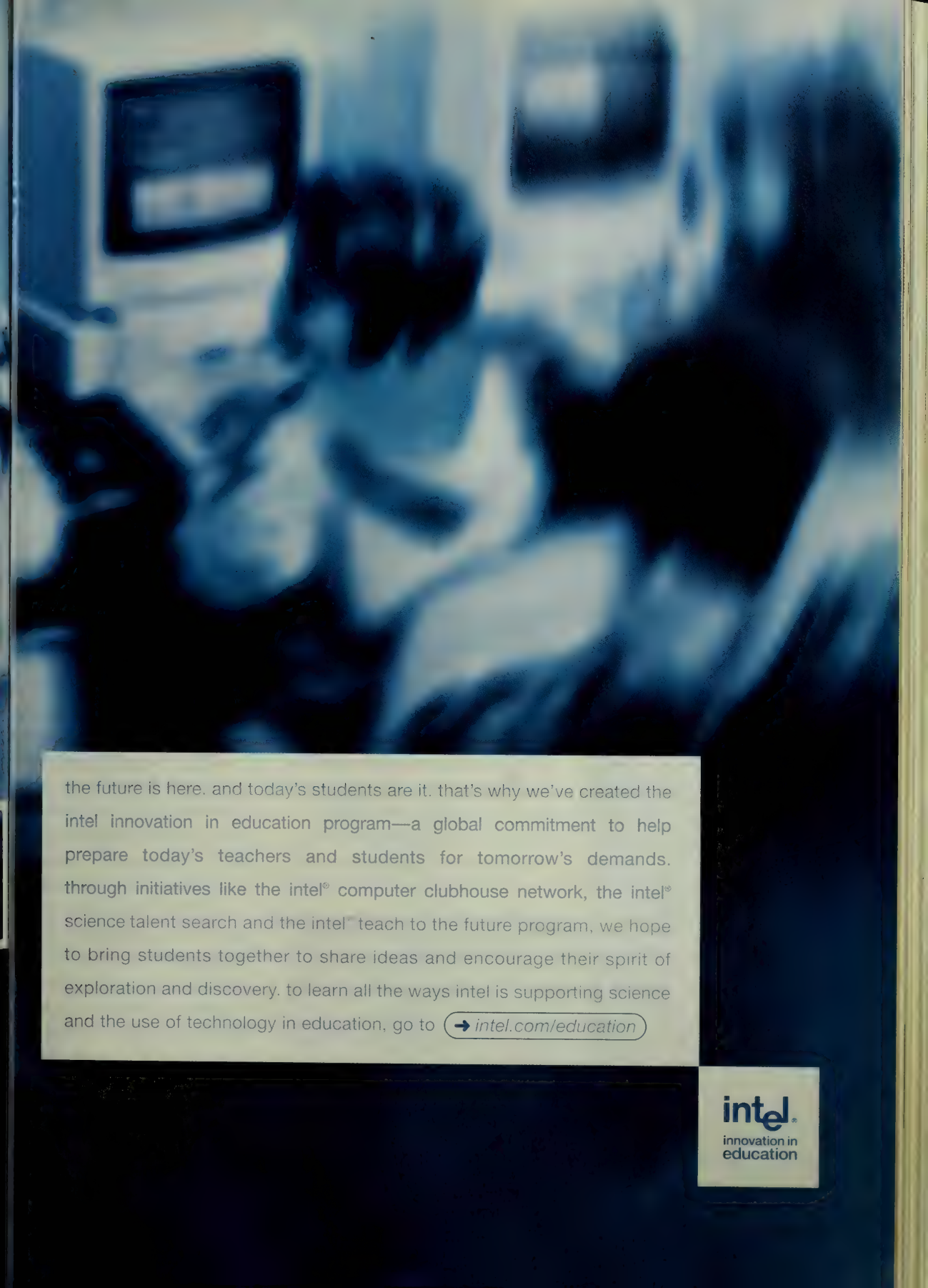
Another new initiative, PowerUP, is an alliance of the Boys & Girls Clubs of America, the YMCA, AmeriCorps*VISTA volunteers, and a number of high-tech companies. It provides computer training to young people who otherwise might not get it.

The progress America's Promise has made in giving disadvantaged American youngsters access to digital technology helps to dramatize what can be achieved through private and public/private initiatives. What has been done here can be done worldwide. The private sector has the incentive, as well as the resources and ingenuity, to lead the world in realizing this critical goal.




JEANETTE ORTIZ-OSORIO/AMERICA'S PROMISE

four feet tall.



the future is here. and today's students are it. that's why we've created the intel innovation in education program—a global commitment to help prepare today's teachers and students for tomorrow's demands. through initiatives like the intel® computer clubhouse network, the intel® science talent search and the intel™ teach to the future program, we hope to bring students together to share ideas and encourage their spirit of exploration and discovery. to learn all the ways intel is supporting science and the use of technology in education, go to [→ intel.com/education](http://intel.com/education)

intel
innovation in
education

A New Business Frontier

Highlights of the Creating Digital Dividends Conference

IS THE GLOBAL DIGITAL DIVIDE A PROBLEM OR A BUSINESS OPPORTUNITY? That is the question that brought leading executives from digital companies to a meeting October 16-18 in Seattle. The powerful answer that emerged from the conference, shared by nearly all participants, was that the digital divide is both an urgent problem *and* a potentially significant opportunity. As Internet founding father and WorldCom Senior Vice President Dr. Vinton Cerf put it, "The Internet is for everyone."

Creating Digital Dividends

Strategic Director

Allen Hammond

World Resources Institute

Special Projects Director

Sue Swarzman

Design

Sundberg & Associates Inc

Conference Photography

Chad J. Klassen

WORLD RESOURCES INSTITUTE

Creating Digital Dividends was prepared in collaboration with the World Resources Institute, an independent thinktank that specializes in taking ideas into action on global environment and development issues.
www.wri.org/wri/

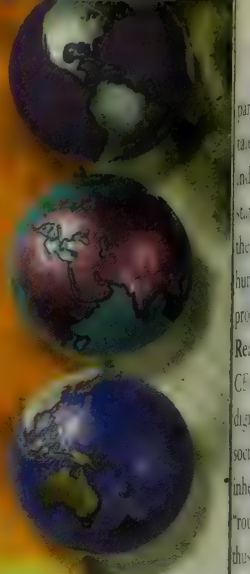
Special thanks to John Bergan

No one disputed how difficult it will be to provide six billion people with access to digital networks and the opportunities, services, and social empowerment they can provide. But speaker after speaker made the case for real business opportunities in creating a new portfolio of digital products and services to meet the needs of developing regions and to address growing environmental challenges. These opportunities for creating profits and social benefits – digital dividends – and novel business approaches to achieve them were the focus of the conference. Among the highlights:

- Hewlett-Packard Chairman and CEO Carly Fiorina not only

underscored the importance and the historical significance of the global transformation now underway, describing it as a "digital renaissance," but also eloquently called for the digital industry to step up and play a crucial role in that transformation – as business. She also put her company's money behind her vision, announcing a new HP division focused on "World e-Inclusion" that expects to sell, lease, or donate \$1 billion in HP products and services in developing countries next year.

- University of Michigan business guru C.K. Prahalad, in a spell-binding presentation that received a standing ovation, shared a compelling analysis of the market opportunity serving the "bottom of the economic pyramid" – the four billion people with incomes less than \$1,500 a year – and gave inspiring examples of real business already tapping that opportunity.
- Renowned KPCB venture capitalist Vinod Khosla argued the power of entrepreneurial energy to drive beneficial change, and pointed out the potential for a historic



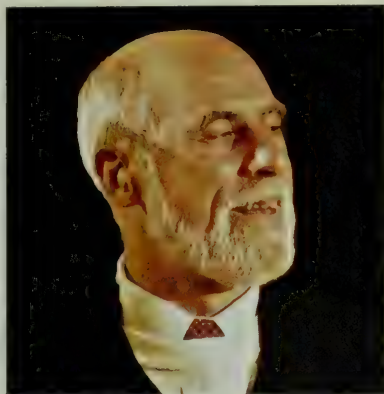
partnership between the increasingly talent-constrained but capital-rich industrial world and the capital-starved developing regions with their huge pools of under-utilized human talent, from incipient programmers to entrepreneurs.

RealNetworks Chairman and CEO **Rob Glaser** described how digital tools can become agents of social progress. He cited the inherent ability of the Internet to "route around" censorship and thus help ensure the openness of society. He described the impact of broadcasting globally over the Net in 50 different languages from 90 different countries on social consciousness. He also announced the creation of the **RealNetworks** Foundation where the company will put five percent of each quarter's profits to foster the progressive social impact of digital technologies.

Amazon.com's Founder and CEO **Jeff Bezos** pointed to the huge efficiency gains possible from digital technologies and e-commerce and their potential to reduce environmental impact. He also emphasized that developing regions could leapfrog traditional development by skipping entire layers of infrastructure.

Entrepreneurs provided specific instances of how new business models could transform social and environmental problems into profitable opportunities.

Martín Varsavsky, Founder and Chairman of **Jazztel**, described the remarkable public-private partnership, **Educ.ar**, that he launched with the government of Argentina. The initiative plans to



WorldCom's Dr. Vinton Cerf, shortly before he revealed that he was wearing a T-shirt with the message "The Internet is for Everyone," the theme of his remarks to the conference.

use private money and e-commerce skills to put 10 million Argentine students online in four years. **Iqbal Quadir**, the entrepreneur behind **GrameenPhone**, described how that venture, by aggregating demand, is profitably providing commercial phone service to poor rural villages in Bangladesh.

Jonathan Campaigne described the digital tools he has developed to help expand **PRIDE AFRICA**, the microfinance entity that serves 100,000 poor clients in six East African countries.

These entrepreneurs were joined by spokespersons for nearly a dozen novel business models or

untapped new markets for digital technologies, including **George Weyerhaeuser Jr.**, Senior Vice President for Technology at the forest products giant that bears his family name. (See case studies.)

- The former President of Costa Rica, the head of Jordan's brand-new IT Ministry, and the Chief Minister of the Indian state of Andhra Pradesh provided compelling examples of what governments in developing regions can do to open markets, enact policies to encourage rapid IT and telecom development, and utilize technology to deliver improved e-government services.

Huge New Markets?

C.K. Prahalad captivated the audience by insisting that companies should think of the poor not as a problem to be dealt with by government, but as a significant market for business. He pointed to the scale of the untapped market – four to five billion people that in aggregate have huge purchasing power. This market is now totally ignored by most global companies. Prahalad argued that business executives need to rethink business models, products, and services developed for industrial

"We are now at the beginning of a second renaissance, the digital renaissance. Invention is once again the prime virtue. But this time the tools for invention can be extended to every corner of the earth."

Carly Fiorina
Chairman and CEO
Hewlett-Packard



DIV



(?) If in the next 3 years more people will access the Web with cell phones than PCs, and if there are 210 million handsets in Asia,



and if there are just 105 million in the USA, is the digital divide where you thought it was.



MOTOROLA

An Internet Portal for Rural India

India's rural areas are virtually untouched by modern technology. Steady, year-round jobs are scarce. Information about employment opportunities, or crop prices, or the availability of candidates for the country's traditional arranged marriages is hard to

Users will be able to shop for farming needs such as seeds and machinery as well as household items such as bicycles or refrigerators, and find buyers for crops and handicrafts without making arduous trips to a city.

come by. Enter the Internet, in the form of a start-up known as TARAhaat.com. It is attempting to reproduce online the colorful "haat" or market that takes place regularly in nearly every Indian village. But because this haat is digital, it can share information, goods, services, and even potential bridegrooms across a whole region, pooling the assets and market potential of many villages.

TARAhaat's Founder, Ashok Khosla, describes the new venture as the first Internet service designed from the ground up for the needs of rural village users. Khosla, a well-regarded development expert who for years has headed

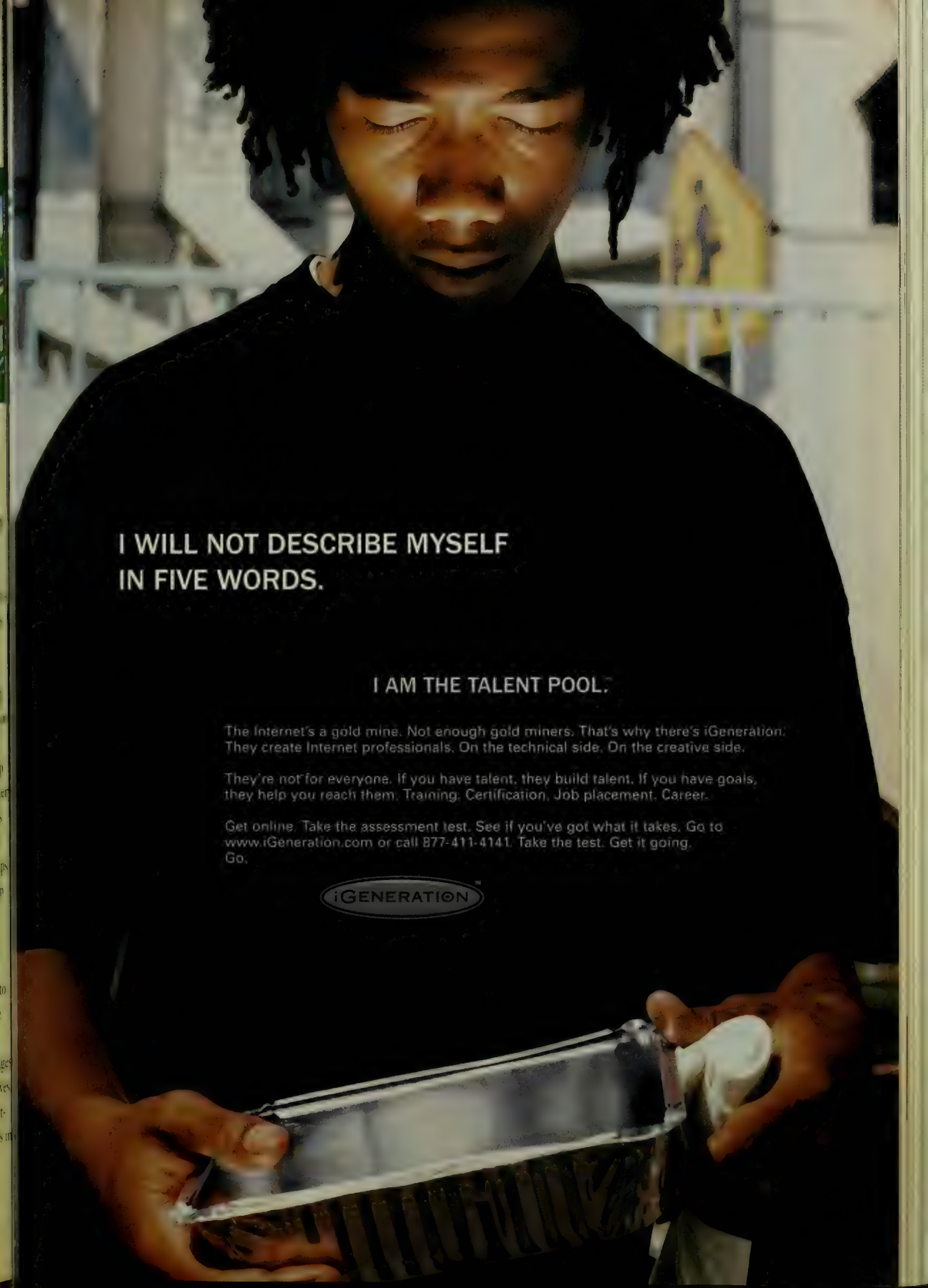


non-profit development organizations, believes the new venture can be both a successful business as well as a tool to help those it serves lift themselves out of poverty. Villagers will access the portal at a village cyberkiosk, owned and operated by a local entrepreneur, using a computer that displays pictures, diagrams, and simple explanations in local languages. The service plans to piggyback on India's extensive rural phone network, supplemented where necessary by satellite links. It will provide information on such vital matters as land records, health clinics, and jobs. Users will be able to shop for farming needs such as seeds and machinery as well as household items such as bicycles or refrigerators, and find buyers for crops and handicrafts without making arduous trips to a city. The venture will operate initially in the states of Uttar Pradesh and Madhya Pradesh, but plans to expand throughout India within a few years.

TARAhaat hopes to make money and to create jobs, raise incomes, and unlock the purchasing power of rural communities. The company believes that opening villages to the world outside will widen perspective enabling India's people to become enlightened citizens and more active participants in shaping India's future.

RICHAR KUMAR



A young man with dark skin and dreadlocks is shown from the chest up. He has his eyes closed and a serene expression. He is wearing a dark, long-sleeved shirt. He is holding a large, cylindrical metal canister with both hands, positioned in front of his chest. The background is a blurred outdoor setting with a white fence and some foliage.

**I WILL NOT DESCRIBE MYSELF
IN FIVE WORDS.**

I AM THE TALENT POOL.

The Internet's a gold mine. Not enough gold miners. That's why there's iGeneration. They create Internet professionals. On the technical side. On the creative side.

They're not for everyone. If you have talent, they build talent. If you have goals, they help you reach them. Training. Certification. Job placement. Career.

Get online. Take the assessment test. See if you've got what it takes. Go to www.iGeneration.com or call 877-411-4141. Take the test. Get it going. Go.



Tools to Transform Management of the World's Forests

WEYERHAEUSER



profit from forest resources while reducing environmental impact.

Better digital maps would enable foresters to classify forest type and health. Prospective forest modeling and visualization tools could also enable forest managers to plan more carefully and to optimize application of fertilizer or herbicides.

Handheld devices and laptop computers are already helping managers and logging crews get access to data and software tools in the forest.

Prospective forest modeling

and visualization tools could

enable forest managers to

plan more carefully and

to optimize application of

fertilizer or herbicides.

Demand for wood is rising. So are pressures to preserve wilderness. To accommodate both, commercial forests will have to be managed more intensively, while protecting conservation reserves and environmentally sensitive areas. But forest managers lack both the detailed data on forest conditions and the software tools needed to coax more productivity and

Eventually forest managers would like to use the Internet to access sophisticated spatial analyses of forests.

Providing the tools and information services for sustainable forestry could be a substantial business. There are 65,000 foresters in the United States alone, and they manage commercial and other privately-owned forests with a market value of \$240 billion.

"The Internet's openness to communication is profound. Its benefits as a global medium, as a medium impervious to censorship, as a medium that lets anybody be a broadcaster, will continue to accrue to everyone."

Rob Glaser
Chairman and CEO
RealNetworks



countries. Companies should not take cost structures as given, he argued, illustrating the point by citing one new business that through use of a heat shield drastically cut the cost of refrigeration and now profitably sells ice cream in tropical India at 3¢ a serving. Another Indian company provides laser cataract surgery including counseling in several local languages, for \$10 per patient. He described a new retail point-of-sale

stem, developed in India for Indian conditions, that copes with fast and highly variable voltage, manages stock and prints invoices in multiple languages, incorporates a barcode scanner, is Internet enabled – and costs less than \$1,000 a terminal. Moreover, Prahalad pointed out, the return on equity for these businesses is higher than that of most multinational corporations: “Selling to the poor may be more profitable than selling to you and me.”

Prahalad went on to say that companies need to listen to the poor markets like India, China, and Brazil, because they can not only be customers, but also an important source of innovation. As an example, he told a story about illiterate kids in New Delhi given access to a networked computer but with no instruction or supervision; within a couple of months, the kids taught themselves to use it and to navigate the Internet. If a software company wanted to create a universal, icon-based language for the Internet, Prahalad asked, where better to experiment than with such kids?

“Don’t look at the poor and say there is no hope. Selling to the poor may be more profitable than selling to you and me. This is where the future is. Opportunities are everywhere. This [digital divide] is not about lack of opportunity; it is about lack of imagination.”

C.K. Prahalad

Professor of Business Administration
University of Michigan Business School



One of his key insights was that access to digital systems is not the same as ownership (the dominant model in industrial countries). With village phones, cybercafes or other pay-per-use systems, the entire community becomes the customer. “It is a huge, counterintuitive opportunity,” he concluded. “You cannot approach these markets unless you have a fundamentally different view of how to use technology.”

Reinforcing this message was 3Com Chairman and CEO **Eric Benhamou**. “What has worked so well [in digital technology] for the relatively few may not work for the

Dividends Idea Lab expo associated with the conference. Designed by the Simputer Trust of India, the handheld device is a powerful Internet access tool with a touch screen, a voice chip that can “speak” different languages, and a smartcard reader. It runs on free Linux software, can be manufactured by anyone without license, and is expected to cost under \$200.

One major company that seemed to “get” Prahalad’s message is **HP**. Their new World e-Inclusion Initiative, according to **Debra Dunn**, Vice President for Strategy and Corporate Operations, will open branches of HP labs in China and India to develop solutions that address the basic needs of people in those countries and will create an “ecosystem of partners” around the world. The company is launching this new initiative not only because it thinks it is a good business opportunity, but also because it believes that the “digital renaissance” will lead to an explosion in human and social advancement. “We must give everyone everywhere a chance to participate in the benefits of this digital age,” Dunn said. “HP is passionate about working to improve

vast majority without profound redesign,” he said. What is needed is “complex research to create radical simplicity” in order to broaden access and make digital devices much easier to use. A prototype that could represent a first step toward such devices is the Simputer, showcased at the Digital

**Milk Collection Centers:
Twice a Day Ritual in Rural India**



C.K. Prahalad

of C.K. Prahalad’s examples of how digital technologies create opportunities concerns these women who bring their milk to this cooperative in rural India. Then they log on the Internet to check the price of milk in neighboring towns before deciding where to sell their product.

Fresh from the baker.
Straight to the dumpster?



One hundred billion pounds of food go to waste every year in America, while 31 million people are hungry or at risk of hunger.

The problem is not lack of food, but lack of communication—how to get food where it's needed most. ResourceLink.org is an hp-designed and operated e-service portal which connects food manufacturers with America's Second Harvest, the country's largest food relief organization.

The system not only automatically locates surplus food, but dynamically interacts with shipping companies to get that food to the right place. Instead of days or weeks, the process takes a matter of minutes. This is the power of e-services—connecting companies and their services in inventive ways and, in some cases, maybe even making someone's life a little better.

www.resourcelink.hp.com

Possibilities made fresh daily. e-services solutions from hp.





A conference panel considered enabling technologies – from satellites to speech recognition software to mobile Internet devices – that might be disruptive of the digital divide, of poverty, and of environmental mismanagement. (l to r) Russ Daggatt of *ICO-Teledesic*, Mike McCue of *Tellme Networks*, Kennet Rådne of *Ericsson*, Mark Anderson of *Strategic News Service*, and Kevin Werbach of *Release 1.0*.

the lives of the four billion people at the bottom of the economic pyramid.”

William B. Plummer, *Nokia’s* Vice President for Government and Industry Affairs, agreed. He said, “Providing the technologies to connect people everywhere is an urgent social mission.”

Enabling Technologies

One conference panel considered emerging technologies that promise to enable broader access and could also be disruptive of poverty and environmental mismanagement. Vivid examples included:

- Non-geostationary satellite networks linking rural areas directly to the Internet. **Russ Daggatt**, Vice-Chairman of *ICO-Teledesic*, pointed out that such systems are inherently egalitarian, because operators of such systems would necessarily have to provide “the same quality and quantity of capacity to Africa as to North America.”

- Third generation or 3G cellular phones that will provide high-speed, mobile access to the Internet without a computer. **Kennet Rådne**, President of *Ericsson Internet Solutions*, pointed out that mobile phone networks are expanding so rapidly that they are likely to become the most common means for access to the Internet.

- Voice-enabled access to the Internet, based on voice recognition

software. **Mike McCue**, CEO of *Tellme Networks*, explained that such systems, now being deployed in the United States, could readily be adapted to other languages and could enable access even for those who are illiterate.

- Much cheaper, smaller, and easier to-use “carry-along” computers, part of a ladder of technologies that will expand access, according to **Mark Anderson**, President of *Strategic News Service*.

Also coming, said **Kevin Werbach**, Editor of *Release 1.0*, are peer-to-peer networking technologies that let people swap music or information or transact business directly with each other, and more powerful location-based computing tools that could enhance environmental management.

Are Digital Dividend Opportunities Real?

Beyond technology, the core questions at the conference concerned access, financing, and the readiness of many developing countries for massive private sector investments in digital infrastructure. As **Kevin Werbach** pointed out, with the Internet “access is everything”



“The developing world may have the opportunity to skip entire layers of infrastructure... telephone poles with all the copper wire... billions of dollars on malls... that could save a tremendous amount of energy, building materials, time, and money.”

Jeff Bezos
Founder and CEO
Amazon.com

Providing Rural Phone Service Profitably in Poor Countries

In poor countries, most people – in all, half the world's population – still live in rural areas. Village phone service is rare, Internet service non-existent, and poverty widespread. In Bangladesh, for example, 90 percent of the country's 68,000 villages have no phone service of any kind and average annual income is less than \$200 per person. It might not sound like a promising commercial telecom market, but appearances can be deceiving.

Since 1997, **GrameenPhone** has provided commercial cellular services in Bangladesh, operating primarily in urban areas. A subsidiary, working with the microfinance organization

Grameen Bank, provides service in rural areas via local entrepreneurs, usually women. Each local entrepreneur owns and operates a cellular phone that typically serves an entire village. Villagers pay for phone calls in cash, by the minute. Grameen Bank helps by loaning the entrepreneurs

money to buy the phone and collecting payments from them for phone usage on behalf of GrameenPhone.

These shared-access village phones are very profitable, generating revenues that now average \$1,200 per year per phone, more than three times as much as the company's urban phones. Each phone serves an average of nearly 70 customers – in effect, tapping the buying power of a whole village. Per

phone revenues have more than doubled in two years of service, and some phones in larger villages generate revenues in excess of \$12,000 per year, in one of the world's poorest countries. A study by the Canadian International Development Agency shows that the village phones also have a big social impact. For villagers, access to phones often substitutes for a trip to Bangladesh's capital, Dhaka, that could take days and cost many times as much as the call. Villagers also use phones to find out current market prices for their crops, arrange remittances from family members working abroad, and obtain urgent medical help.

If it works in Bangladesh, how about in rural areas elsewhere? If phone and perhaps Internet services can be provided profitably to rural communities through shared access, then opening up such regions to commercial telecom competition may be an effective way of stimulating rural development and providing significant social and economic benefits to impoverished areas. The business opportunity also seems large enough to stimulate private investment: becoming the phone company and the Internet service provider for nearly half of humanity.



Grameen Bank helps by
loaning the entrepreneurs
money to buy the phone and
collecting payments from
them for phone usage on
behalf of GrameenPhone.



NURAHAN CHAKLADER/Grameen Bank

because once people have access, they can get everything else virtually free. And because of shared-access systems, universal global access may come more rapidly than is generally expected. "My estimate," predicted Internet architect **Dr. Vinton Cerf**, "is that half the world's population will be online by the year 2010 – about the same fraction that have access to the phone network today."

Venture capital financing, the fuel for rapid innovation in technology, is not yet widespread outside the United States. It is mostly unavailable in developing regions,



Microsoft Chairman Bill Gates argued for the overriding importance of meeting basic needs, such as health, in poor communities.

"The Internet is the best tool we have had for creating wealth and for redistributing the opportunities to create it since the steam engine – wealth created not from our diminishing supplies of raw materials and natural resources but from our limitless reserves of creativity, intelligence, and information."

Stephan Schmidheiny
Founder and President, Avina
Chairman, Grupo NUEVA



except to enable a few "foreign entrepreneurs to come to the United States and sell their products here," as **Dan Rosen of Frazier Technology Ventures** put it. "We need to find a way so that the next wave of venture investment outside the United States leads to creation of new markets in the developing countries themselves." **Tom Alberg**, Managing Director of the **Madrona Venture Fund**, proposed a possible mechanism to do that – a new kind of venture fund with lower rate of return expectations targeted directly at such markets.

The digital opportunity task force, launched at the G-8 economic

summit in July 2000, intends to help close the global digital divide. What will it do? The details are still being worked out, but the hopes are clear. As **Markle Foundation President Zoë Baird** described them: create strategies to help government, business, international organizations, and non-governmental organizations (NGOs) work together; develop country-specific strategies with and for developing country governments and support specific projects. **Kathy Bushkin**, AOL's Chief Communications Officer, said that the key for the task force and for closing the digital divide will be "collaboration between companies and NGOs, between companies and governments, and between countries.

Will such efforts be enough? Can private sector investments to close the digital divide, even if supported by governments, international agencies and non-governmental groups, really help alleviate poverty, improve human welfare, and create new tools to reduce environmental harm? Possibly, but calling attention to the health needs of the world's poor was **Microsoft Chairman Bill Gates**. He argued that poor people need more basic things than access

Are We Ready for Universal Connectivity?

Stephan Schmidheiny, Founder of the World Business Council for Sustainable Development, described obstacles in business and in government to creating digital dividends and called for a rethinking of roles and for new partnerships among business, government, and civil society. He emphasized that education is now utterly critical to enable individuals and countries to participate in the digital economy, and urged business to accept education as a strategic corporate issue as well as a social issue. Schmidheiny also described how the growing use of digital networks by civil society is likely to bring almost complete transparency for large businesses and for government. "Are we ready for this? I'm not quite sure."



CHNOLOGY SHOULD NEVER GET IN THE WAY OF A BIG IDEA.

*Sometimes, before you can think big
you have to think small.*

Small, like the Compaq

ProLiant DL360 Server. With a

*1.75-inch profile that fits everywhere,
you can have your*

big start-up idea anywhere.

Even in the back of a van.

Welcome to the new IT.

*Inspiration Technology
from Compaq.*

COMPAQ

Inspiration Technology

compaq.com

88-5858 © 2000 Compaq Computer Corporation. COMPAQ and the Compaq logo are registered in U.S. Patent and Trademark Office. ProLiant and Inspiration Technology are trademarks of Compaq Information Technologies Group, L.P. in the U.S. and other countries.

Can Digital Community Centers Save Remote Communities?

In most developing regions, governments are hard-pressed to provide the services needed to keep civic and cultural life functioning. Schools often lack supplies, health care may not be available in the community, and isolation is the rule.

One bold attempt to change this pattern is underway in Costa Rica. A local foundation and the **MIT Media Lab** are recycling old shipping crates into newly-wired digital community centers. The goal of these **Little Intelligent Communities (LINCOS)** is to give rural villages access to a post office, a school computer lab, a small medical center (linked to specialists by telemedicine), a large screen for videos, as well as e-mail, fax, and Internet services – tools that villagers can

use to improve their quality of life. The effort plans to expand from today's seven units to sites throughout Central America, Asia, and Africa. At the same time, the Media Lab will use the LINCOS units as testbeds for businesses that could power economic and community development. Successful models will be franchised.

The LINCOS strategy, still being refined, is to offer governments more cost-effective service delivery, community residents new economic opportunities, and online vendors potential new markets. If it succeeds, remote might no longer have to mean isolated.



to technology and doubted the business opportunities in indigent communities. Vinod Khosla also expressed caution about the goal of universal access, arguing that connectivity is most important for the perhaps 10 percent of a population who can be entrepreneurially active

and create wealth. Nonetheless, the new initiatives and prototype ventures considered at the conference generated tangible enthusiasm, and the consensus of those attending was optimistic about the prospects for creating digital dividends. Most attendees seemed to agree that

Fiorina's vision of a digital renaissance and Prahalad's business strategies for tapping the market at the bottom of the pyramid were on target. As **World Resources Institute** President **Jonathan Lash** put it, "We should not minimize the obstacles – they are real. But if the opportunity is also real, then it is too important to ignore." **Mark Malloch Brown**, head of the **UN's Development Programme** summed up the conference this way: "If we can make this a technology for all rather than for the few, then we are seeding an extraordinary revolution in the affairs of our world."



"The biggest obstacle standing between technology and its benefit is not cost, is not performance. Technology must become radically simple."

Erik Benhamou
Chairman and CEO
3Com Corporation

THE SKEPTICS WERE RIGHT WHEN THEY SAID CRAIG VENTER
WOULD NEVER CRACK THE HUMAN GENETIC CODE ON SCHEDULE.
HE WAS TWO YEARS EARLY.



When you're trying to decipher something as complex as the human genetic code. And when the consequences of success are so important to the health and well being of everyone on the planet. Time matters.

So as Venter and his team from Celera Genomics began evaluating their technology needs they realized there were only two systems even capable of taking on a task of this magnitude. They suggested a benchmark test. One system ran the test in 87 hours. The Compaq Tru64 UNIX AlphaServer with Compaq StorageWorks solutions did it in 7.

The superior processing power that delivered this performance is the same technology that enabled Compaq to win four recent supercomputing projects around the world. And it's just one example of how Compaq Tru64 UNIX AlphaServers help people in all kinds of settings realize their inspiration.

That's what happens when you move beyond the limitations of Information Technology to something more inspiring. Welcome to the new IT. Inspiration Technology from Compaq.

COMPAQ
Inspiration Technology

Expanding Microfinance

With Digital Technologies

Micro-loans in their modern form were pioneered by the **Grameen Bank** to provide a source of credit for poor people in Bangladesh. Today more than 1,000 microfinance institutions offer micro-loans of between \$150 and \$500 to five million clients in poor rural communities or urban slums spread across Africa, Asia, and Latin America. Most such loans go to women to enable them to expand small businesses. A track record of remarkable repayment rates and success in helping



Today more than 1,000 microfinance institutions offer micro-loans of between \$150 and \$500 to five million clients in poor rural communities or urban slums spread across Africa, Asia, and Latin America.

recipients climb out of poverty have made micro-loans a favorite of development agencies.

Yet relatively few poor people have access to micro-loans – about five percent of an estimated 500 million potential borrowers worldwide. Major reasons are inefficient practices and the resulting high costs of processing loans and keeping records. Few if any microfinance institutions

are profitable, so they cannot tap banks or capital.

What may change this picture is the advent of digital tools to automate transactions and increase efficiencies. Imagine a loan officer

travelling from village to village, equipped with a mobile data entry device similar to that used by FedEx delivery personnel and transmitting loan data over wireless links to a central computer. Microfinance institutions operating in Mexico are now testing the use of Palm Pilots equipped with simple accounting software for their loan officers, and many such groups are introducing computerized accounting systems.

PRIDE AFRICA operates in six East African countries where half the population subsists on less than \$1 a day. PRIDE links its base of 100,000 clients to financial services, information, and markets. It has developed its own banking software to manage micro-loans and small savings accounts and to automate administrative tasks. The group is now experimenting with magnetic cards and information kiosks that allow even illiterate clients to access their accounts and check loan balances, while cutting costs. PRIDE is developing software that will enable it to bundle together loans from tens of thousands of its clients and resell them to commercial banks, opening up capital markets to finance expansion.

PRIDE Founder **Jonathan Campaigne** points out that microfinance can benefit from the same emerging Internet-based technologies that are forcing retail bankers everywhere to rethink their business models. These include tools like data mining, customer service and support software, and customer relationship management applications. PRIDE, for example, hopes to work with partners to build an Internet-based virtual “back-office” and provide tools that are easier for poor clients to use – all with the intent of making access to financial services as widespread as the traditional African drum.



WENDY STONE/LIAISON

WorldCom: Investing in the Future of a Digital Generation




As the preeminent global communications company for the digital generation, WorldCom™ is taking a leadership role sculpting the next generation of digital communications, including IP Virtual Private Networks (VPNs), Web Hosting and Web Centers. While delivering the essential services to fuel the success of its customers, WorldCom is helping to bridge the digital divide and develop a fertile environment for innovation.

E-business is "business as usual" in the digital age. Therefore, the e-business communications infrastructure of WorldCom's customers is becoming synonymous with their business communications infrastructure. WorldCom's global IP service capabilities are unmatched in the industry, enabling the Company to deliver superior products and services to customers. WorldCom's global network will continue to be the foundation for its success

MMDS is a great "leveler" of the playing field, because it bypasses the bottleneck of monopoly incumbents to deliver quick, efficient and cost effective broadband services to customers. WorldCom has been built around digital initiatives that will deliver the next generation of services and enable a world of new applications.

—and distinguish it from new and established competitors around the world. Services like hosting, content distribution and security will be integrated with the traditional network components, such as transmission speeds, pipes, and PoPs.

Additionally, WorldCom has begun offering high-speed broadband Internet access using MMDS fixed wireless technology—a technology that will enable the Company to reach beyond traditional markets and provide businesses with the speedy, reliable Internet connection that today's economy demands.

WorldCom's business and societal perspectives on bridging the digital divide are inextricably linked. As a world leader in Internet technology, WorldCom has a unique opportunity to ensure that educators harness the enormous educational power of the Internet.

To this end, the WorldCom Foundation, which is the principal instrument for WorldCom corporate giving in the U.S. and throughout the world, established the MarcoPolo Internet Content for the Classroom initiative in 1998.

Recognized by President Bill Clinton and Secretary of Education Richard Riley in 1999, MarcoPolo is an

unprecedented public/private partnership project designed to explore the frontiers of Internet-based education. Through the MarcoPolo gateway (www.wcom.com/marcopolo), teachers can quickly find high-quality Web sites in almost every subject area, all with content thoroughly reviewed by scholars and approved by educators. Teachers will be able to overcome barriers in the use of technology with content that enhances their classroom plans. The MarcoPolo partners include: the American Association for the Advancement of Science; Council of the Great City Schools; Kennedy Center for Performing Arts; National Council of Teachers of Mathematics; National Council on Economic Education; National Endowment for the Humanities; and National Geographic Society.

In addition, 31 state partnerships have been set up, so far, in which MarcoPolo certified instructors will provide professional development to thousands of state teacher trainers who in turn will provide training on MarcoPolo to every teacher in their state. Almost 400 days of training will be completed in 2000, with over 8000 teacher trainers trained, all at no charge. Next year the goal is to involve every state and ensure that every school with Internet access, no matter how rural or how poor, has the benefit of using the MarcoPolo program.

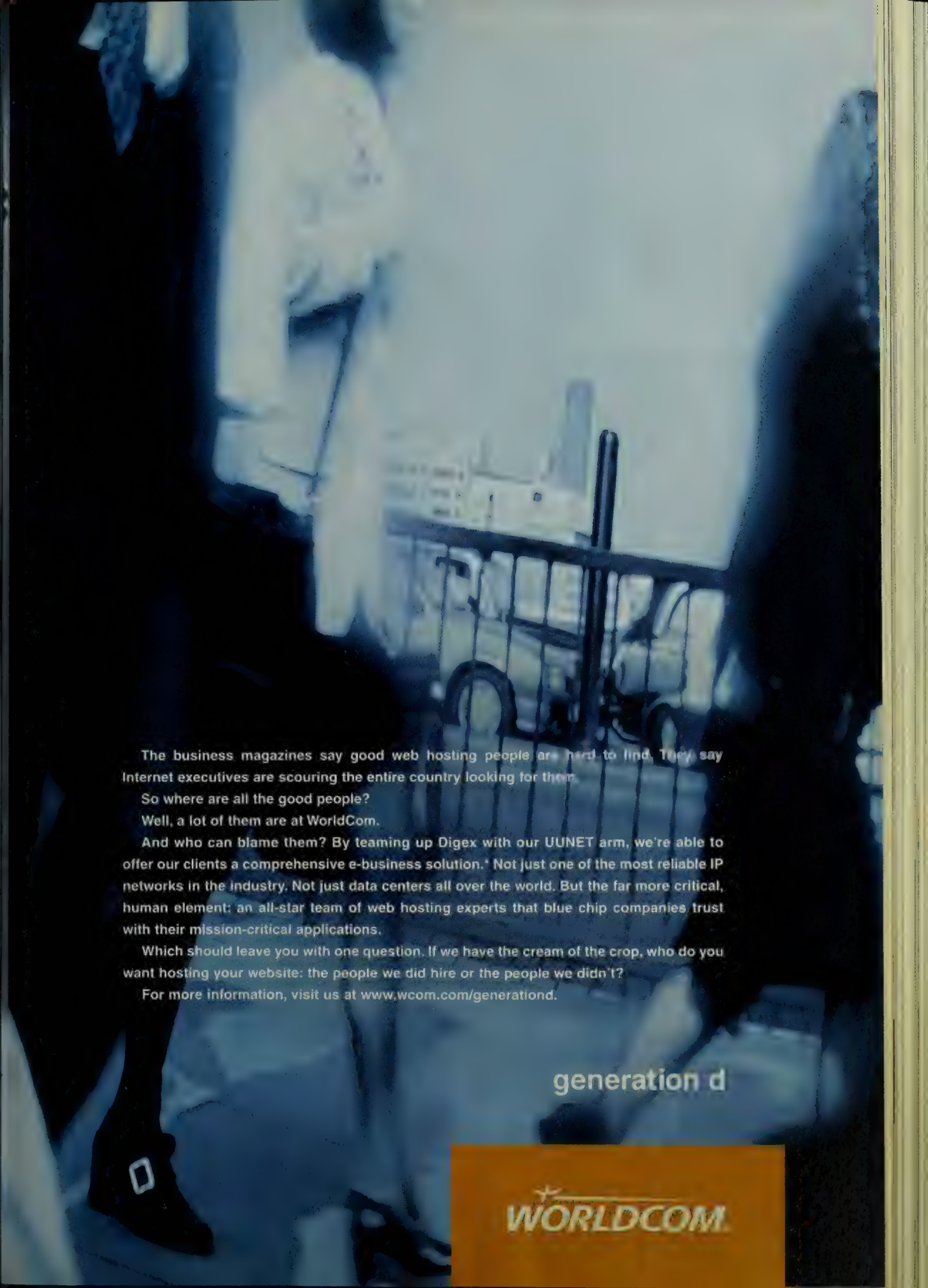
Other initiatives supported by WorldCom include Making a Civic Investment, a five-year, \$5-million program involving a partnership with Brown University to link schools and community organizations around the country with local colleges or universities to develop educational technology projects for youth in underserved communities. Additionally, WorldCom has earmarked \$10 million for a scholarship program through the National Action Council for Minorities in Engineering (NACME), a not-for-profit corporation committed to bringing the talents of African Americans, Hispanics and American Indians to the nation's engineering workforce.

WorldCom's focus on educational giving is an investment in the future of a digital generation. Today, WorldCom's workforce is made up of information architects and service specialists, dedicated to engineering solutions for its customers. The success of WorldCom and society at large is dependent on technology education for teachers, parents and the students who one day will lead the next wave of the digital revolution.

FOR MORE INFORMATION ON WORLDCom TECHNOLOGY
visit www.wcom.com/generationd

A photograph of a person holding a large, dark sign in a city street. The sign has white text that reads: "GOOD WEB HOSTING PEOPLE AREN'T HARD TO FIND. YOU JUST HAVE TO KNOW WHERE TO LOOK." The background is a blurred city street with buildings and other people.

**GOOD WEB HOSTING
PEOPLE AREN'T
HARD TO FIND.
YOU JUST
HAVE TO KNOW
WHERE TO LOOK.**



The business magazines say good web hosting people are hard to find. They say Internet executives are scouring the entire country looking for them.

So where are all the good people?

Well, a lot of them are at WorldCom.

And who can blame them? By teaming up Digex with our UUNET arm, we're able to offer our clients a comprehensive e-business solution.* Not just one of the most reliable IP networks in the industry. Not just data centers all over the world. But the far more critical, human element; an all-star team of web hosting experts that blue chip companies trust with their mission-critical applications.

Which should leave you with one question. If we have the cream of the crop, who do you want hosting your website: the people we did hire or the people we didn't?

For more information, visit us at www.wcom.com/generationd.

generation d

**WORLD**COM



**I WILL FOLLOW IN MY
OWN FOOTSTEPS.**

I AM THE TALENT POOL.

The Internet's a gold mine. Not enough gold miners. That's why there's iGeneration.SM They create Internet professionals. On the technical side. On the creative side.

They're not for everyone. If you have talent, they build talent. If you have goals, they help you reach them. Training. Certification. Job placement. Career.

Get online. Take the assessment test. See if you've got what it takes. Go to www.igeneration.com or call 877-411-4141. Take the test. Get it going. Go.

iGENERATION

Taking Action



One direct way to close the digital divide is simply to provide the technology resources to get the job done. Many digital companies and their employees are doing just that. Some of these efforts are focused on kids and schools. Others focus on under-served communities, from isolated Native American reservations to inner-city neighborhoods to community groups or non-profit organizations serving communities around the world. A few efforts seek to engender a global community or use the Internet as a means of solving global problems. Still others

focus on connecting their own workers in the United States and abroad. By any measure, the outpouring of philanthropic and charitable efforts intended to provide access and skills to the digitally disconnected is remarkable.

Kids and Schools

Sean aspires to go to college and become a graphics animator. Latoya is directing a movie and has used the Web to research colleges where she can pursue her newfound interest in science. Both credit the **Computer Clubhouse** at Boston's Museum of Science with giving

their lives direction. More than a cool place to hang out after school, the Clubhouse offers youths from age 8 to 18 mentors, access to technology, and the chance to develop their own projects, together with skills and self-confidence.

Now **Intel** and the **MIT Media Lab** are working with the Museum to spread the widely-acclaimed model. The **Intel Computer Clubhouse Network** plans to create 100 clubhouses around the world by 2005. In addition to financial and technical support, Intel will provide clubhouse mentors from its employee volunteer program. **Hewlett-Packard** is providing computers, printers, and digital cameras, while **Covad Communications** is providing high-speed Internet links. The Network makes a special effort to attract young women, setting aside Mondays as Girls Day, a feature that attracted 15 year-old Latoya. The project expects to open 20 additional Computer Clubhouses this year and 100 worldwide over the next several years.

Taking a similar approach, **PowerUP** aims to help under-served youth succeed in the digital age by providing access to the Internet, mentoring, and a safe learning

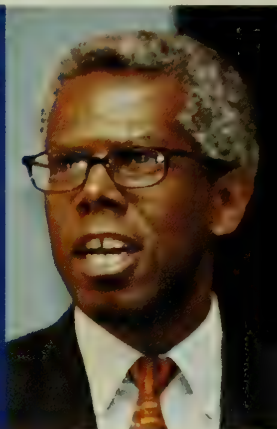


Computer Clubhouse at Boston's Museum of Science gives kids from 8 to 18 mentoring as well as access to technology.

"We have to move at a tremendously fast pace, but at the same time we have to make investments to address infrastructure, to address education. And we have to not be afraid to apply new business models."

Samme Thompson

Senior Vice President and Director
Strategy and Corporate Development
Motorola



environment. The initiative brings together major corporations, federal agencies, and non-profit organizations to create or enhance technology centers in U.S. schools and communities. PowerUP will provide technology centers with 50,000 Gateway computers from the Waitt Family Foundation, 100,000 Internet accounts from AOL, and 400 AmeriCorps*VISTA members to serve as full-time mentors. AOL has also developed an online, interactive system for PowerUP that helps kids find information and develop useful skills.

Taking aim directly at schools, **Sun Microsystems' Open Gateways Program** enables expanded access to curricula and reference materials for students and teachers alike by integrating network computing into primary and secondary schools. The program also helps teachers share lesson plans and lets school districts become more efficient by linking all their schools together. Sun forms partnerships with schools interested in adopting network computing, concentrating especially on assisting those in economically disadvantaged communities. Sun and its employees are also assisting America's Promise,

contributing 20,000 hours of service in schools and \$5 million in equipment and teacher training to help prepare youth for lifelong learning in the 21st century.

Another school-oriented effort is **Compaq's techs4schools Program**, a Web-based "virtual volunteer" or mentoring effort that the company helped to develop and launch in April 2000. The program establishes a technology coordinator for each school or school district, then links coordinators over the Web with a team of volunteer mentors who have specialized skills in areas such

as computers, networking, software or Internet technologies. The mentors answer questions channelled to them by the coordinator via the techs4schools Web site, so that U.S. schools can get the help they need quickly and easily, regardless of their geographical location. The techs4schools effort is part of **TECH CORPS**, a national non-profit organization dedicated to improving K-12 education through effective use of technology, which Compaq also sponsors.

Even where classrooms have computers, effective integration of these tools and the Internet into education remains a challenge. **WorldCom** and a number of leading educational organizations have developed dynamic lesson plans, links to approved educational Web sites, and educational materials for many curricula and grade levels – a complete set of Internet content for the classroom. These tools are available to teachers on **WorldCom's MarcoPolo Web site** and the sites of its partners, and cover six disciplines

Internet Content for the Classroom

Search MarcoPolo

• Home • MP Now! • Publications • MP Community • Link to Our Site

Explore MarcoPolo

- About
 - Philosophy
 - Tour
- Teacher Training
 - Overview
 - Download Free Kit
 - Apply for Free Training
- Training Sign-In
 - Teacher Survey
 - Trainer Report
- Grant Programs
 - Overview
 - State and District Training
 - University Grants
- Progress & Results
 - Contents
 - Web Stats
 - Online Educator Survey
 - Training Survey Results

Introduction

The MarcoPolo program provides no-cost, standards-based Internet content for the K-12 teacher and classroom, developed by the nation's content experts. Online resources include peer-reviewed links to top sites in many disciplines, professionally developed lesson plans, classroom activities, materials to help with daily classroom planning, and powerful search engines.

MP Now!

MarcoPolo Offers New Guide to Help Elementary School Teachers Introduce Internet Content in the Classroom: The MarcoPolo partnership has produced a new resource for elementary school teachers. "MarcoPolo: Internet Content for Your Classroom Elementary Guide; A Teacher's Guide to Finding and Using the Best of the Net" is the latest MarcoPolo publication, specifically designed to address the needs of K-6 classroom educators. The Guide, like the Teacher's Guide produced for secondary school teachers earlier this year, offers a step-by-step tour of the MarcoPolo Partner web sites. Please request your free copy of the guide here, or download a copy in PDF from this web site. If you have already seen the new Guide, please fill out the Teacher's Guide Survey and receive a free MarcoPolo poster.

EconEdLink
Resources, Activities, and Collaborative

XPEDITION
Resources, Activities, and Collaborative

EDSITEment
Resources, Activities, and Collaborative

ILLUMINATIONS
Resources, Activities, and Collaborative

ARTS EDGE
Resources, Activities, and Collaborative

Visitors to www.wcom.com/marcopolo will see teacher materials in six subjects for all grade levels, the results of a partnership between the WorldCom Foundation and seven leading educational organizations.

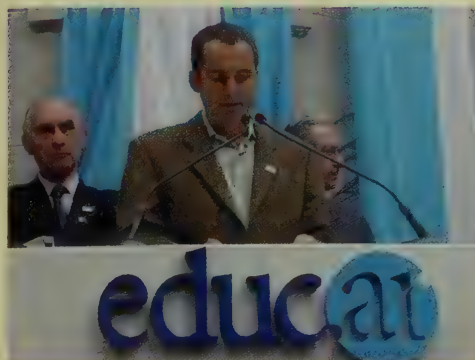
Putting 10 Million Students Online in Argentina

Fewer than 200,000 of Argentina's 10 million students now have Internet access. This digital divide is common to most developing countries. But in Argentina, it will rapidly disappear if an innovative public-private partnership is successful. Initiated by **Martín Varsavsky**, an Argentine who has become a successful Internet and telecommunications entrepreneur in Europe, the partnership launched a national student Internet portal, **www.educ.ar**, in September 2000.

The content of the portal will be under the control of the Ministry of Education.

The **[Educ.ar]** initiative is expected to increase the number of Argentines with Internet access from about three percent of the population to **25 percent** or more.

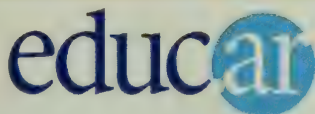
The Ministry will use the site to connect Argentina's teachers and students and provide class listings, online registration, homework assignments, course materials, and readings. Every student in Argentina will receive an e-mail address and server space to create his or her own Web page.



PABLO VILLARRE/EDUC.AR

than 10 million potential users and bring in substantial amounts of private capital, the company plans to sell shares through an initial public offering. The funds raised will be used to provide access to students and schools throughout the country. The goal is to have all Argentine students online within four years.

The initiative is expected to increase the number of Argentines with Internet access from about three percent of the population to 25 percent or more. This huge jump in connectivity among young people is expected



Both students and teachers will have access to the broader Internet through the portal; they will be able to link to thousands of Web sites, but firewalls will prevent access to undesirable content.

The Ministry's partner in the portal is a newly-formed private company, **educ.ar S.A.** The company will manage day-to-day operations of the portal and will have exclusive rights to the portal's advertising and e-commerce potential. The income from banner ads on the Web site, for example, will help to pay for operation of the portal. To tap the commercial value of a portal with more

to give a big boost to e-commerce in Argentina. By ensuring that students graduate well-trained in Internet skills, the initiative will help create the talent pool necessary to enable growth of the e-economy in that country. In long run, Varsavsky hopes, widespread skills and rapid creation of new jobs will lead to more equitable income distribution in Argentina and elsewhere. A number of other countries are already studying the portal to see whether they, like Argentina, can turn their connectivity gap into an opportunity. Equipment suppliers and e-commerce marketers take note.

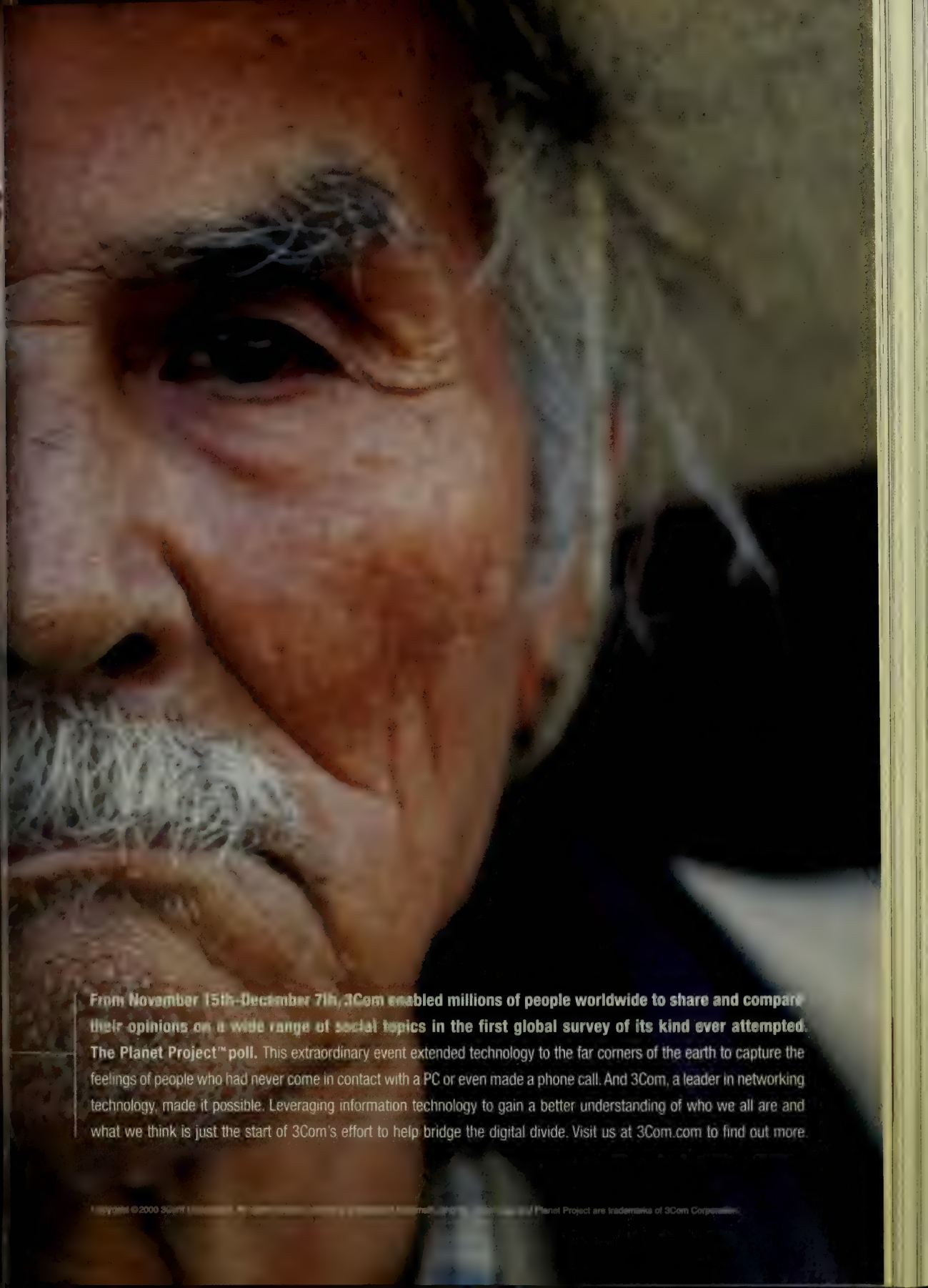
He just shared his
innermost feelings with
the rest of the world.



3Com

Simple sets you free.





From November 15th-December 7th, 3Com enabled millions of people worldwide to share and compare their opinions on a wide range of social topics in the first global survey of its kind ever attempted. The Planet Project™ poll. This extraordinary event extended technology to the far corners of the earth to capture the feelings of people who had never come in contact with a PC or even made a phone call. And 3Com, a leader in networking technology, made it possible. Leveraging information technology to gain a better understanding of who we all are and what we think is just the start of 3Com's effort to help bridge the digital divide. Visit us at 3Com.com to find out more.

from geography to humanities to mathematics. The WorldCom Foundation also assists in teacher training in all U.S. school districts.

One of the more remarkable efforts to close the digital divide through education started in a Rio de Janeiro slum. **Rodrigo Baggio** was a middle class schoolteacher when he decided to start a school for poor kids to teach them both computer skills and citizenship skills. He got corporations to donate old computers, and trained his best pupils to become teachers themselves. The result is the **Committee for the Democratization of Information Technology (CDI)**, which has grown into a network of self-supporting schools in slums and disadvantaged communities across

Brazil. Providing equipment for these schools are major digital companies including **IBM**. CDI has attracted interest and imitation in a number of other countries.

One novel computer-equipped classroom is located at Myeka High School in rural South Africa. Solar panels power the computers, a television, and a satellite-linked connection to the Internet. According to its principal, the new equipment has transformed the school, which previously had no electricity, few books, and fading morale; now enrollments have risen, new educational materials can be downloaded, and neighboring communities are clamoring for access. The school is a project of the U.S.-based **Solar**

Electric Light Fund, which plans to work with companies and foundations to create similar schools in other rural areas.

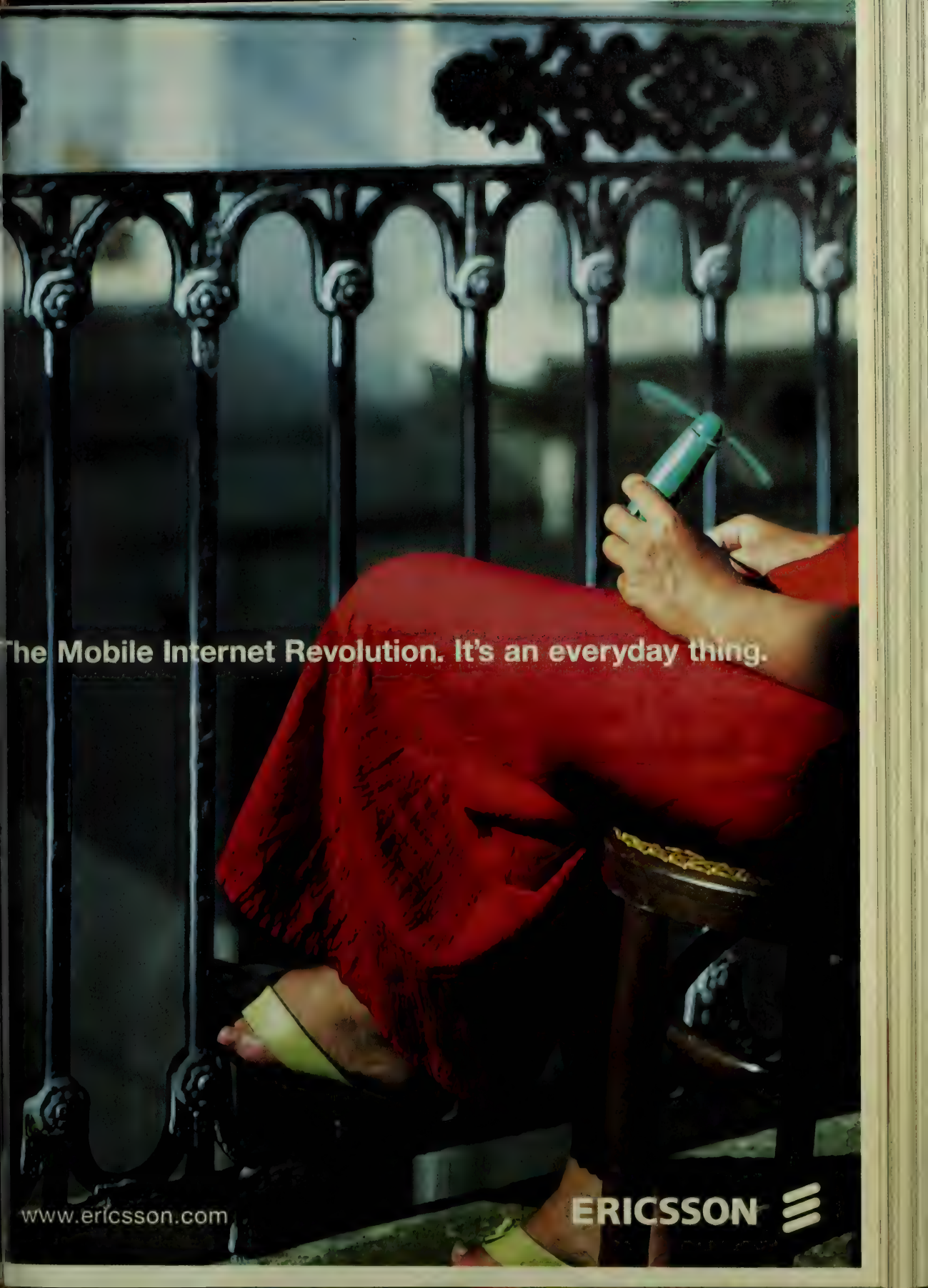
Instead of assisting schools, some companies start their own. **Cisco Systems** now has Network Academies in 83 countries around the world. The program is aimed at creating talent pool and helping to solve the skills shortage that plagues the industry. The academies offer a four-semester course that trains students in design, build, and maintain networks through both formal instruction and hands-on, practical training. Students learn skills needed to qualify as Cisco Certified Network Associates, positioning themselves for jobs or engineering studies at a college level.

CDI



Started by Rodrigo Baggio in a Rio de Janeiro slum, CDI now runs more than 160 schools in Brazil and neighboring countries to teach computer skills to disadvantaged children.

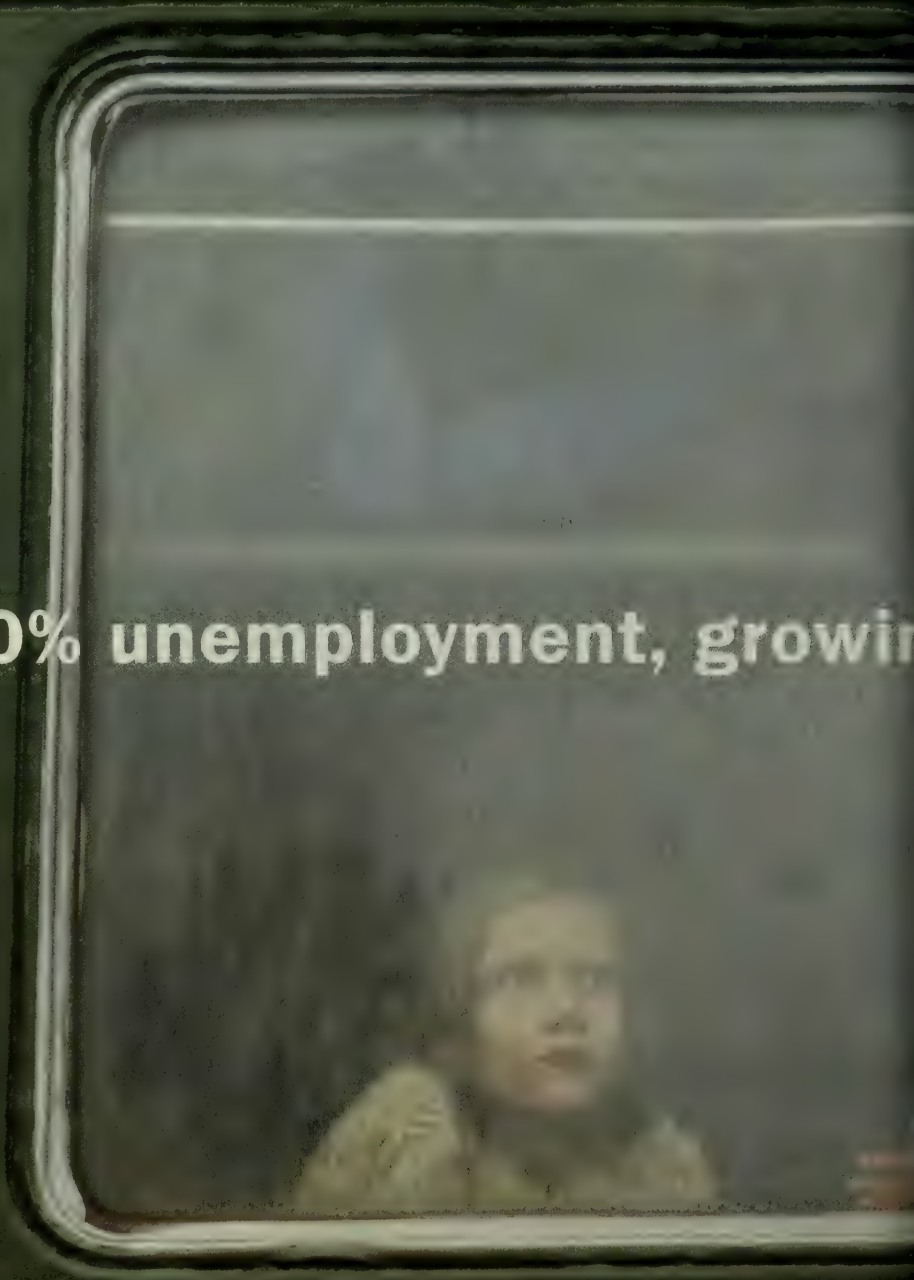
www.digitaldividend.org

A woman wearing a vibrant red dress is seated on a balcony. She is holding a green mobile phone in her hands. The balcony features an ornate black wrought-iron railing. The background is slightly blurred, showing a glimpse of the outdoors.

The Mobile Internet Revolution. It's an everyday thing.

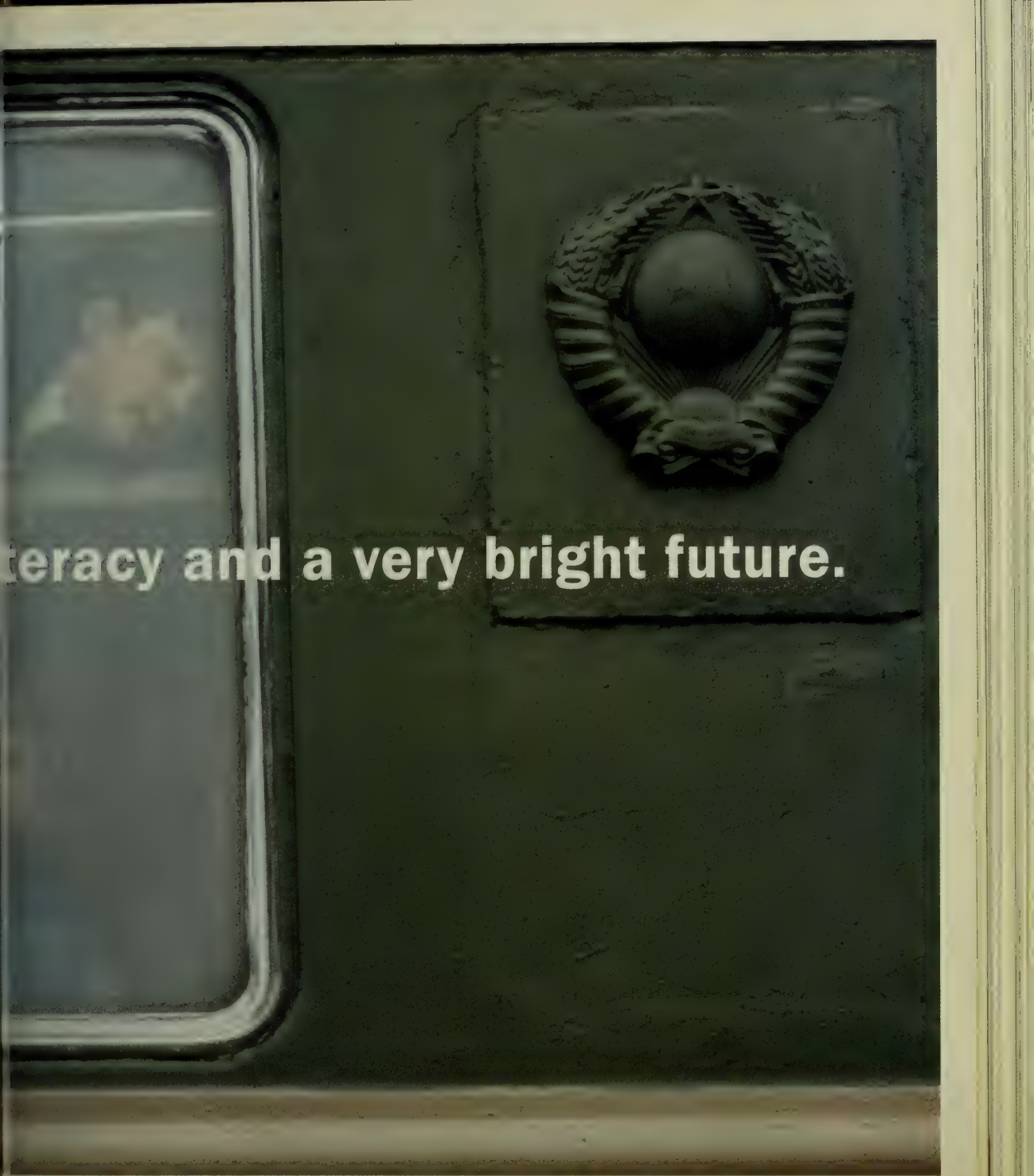
www.ericsson.com

ERICSSON 

A young girl with light-colored hair is looking out of a window. The window frame is dark and has rounded corners. The background outside the window is blurry and indistinct. The text "70% unemployment, growing" is overlaid on the image in a white, sans-serif font.

70% unemployment, growing

MICROSOFT® BELIEVES IF YOU PROVIDE PEOPLE WITH THE RESOURCES THEY NEED, THEY CAN ACCOMPLISH GREAT THINGS. In a small rural school anywhere in the world, a little girl looks forward to computer class. She gets to write and draw and read and experience things she's never even dreamed of before. And on the way, she learns. She learns to like school. She learns basic skills that may open her eyes to a world of possibilities. And that's an option Microsoft



eracy and a very bright future.

es she should have. Through partnerships with New Perspectives
ation and other local nonprofit organizations, grants of money, software,
technical expertise are helping bring new opportunities to people in 67
ries who may have never otherwise been given the chance. If you'd like
rn more about these programs, visit www.microsoft.com/giving

Microsoft

Communities and Civil Society

In the economically depressed town of East Palo Alto, **Hewlett-Packard** is piloting its **Digital Village Program**, aimed at making information and skills broadly accessible in under-served communities. The company will develop programs for K-12 education, help adults and kids in after school settings learn how to explore and communicate via the Net, and help families with home-based Internet tools and information. These components – HP@School, HP@Neighborhood, and HP@Home – will be developed in a three-year partnership with East Palo Alto and other communities so that they serve the community's real needs.

The company will contribute up to \$15 million in cash and equipment to three pilot communities.

A different but similarly-named **Digital Villages** project takes place in South Africa. Managed by **Africare** with support and technical help from **Eastman Kodak**, **Microsoft**, **Intel** and other companies, it creates computer education and resource centers that provide training and access to information technology for children in disadvantaged communities throughout the country. Volunteers from **Lucent Technologies** and **eBay** are providing computers and Internet access for a school and an entire community in rural Guatemala.

To build ties between non-governmental organizations

and business and foster innovative uses of technology within civil society, **Ericsson's Internet Community Awards (ERICA) Program** runs a worldwide competition to select the best ideas for Web sites designed to serve social purposes. Winners each receive \$100,000 in Web development services. The ERICA 2000 winners were announced at the Creating Digital Dividends conference in Seattle and included the **Fiji School of Medicine**, which will build a Web-based telehealth network; an Atlanta-based group, **Pathways Community Network**, that assists the homeless and will equip its

ROBERT FREILING/SOLAR ELECTRIC LIGHT FUND



In rural South Africa, the Solar Electric Light Fund has provided Myeka High School with solar panels that power not only a computer classroom, but also satellite-based Internet links.

Making Farming More Productive

Record harvests in the United States are lowering the prices farmers get for their crops. At the same time, farmers are under pressure to lessen their environmental impact, because agriculture is a major source of U.S. water pollution. A way to cope with both these problems is to reduce the use of expensive fertilizers and pesticides by using computers, digital controllers on tractors and harvesters, and satellite links that enable a new level of precision for farming. These technologies, collectively known as precision agriculture, automatically match inputs to variable conditions within a field. The benefits include higher yields, cost savings, higher quality produce, and less off-farm pollution. Most of these benefits still lie ahead,

because less than four percent of U.S. farms now use these new techniques. According to **Francis Pierce**, Director of **Washington State University's Center for Precision Agriculture**, the technology itself also needs improvement. Today's commercial agriculture depends on close integration among farmers, suppliers, and food companies and needs an Internet-based technology that can accommodate far more data than the stand-alone PC-based tools available now.

The potential market for precision agriculture tools is growing rapidly. In the next few years an estimated 80,000 commercial farms in the United States and another 60,000 elsewhere could adopt advanced digital tools and services.

Precision agriculture's
benefits include higher
yields and less off-farm
pollution.

Each team with mobile access to shelter information; and the **Wild League**, an Australian conservation group that plans an online learning simulation to promote citizen education. Additional users were a project to link up to help math teachers in rural South Africa, and the **U.S. National Autism Syndrome Society**. An additional prize, chosen by the public through online voting, was awarded to **Alley Cat Allies**, which aims to reduce the estimated 60 million stray and wild cat population through sterilization programs. To help minorities and low income families gain access to the Internet, **AT&T's Urban Challenge Program** provides networking equipment and consulting services to 10 U.S. cities, including Baltimore, Maryland, and

Glasgow, Kentucky. Grants to 10 additional cities will be announced in January 2001. Glasgow, for example, is building a citywide network to link all residents to public schools and city services. In New Orleans, 3Com is helping install computer kiosks throughout the city that will link students who have

dropped out of school to training and employment opportunities. The Urban Challenge program builds on successful earlier efforts in Boston and San Jose.

Helping minority groups to build Internet-based "tech centers" in cities is the goal of an **AT&T** effort. Working with the National



"We need to find a way so that the next wave of successful venture investment outside the United States leads to creation of new markets in the developing countries themselves."

Dan Rosen
Managing Partner
Frazier Technology Ventures

It took him
five years to build
a local business.
He's taking it global
at light-speed.



With the **Optical Internet** Lucent is creating, a business knows no boundaries. We're building all-optical networks that are four times faster than today's—with the speed and capacity to connect local markets to global markets. So businesses large and small can serve new customers anywhere in the world. Change the way people communicate, and you change the way they do business. Lucent Technologies. We make the Internet move at light-speed.

Lucent Technologies
Bell Labs Innovations

www.lucent.com
1-888-4-LUCENT

Expect great things.SM

Urban League and the NAACP, the company is supporting neighborhood centers in seven cities with high minority populations. The centers provide online training for children, parents, and guardians as well as a place for children to go after school.

A similar effort by **SBC Communications** will help the NAACP upgrade its own national information network that links its headquarters and seven regional offices. The organization hopes to offer online services to its more than half-million members, helping to close the gap in the availability of such services to minorities.

A Global Reach

Could the Internet someday link all of humanity into a global family? Something like that vision underlies the **Planet Project**, an Internet-based poll of millions of people from all over the world. Launched by **3Com** in November 2000, with the help of many other companies, the project combined technologies in novel ways to capture a portrait of the human condition across geographic and cultural differences. The project

FRANCISCO VAZQUEZ



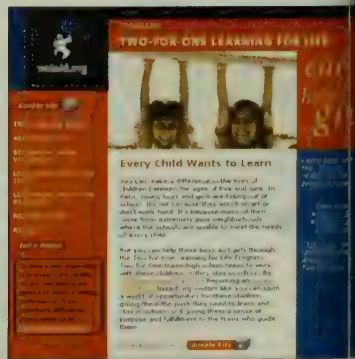
Chiapas Media Project camera workshop in the region of Altamirano, Chiapas. Women who attended this workshop spoke very little Spanish; their native dialect are Tzeltal and Tojolabal. A couple of months later, two of the attendees helped shoot a video, *Women United*, about women's collective work in this region.

also sent thousands of volunteers to remote locations to include people who are not yet linked to the Internet. The results of the poll are available in eight languages at **www.planetproject.com**.

The **Netaid** project takes a similar global stance, using the power of the Internet to tackle global poverty. Based on an unprecedented partnership between the **United Nations** and **Cisco Systems**, it

enables Internet users to become directly involved in causes they care about, track donations to specific projects, and see the difference they make. The project guarantees that every dollar donated reaches the intended recipients. Visitors to **www.Netaid.org** can give money, volunteer a few hours of their time, or help enlist others.

Launched with rock concerts broadcast over the Net, Netaid now



Netaid seeks to use the power of the Internet to combat poverty, by linking individual donors to specific projects through **www.Netaid.org**.

Closing the Internet Skills Gap

There simply aren't enough Web site designers and programmers to power the new economy. As many 100,000 such U.S. jobs remain unfilled. At the same time, social concern is rising over many young people, often from minority groups, who lack access to computers and the skills to use them.

To start-up, **iGeneration**, proposes a way to solve both problems at the same time – a Web design training program. The company has developed a program to assess skills, provide a personalized training course that teaches the skills needed to succeed in the current job market, and certify the competence of its trainees to potential employers. iGeneration says it can train a motivated young person with virtually no computer background to be a Web designer in as little as six months. Moreover,

the company will loan trainees the money to pay for the training, guarantee placement in a job for those who successfully complete the program, and even forgive the loan for those who stay in that job at least a year. The company expects to make money by charging the employers who hire its graduates about \$67,000 per trainee, well below typical hiring costs for Internet talent today.

iGeneration CEO **Toby Corey** points out that an estimated 10 million young people in the United States are interested in an Internet career, but many of them don't know where to begin. He believes his new company can give them a hand up, while also helping to relieve the industry's critical labor shortages.

iGeneration says it can train a motivated young person with virtually no computer background to be a Web designer in as little as six months.

supports youth projects, provides materials needed for children to develop basic learning skills, and helps expectant mothers safer birthing. In Peru, for example, where nearly one in four children enters school before the fifth grade, the project is channeling support to reduce the dropout rate. The **Two for One** project is coordinated through the Peruvian Ministry of Education and UNICEF. The project selects children at the bottom of their class, typically from families in poor communities that have little or no education. These children have no exposure to reading materials, so the project helps these first and second graders develop the skills needed to read and write

"In China, the Internet is not an option. It is the place where people will get their news, their education, everything. For 1.2 billion people, it's going to be their primary means for accessing the world, [so] it's important that it happen quickly."

Micah Truman
Co-Founder and CEO
madeforchina.com



by teaming at-risk children with high school teens who give them individualized attention and encouragement. The children gain skills and self-confidence, while the teenage mentors develop leadership skills – hence the "Two for One" name. Groups of eight children and

three teen mentors meet weekly for two months to play educational games and research topics of common interest. The results include higher scores in standardized tests and lower dropout rates. Netaid support, provided by thousands of individual donors, gives critically



Life has pressures. We offer some relief.

1. *One-touch message retrieval*
2. *Easy-to-read graphics, built-in user's guide*
3. *Caller ID*
4. *Four entertaining games*
5. *35 distinctive ringing tones*
6. *Alphanumeric and numeric paging*
7. *Permanent signal and battery strength indicators*
8. *Versatile range of Nokia Original
Accessories for home, office and auto*
9. *Weighs under six ounces with standard battery*
10. *Up to 199-name phone directory*
11. *Remembers last 10 numbers dialed*
12. *Calculator with currency converter*
13. *Clock and appointment calendar*
14. *Up to eight hours of talk time*
15. *Up to 14 days of standby time*
16. *Profile settings that control how you receive
calls in meetings, outdoors, etc.*

NOKIA

CONNECTING PEOPLE

www.NokiaUSA.com

Can Digital Tools Help Manage the World's Watersheds?

Watershed management is a political hot potato virtually everywhere. The Pacific Northwest, for example, is under court-ordered mandate to protect and re-introduce salmon into watersheds stressed by sprawling subdivisions, logging, and dams.

New software tools being developed by the **University of Washington** and **Battelle Pacific NW National Laboratories** can let community and tribal leaders as well as policy-makers "see" the whole Puget Sound watershed, analyze human impacts, and explore alternatives. The software simplifies results from sophisticated models of rainfall, water runoff, and estuarine conditions and displays these virtual watersheds over the Internet.



Faced with the complexity of an entire watershed, the normal human response is political paralysis, so there seems little question that better tools are needed.

If commercial versions of today's limited prototype types became available, their providers might find a ready market for the software as well as for the e-services to deploy and support such tools. More than 1,000 major watersheds throughout the world face challenges similar to Puget Sound. So if Seattle's software mavens are again to dine on Duwamish River salmon, their professional talents may be needed both in their own backyards and around the globe.

The Pacific Northwest is under court-ordered mandate to protect and re-introduce salmon into watersheds stressed by sprawling subdivisions, logging, and dams.

needed supplies and training for the project, which hopes to reach 16,000 children by the end of December 2000.

Microsoft's International Community Affairs Program also has a global reach, providing \$21 million in support in 67 countries over the past year. To support learning through technology, the company has opened 500 new computer centers over the past year in schools, orphanages, community centers and libraries, in partnership with local organizations in dozens of countries from Malaysia to Ecuador. Additionally, the company helps train laid-off workers in China, inmates of juvenile reformatories in South Korea, and disabled people in

the Czech Republic in IT skills that can create employment opportunities. Microsoft also supports disaster relief efforts through refugee registration kits and databases to help reunite families.

To help field test new IT-based development ideas, the **World Bank's Information for Development Program** manages a global effort to pool public and private sector resources in support of innovative projects. Working with **Motorola** and other companies, the program has provided grants to more than 90 projects in all regions of the world. Projects have ranged from a computerized mobile bank in Ghana to computer training for poor women in India to creating

an information network linking women's groups across Africa. **Motorola** also fosters digital entrepreneurship among Latin American business students in partnership with over 60 universities, through its **Mission XXI** program.

Empowering Employees

Some of Corporate America's most imaginative efforts to bridge the digital divide have come from main-line manufacturing or transportation companies. **Ford** and **Delta Air Lines** generated headlines and delighted their employees when they announced commitments to provide their workers with personal computers and low-cost access to the Internet. Ford, for example,

give every one of its 350,000 employees worldwide a home computer, color printer, and unlimited Internet access for \$5 per month. The monthly fee will be lower in developing parts of the world. Ford hopes to boost the productivity of its workforce, help workers become savvier about the needs of their customers, and accelerate the company's push to use e-commerce in every aspect of its business. It also expects to improve the company's ability to communicate with its workers and save money in the process; an e-mail link to the company's Web site is cheaper than mailing a bulky package of documents. Ford O Jacques Nasser already sends a weekly e-mail to many of the company's workers.

"Now for the first time we may have tools that could empower people – tools that could raise productivity, incomes, and human welfare, and reinforce a trend toward more transparent and democratic governments."

William D. Ruckelshaus
Chairman, World Resources Institute



Delta's **Wired Workforce Program** will do much the same for its 72,000 employees, offering unlimited Internet access costing \$12 per month. Besides home computers, the company will offer laptops to employees who travel, so they can log on from Rome, Rio de Janeiro, or almost anywhere to schedule flights, check benefits, and communicate with their families. As Delta

points out, even its baggage handlers now use digital tools, so the company expects to gain from the increased computer skills of its workers.

Enron, Avon, American Airlines, and *The New York Times* have begun similar programs. ■

ADVERTISER/CONFERENCE SPONSOR WEB ADDRESSES

3Com
www.3com.com

Compaq
www.compaq.com

Ericsson
www.ericsson.com

Hewlett-Packard
www.hp.com

iGeneration
www.igeneration.com

Intel
www.intel.com

Lucent Technologies
www.lucent.com

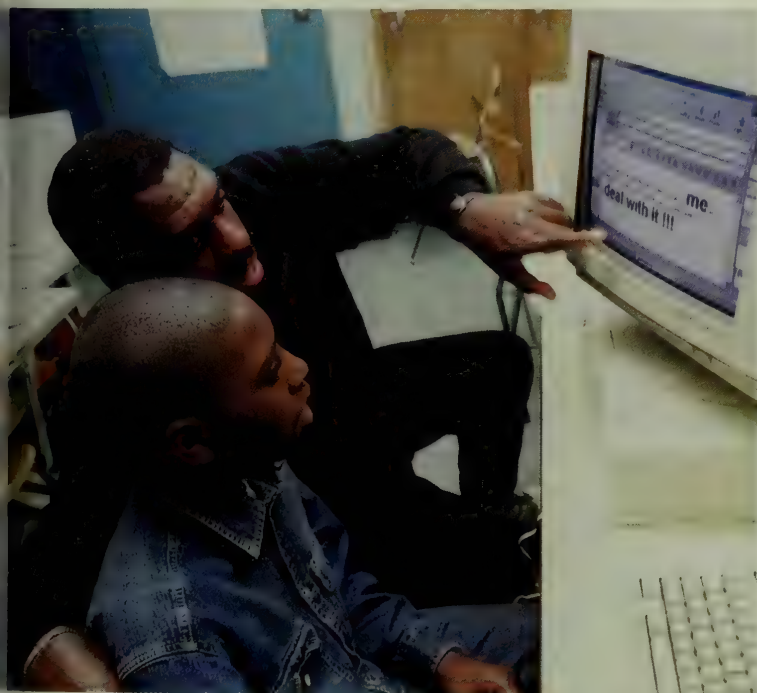
Microsoft
www.microsoft.com

Motorola
www.motorola.com

Nokia
www.nokia.com

Weyerhaeuser
www.weyerhaeuser.com

WorldCom
www.worldcom.com



Kir Mack, a seventh grader from the South Bronx, and his father, Eddie Mack, learn word processing together at a Computers for Youth (www.cfy.org) Saturday learning session. At its completion, the Macks are free to take the computer home.

M. SCHMELING/COMPUTERS FOR YOUTH

For more information about the conference or follow-up activities, log on to www.digitaldividend.org

Linking Village Artisans to Global Markets

VIATRU



Some of the most talented artisans in the world come from developing communities where unique skills in making tapestries, pottery, jewelry, rugs and many other traditional crafts have been passed down for generations. But many such artisans lack access to markets; buyers for major retailers don't visit Tansen, Nepal or Cochaquinray, Peru. For all too many artisans, making an adequate income means forsaking their

The result is unique, hand-crafted products produced in a sustainable, socially responsible manner, as well as access to remote markets and more reliable incomes for artisans.

craft and moving to an already congested city.

Can Internet commerce help preserve the artisan tradition and the culture it embodies? A start-up called **Viatru** thinks it has a workable business model to do just that. It is building an unusual infrastructure to link artisans with major retailers over the Internet.

Large mainstream retailers

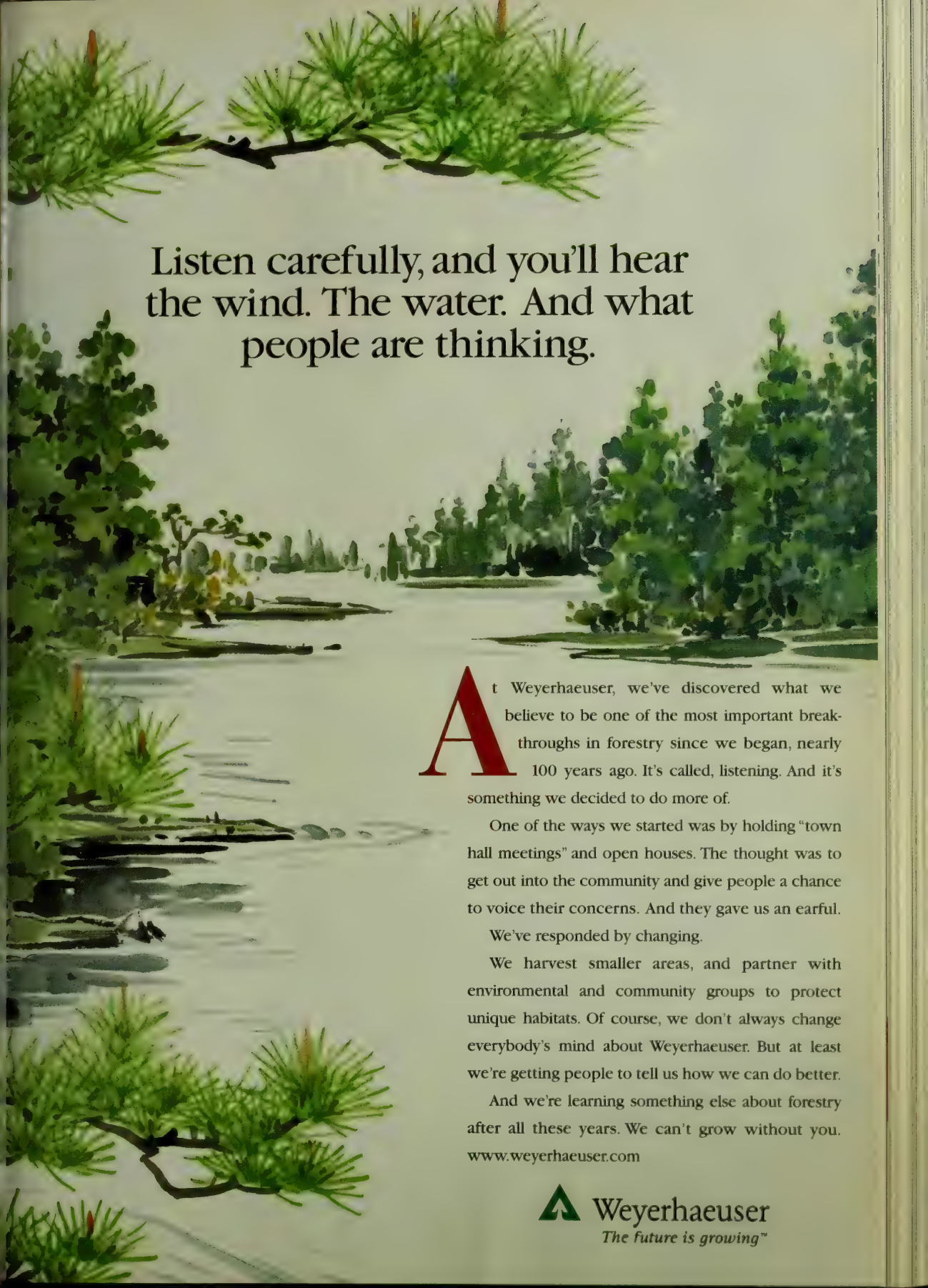
interested in the traditional metal-working skills found in Tansen, Nepal or regions of Chile, can work with the artisans over the Net to create a design for a vase or bowl that would sell well in their stores. A buyer interested in hand-painted ceramics from Peru,

but only if they were precisely this season's colors, can use new technologies for color matching that ensure the artisan can deliver just what is needed. Design, ordering, and purchasing can happen in real time, with Viatru ensuring on-time delivery of the products, and a transparent window into the source.

The result? The retailer can offer their customers unique high quality products produced in a sustainable, socially responsible manner, and a connection to the creator.

Artisans get access to remote markets, reliable incomes, and a way to differentiate the special nature of their work. Viatru Founder **Michelle Long** points out that as information technologies shrink the distances between rural villages and developed cities, they are opening communication links with nearly three billion people living in previously isolated communities – a huge potential human resource. She believes that consumers increasingly want information about the impact their purchases have on people and planet and will welcome a meaningful connection to other cultures. The company hopes not just to profitably link large retailers and small artisan businesses, but also to help sustain rural communities and the traditional skills that are part of their – and now the world's – culture.





Listen carefully, and you'll hear
the wind. The water. And what
people are thinking.

At Weyerhaeuser, we've discovered what we believe to be one of the most important breakthroughs in forestry since we began, nearly 100 years ago. It's called, listening. And it's something we decided to do more of.

One of the ways we started was by holding "town hall meetings" and open houses. The thought was to get out into the community and give people a chance to voice their concerns. And they gave us an earful.

We've responded by changing.

We harvest smaller areas, and partner with environmental and community groups to protect unique habitats. Of course, we don't always change everybody's mind about Weyerhaeuser. But at least we're getting people to tell us how we can do better.

And we're learning something else about forestry after all these years. We can't grow without you.
www.weyerhaeuser.com



Weyerhaeuser
The future is growing™



Fabric merchants in Sa'dan Village, Sulawesi, Indonesia

Digital technologies can increase productivity even in poor communities. More productivity brings higher incomes and a greater ability for people to meet their basic needs. Herein lies a wonderful opportunity for business to link the creation of new digital markets to the advancement of humankind and to help people everywhere participate in the social and economic possibilities of the digital age. These are lofty goals. But the challenge, as Professor C.K. Prahalad of the University of Michigan reminds us, "is not about lack of opportunity; it is about lack of imagination."

Clearly, corporations must lead the way in creating digital dividends for all humanity. We thank the distinguished companies who sponsored the Creating Digital Dividends Conference and participated in this special section for their imagination and leadership in supporting this important initiative.

GETTING TANGLED IN HEALTH CARE'S WEB

Hospitals say new laws to simplify electronic health transactions are a nightmare

Robert Frieden, chief information officer at Michael Reese Hospital in Chicago, looks around the Administrative Service Center and sees his head. The hospital's database system is a ticking time bomb. One strolling past the center might take a look at the scads of paper folders containing patient records or peruse sensitive medical data on a dozen different computer monitors. That's particularly troubling because within just two years, Frieden will have to ensure that his organization meets tough regulations passed by the Health Insurance Portability & Accountability Act of 1996 (HIPAA).

Frieden is not alone. Over the next several years, every health-care organization in the country that uses computers will have to comply with these rules. They were drawn up by the Health & Human Services Dept. (HHS) to help medical institutions adopt new technology while protecting patients from possible abuses. But right from the start, HIPAA has been mired in controversy, reeling from heavy technology spending to ward off a Y2K bug, hospitals' unease at the thought of fresh tech-related lawsuits. Health-care companies also worry they will be threatened by the new rules, which dictate how digital patient records are to

be standardized and kept secure from prying eyes. Consumer groups, at the opposite extreme, say the rules don't go far enough to protect patient privacy. HIPAA was born out of a political movement to reform health insurance in the mid-1990s. It began as a small piece of legislation designed to make it easier for Americans to maintain their health insurance when they switch jobs. The aim was to restrict insurers' ability to reject job-hoppers based on preexisting conditions such as cancer or heart

IN HIS LAP
Hospital CIOs such as Frieden have only two years to meet the new standards



disease. The issue of insurance portability "was really heating up with the emergence of the New Economy," says M. Peter Adler, national HIPAA team leader for law firm Foley & Lardner.

But riding along with the new insurance-reform rules was a set of provisions cryptically labeled "administrative simplifications." At the time, hospitals and insurers used more than 400 different software formats to transmit health-care data back and forth. These covered everything from the headers

on insurance forms to the codes describing diseases and medications. The government hoped to standardize and simplify electronic claims and thus speed up the entire claims-and-payment-processing system for the health-care industry. In addition, the new standards spelled out procedures to protect health information that is digitally transmitted and stored.

But HIPAA rules quickly mushroomed into an unruly garden of laws that nearly everyone finds disturbing. Doctors

and hospital administrators complain that the laws are too vague and could limit the care they're able to provide to their patients. They also worry that the two-year deadline is too tight and that the penalties—including possible jail sentences for noncompliance—are too severe.

Consider, for example, the proposed standards for electronic transactions. Many common medical and administrative procedures, such as billing for a routine doctor's checkup, are adequately spelled out. But there are glaring exceptions. Because psychologists haven't been very active in the HIPAA process, for instance, codes for treating some aspects of mental health still haven't been hammered out. What's more, for HIPAA to work as planned, every hospital, pharmacy, insurance company, and health-information clearinghouse that routinely sends information to other health-care organizations must switch over to the new formats at the same time. Today, such cooperation is the exception, not the rule, says Shannah R. Koss, the top HIPAA expert at IBM.

Some of the deepest disagreements over HIPAA concern costs. The HHS claims that the health-care industry should be able to comply with the new laws at a modest cost of about \$3.8 billion over the next five years. Health-care players are more pessimistic. Blue Cross & Blue Shield Assn. says the industry may have to spend \$40 billion just to put privacy standards in place. Meanwhile, Medicare reimbursement laws are squeezing dollars from many health providers' coffers. "These regulations come at a tough time," says Elliot M. Stone, CEO of Massachusetts Health Data Consortium, a nonprofit that tracks health-care trends in New England.

Easily the most contentious of the HIPAA regulations are the privacy proposals. In theory, these rules will limit third parties from viewing or transmitting anyone else's medical data. The government's stated goal is to help doctors exchange private medical records for the benefit of

The law is on track with its initial goal: Making it easier to change plans and providers

patients and protect those records from other people. Judging from the scores of outraged responses HHS received after releasing their proposed regulations, however, many people believe the government missed on both counts. "Patients want maximum privacy—damn the costs," says William Braithwaite, senior adviser on Health Information Policy for HHS. Organizations, on the other hand, don't want to spend money on costly privacy-related audit trails and other software-based protections. "They say: 'To hell with privacy, we won't spend any money on it,'" he says.

With a few exceptions, HIPAA proposes that access to medical records be restricted. Visibility should be limited to the "minimum necessary" data for

each situation. For example, if a patient is taking the antidepressant Prozac, that fact could be withheld from doctors who are not mental-health specialists, even though the medicine can interact with certain heart and sleeping medications. Such stringent rules have doctors and health-care administrators shaking their heads in consternation. Patient care will suffer, says Alissa Fox, executive director for legislative policy at Blue Cross. "We already know that to get the best health care and avoid errors, we need complete and timely access to information," she says.

LAYERS OF RED TAPE. Another sticking point involves patient authorization of the release of data. One privacy proposal would require patients to sign off on the release of medical records for purposes other than treatment and payment. But that could add layers of red tape to research efforts and other legitimate causes that rely on patient data.

The proposed security rules will also cause nightmares. In addition to physically securing computers and printers, organizations will have to safeguard confidentiality and integrity of digital medical records through the use of password-protected software, electronic audit trails to track who has accessed data, and encryption for the transfer of files. That may sound daunting to patients. But it creates major administrative hassles for doctors.

HHS downplays the burden the rules will place on health-care companies, claiming that the best-run medical facilities already have a lot of these measures in place. And despite the challenges, HIPAA is on track with its initial goal: making it easier for consumers to change health care providers and health plans. But as regulators begin to enforce the new regulations, they have to be careful in managing the fresh burdens that will be placed on an already strained health-care system.

By Darnell Little in Chicago



PILEUP:

For the law to work, all players must switch in tandem

IS HIPAA'S CURE WORSE THAN THE DISEASE?

The Health Information Portability & Accountability Act (HIPAA) is a law designed to bring health care into the Internet era. But doctors and hospitals worry that the expensive new guidelines may impede delivery of care. Here are some of their concerns:

ELECTRONIC TRANSACTIONS

New standards that outline how medical information is to be transmitted electronically don't yet describe how to deal with some sensitive health information, including mental-health claims.

PRIVACY

To reduce risk of patient data falling into the wrong hands, HIPAA requires that physicians and insurers transmit only minimal amounts of medically relevant data. But doctors fear that such things as possible drug interactions will be missed if restraints are too severe.

SECURITY

The new proposals mandate individual passwords, audit trails, and secure workstations. Those are key security measures, but they may not be practical in a doctor's office, where physicians rely on nurses to pull up information for them. Dealing with e-mail is another issue that troubles doctors.

COST

HIPAA is expected to cost at least \$3.8 billion over the next five years—and it could be 10 times that. The money will come out of hospital revenues and physician incomes. That's a huge outlay for cash-strapped hospitals at a time when Medicare reimbursements are declining.

Digex and Spalding

**We manage Web servers,
They manage to improve your game.**

Together, we do e-Business.

Spalding has been a leader in golf ball manufacturing for over 100 years – that's their business. Through Spalding.com, they offer only the BEST products – Ben Hogan, Etonic, Strata and Top-Flite. At Digex, we may not know much about sporting goods but we do know what it takes to run a successful e-Business.

We supply the hardware, software and pre-engineered platforms that include best-of-breed technology to get your site up and running – fast and reliably. Our world-class data centers and networks are optimized for performance and availability, so your site is online 24x7x365. We provide the administration, monitoring and security services necessary to make sure your site remains secure.

Spalding is a hit for its online customers.

Digex is a hit for Spalding.

digexSM

Digex keeps e-business in businessSM

www.digex.com/spalding 1-800-455-2968 Ext. 501

Where managed hosting began.
Where managed hosting is going.



SOMETIMES THE **WISE** CHOICE ISN'T ALWAYS THIS OBVIOUS.



© 2000 Sageo LLC

Take health care, for example. Say you're looking for a way to offer employees and retirees quality health care at an affordable price. One person cares about cost—another, quality. And for someone else, it could be a preferred doctor. Enter Sageo,TM a new alternative that can take on your administrative burden and provide your employees and retirees access to a broad array of health plans, guidance on how to use their health benefits, and a library of interactive health and medical educational resources from Mayo Clinic. If your company is looking for a cost-effective way to deliver health care to employees and retirees, isn't it obvious what to do? Contact us at 1-877-465-7000 or visit www.sageo.com.

s a g e o

a H

EDITED BY OTIS PORT

THE BETTER I HEAR YOU WITH, MY DEAR

HEARING AIDS AND acoustic sensors modeled after biological ears—complete with artificial ear drums, or stereocilia—may be within reach. Thanks to nanotechnology, manmade devices could soon match—then surpass—the sensitivity of Nature's keenest ears. On Dec. 5, at the annual meeting of the Acoustical Society of America in Newport Beach, Calif., an international team led by researchers at NASA's Jet Propulsion Laboratory (JPL) was scheduled to report that carbon nanotubes could be the key to revolutionary advances in acoustic technology. Nanotubes are hair-shaped bundles of carbon atoms only a few millionths of a meter in diameter—even smaller than the tiny hairs in human ears. Smallness is critical to sensitivity, notes JPL researcher Flavio Noca. "The gentle sound waves say, rustling leaves," he says. "The ear's stereocilia sway back and forth less than a nanometer. Large rods can't mimic such subtle movements. But with nanotubes, the ear envisions a device that can catch sounds of a forest—and more. They describe a super-sensitive "nanostethoscope" that could pick up the metabolic sounds of individual cells—perhaps linking healthy cells from cancerous ones. And future robots sent by NASA to explore distant planets would listen for signs of life, no matter how tiny. □

BOOSTING THE CASE FOR BETA-BLOCKERS

HEART DRUGS CALLED BETA-blockers could be a more important first line of defense in treating high blood pressure and chest pain. Their effectiveness has been known for years, but recent studies indicate they are prescribed to as few as 40% of eligible patients. A report in the Dec. 6 *Journal of the American Medical Assn.* suggests that doctors who avoid these drugs put patients at risk—and may exacerbate health-care costs.

Scientists at the University of California in San Francisco employed a sophisticated computer program to analyze the health and economic effects of beta-blocker use. Team leader Kathryn A.

Phillips says the computer model has predicted real-world outcomes within just two percentage points. This time, it suggests that beta-blockers would help 92% of heart attack survivors, or 400,000 people annually in the U.S. And if beta-blockers were taken by every heart attack survivor over the next 20 years, there would be 72,000 fewer deaths.

These heart drugs would save money as well. Phillips' analysis predicts the cost of widespread use would run about \$160 million. However, this would be more than offset by lower hospital bills. "This is an example of how a cheap intervention can have a big impact," says Phillips, who warns against dismissing tried-and-true solutions in the quest for high-tech drugs.

Ellen Licking



CRAZY? A blood test may someday tell

A SIMPLER, FASTER WAY TO TEST FOR MAD COW

THE PRION PROTEINS THAT cause mad cow disease and its human variant are present in most cells of the body. In their normal form, they cause no harm. But in prion-linked diseases, the proteins change shape and clump together to form corrosive plaques in the brain.

Until now, the only way to prove infection was to send samples of tissue to a lab.

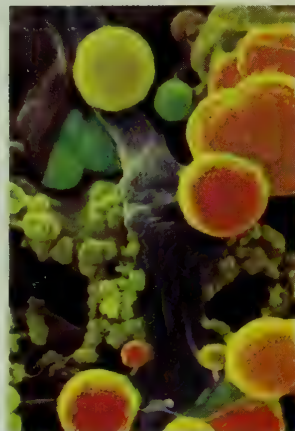
But in the Nov. 23 issue of *Nature*, a team led by Adriano Aguzzi at the University Hospital of Zurich reports that a blood protein called plasminogen binds to prions in their deformed state—but not to normal prions. That could open the door to a fairly simple blood test to identify victims of mad

cow, which is always fatal in humans.

Experts, however, warn that perfecting such tests could take time. "This is a formidable challenge because the two [proteins] differ in shape, but are identical in sequence," explains AIDS pioneer Robert C. Gallo, director of the Institute of Human Virology in Baltimore and head of the scientific advisory board of Prion Developmental Laboratories Inc. in Buffalo Grove, Ill. The company is working on blood screens for prion diseases. Neil Gross

INNOVATIONS

■ Some bacteria thrive on really noxious stuff. In the flooded depths of an old zinc mine, University of Wisconsin researchers found microbes that are converting sulfuric



HELPFUL Microbes

acid, which contaminates many mine sites, into benign zinc sulfide. The discovery of this new aquatic ecosystem is reported in the Dec. 1 issue of *Science*. Meanwhile, researchers at Germany's Technical University Berlin have isolated similar bugs that decompose chlorobenzenes—the solvents in some paints and cleaning fluids—and render the nasty gunk harmless. These bugs are described in the Nov. 30 issue of *Nature*.

■ Scientists at the University of Nebraska are pioneering a relatively simple way to create quantum dots. These dots, which could be the guts of tomorrow's ultrafast computers, are essentially tiny metal boxes that house single-electron switches—transistors far smaller than could ever be etched into silicon. Nebraska's technique uses a combination of electrical currents and chemistry to cause quantum dots to self-assemble and form neat rows of boxes. But the process is too touchy for commercial use. The researchers hope to work out the bugs in five years.

It's a clean job, but somebody's got to do it.



Cars come and go, but they leave behind more than meets the eye. Exhaust emissions, for example. That's why we've developed the Toyota Hybrid System, the power inside our breakthrough gas/electric vehicle, the Prius. It reduces smog-forming exhausts by up to 90%, and is a giant step forward in our quest to eliminate them altogether. When it comes to making cleaner cars, we're not afraid to get our hands dirty. www.toyota.com/ecologic 800-GO-TOYOTA ©2000



DDAY TOMORROW **TOYOTA**



ANTITRUST

IS THE FTC DEFENDING GOLIATH?

It is nixing a merger of Heinz and Beech-Nut, competitors of giant Gerber in the baby-food industry

Gerber Products Co. is the behemoth of baby foods. Enjoying nearly religious brand loyalty, its share of the \$1 billion market for mushy fruits, meats, and vegetables has steadily climbed from 67.1% to 72% over the past five years.

Gerber's two chief competitors, meanwhile, have been getting squashed. Beech-Nut Nutrition Corp., which has had six owners over the past two decades, has watched its share sink by nearly two points, to 13.7%, since 1995. No. 3 player H.J. Heinz Co. isn't faring much better. Despite pouring \$100 million into a new plant, Heinz has seen its portion of the business dropping, too, from 13.8% to 12.3%. Says Heinz Senior Vice-President Laura Stein: "It's an absolutely frozen market."

So perhaps it's not surprising that last February the two also-rans decided

to join forces against Gerber. By buying Beech-Nut and its parent Milnot Holding Corp. for \$185 million, Heinz CEO Bill Johnson said he would be able to slash production and distribution costs by \$10 million annually and would finally have the critical mass to go toe-to-toe with Gerber. The result, he argued, would be more competition, lower prices, and greater choice for consumers.

Those are the types of things trustbusters are supposed to like. But in July, the Federal Trade Commission went to court to block the merger. Rejecting the notion the deal would help consumers, the agency said that on the contrary, the merger would create a dangerous duopoly—and that Heinz and Gerber were more likely to collaborate than compete. Molly Boast, deputy director of the FTC's competition bureau, says Heinz's promises of increased competition are just that: promises. "We're a law-enforcement agency," says Boast. "We're not in the 'trust me' business."

The baby-food deal raises an intriguing question: When should two Davids be allowed to merge in order to better compete against one Goliath? While the

deal hasn't received as much public attention as the proposed America Online-Time Warner merger or British Petroleum's

aisle king
Gerber is well ahead of its rivals, with 72% of the market.

combination with Amoco, it has proved to be more controversial in the antitrust community. Critics say the agency, which became markedly tougher on mergers during the Clinton Administration, has gone overboard. Using dated theories, they say, the FTC reverted to a 1960s-era, "big-is-bad" philosophy that dogmatically rejects any merger that cuts the number of companies in a market from three to two.

DOCTRINAL IMPACT. In October, District Judge James Robertson agreed with those critics and denied the agency's request to block the merger. Now, the FTC has appealed his ruling to the D.C. Circuit Court of Appeals, which has temporarily halted the deal until the trial in February. No matter who the next President is, the case is likely to play a big role in shaping future merger policy. If the government loses, it could create a groundbreaking precedent allowing mergers in highly concentrated industries. If the government wins, the case could end up with a judicial stamp of approval on some of the aggressive deal-killing theories championed by FTC Chairman Robert Pitofsky, which have been embraced by academics, judges, and state attorneys general. Of all the Clinton-era merger cases, "this case could have the biggest doctrinal impact of the whole," says William E. Kovacic, a law professor at the University of Virginia.

americanexpress.com ▼

**OFFER
ZONE** ▼

BARNES & NOBLE .com
www.bn.com

buy.com

FedEx
Express

 **flooz**.com

 **FTD.COM**

OMAHA STEAKS
EST. 1984

priceline.com

red ENVELOPE

THE SHARPER IMAGE

ticketmaster

 **wine.com**
The best of wine™

see more ►

One-stop holiday gift giving for your business. The Offer Zone.SM

gourmet basket for your client. A gift certificate for your employees. Whatever is on your business gift list — get it at the Offer Zone for Small Business. The American Express® Corporate Card for Small Business lets you take advantage of free shipping and handling, savings of up to 35%, and even valuable gifts with purchase. And the Card's **Online Fraud Protection Guarantee** means you're not responsible for any unauthorized charges. So for great holiday gifts, visit the Offer Zone for Small Business at americanexpress.com/sbofferzone.



**Small Business
Services**



NIGHTMARE.

For a kid with asthma,
the joys of childhood quickly
become living nightmares.
A playful kitten,
a cuddly puppy,
a bouquet of flowers.
All are potential triggers
for terrifying attacks.
Don't let asthma
rob another childhood.
Call 1.800.LUNG.USA.

 **AMERICAN LUNG ASSOCIATION®**
www.LUNGUSA.org

Legal Affairs



FOOD FIGHT

Beech-Nut and Heinz want to join forces to take on Gerber, which dominates the baby food market. But the FTC, in a controversial decision, says the deal is anticompetitive.

COMPANIES SAY

FTC SAYS

CONSUMER IMPACT

● By joining together, Beech-Nut and Heinz argue they will be able to offer parents lower prices and a wider range of products.

● Rather than competing forcefully against Gerber, the newly merged company would avoid price wars and eliminate the low level of existing competition in the baby food industry.

ANTITRUST THEORY

● The FTC is using old-fashioned analytic tools to reject the merger and is ignoring powerful evidence that the deal would allow them to better compete against Gerber.

● Whenever a market with three players shrinks to two, consumers almost always lose. Trustbusters say that traditional tools to measure market power are still valid.

DATA: BUSINESS WEEK

at George Washington University.

The key issue in the case is how much weight to give to the potential consumer benefits that can arise when two companies join forces. In the heyday of aggressive antitrust enforcement during the 1960s, trustbusters didn't care about these efficiencies—which might include, say, lower distribution costs or increased research-and-development spending. Instead, government lawyers simply calculated how big a company would be, analyzed the number of competitors, and made a decision.

NEW GUIDELINES. Because this mechanical approach to merger analysis was rejected by the courts in the 1970s, recent antitrust enforcers have paid closer attention to the ways corporate combinations can help consumers. In 1997, Pitofsky and then Justice Dept. antitrust chief Joel I. Klein unveiled a new set of merger guidelines that rejected the assumption that big is always bad. Recognizing that efficiencies of scale can create savings for consumers, the new guidelines said trustbusters should weigh these factors against the loss of competition that can result from the elimination of one rival. At the time, the guidelines were widely applauded for marking a middle path for antitrust between the aggressive enforcement of the 1960s and the permissiveness of the Reagan-era 1980s.

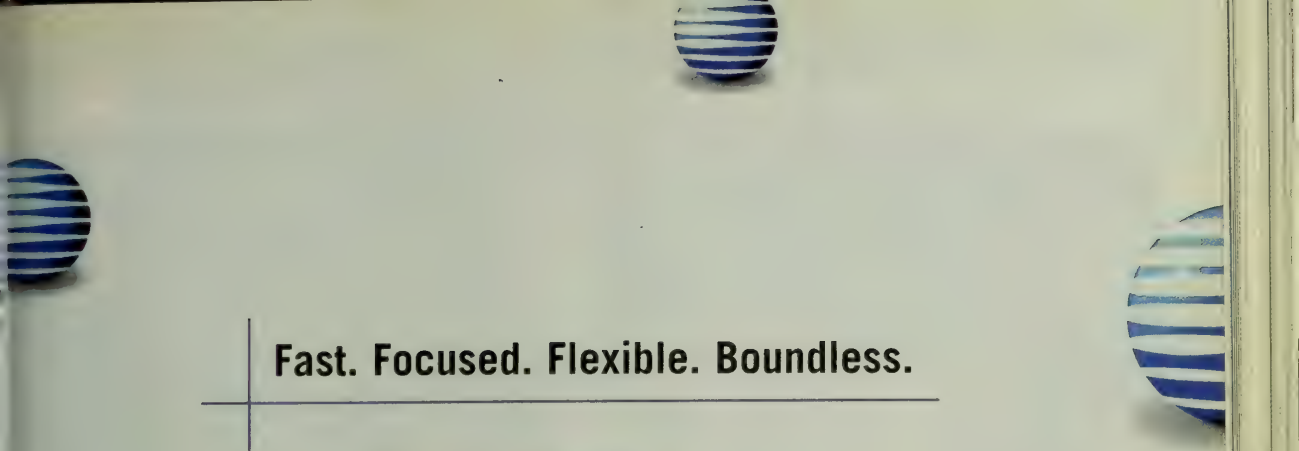
To many observers, the Heinz deal exemplifies the type of efficiencies the Pitofsky-Klein merger guidelines had in

mind. The companies are both large regional brands with complementary strengths. Heinz is more popular in the Midwest and Texas, while Beech-Nut does well on the coasts. Together, they could attain efficiencies of scale to lower prices and launch products. "There is a real chance that this merger could create some serious competition," says Jaine Mehring, a managing partner at Salomon Smith Barney.

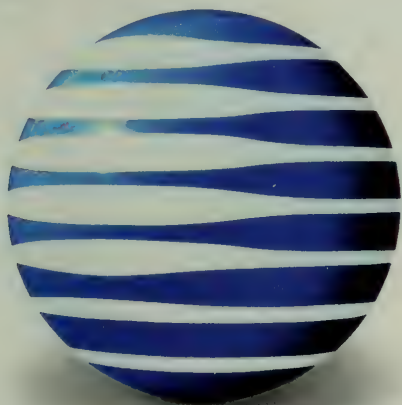
So why isn't the FTC saying yes? Largely because of something called the Hirschman-Hirfindahl index, a mathematical formula designed to tell regulators whether a market is too concentrated. It focuses exclusively on the number of companies in a market and their market shares of every company in that particular industry. By this measure, anything above 1,800 is worrisome. With the merger, the baby-food industry gets a fat 5,285—well over the threshold used to be required to nix a deal.

Heinz argues that the Hirschman-Hirfindahl index simply doesn't apply. Of the 5 points in this case, 4,225 of them come from Gerber's dominant position. To the extent trustbusters use this index, Edward P. Henneberry, the company's chief lawyer, they won't ever approve any merger in a highly consolidated industry. In this case, that would be tantamount to protecting Goliath—a strange position for trustbusters to be in.

By Dan Carney in Washington



Fast. Focused. Flexible. Boundless.



"In light of AT&T's recent restructuring, I felt this would be a good time to update our valued customers on the latest developments at AT&T Business, and to restate our commitment to keeping five million business customers at the forefront of the networked world."

"By combining the most advanced IP, data and voice technology with the expertise of 40,000 networking professionals, AT&T Business has achieved a number of significant milestones. With an IP Network presence in 60 countries and 850 cities, we've been awarded *Network Magazine's* Product of the Year for our Global VPN service. By offering the security and reliability of private data networks along with the ubiquity and reach of the Internet, we've taken the lead in overall IP-VPN market share. And in keeping with our commitment to provide a range of access options, we've deployed DSL in 100 markets."

"In addition, AT&T Business has firmly established itself in web hosting for companies of every size. AT&T Solutions—our professional services arm—is providing custom hosting solutions to some of the world's leading corporations. As part of a \$2 billion joint effort with BT and Concert, we're building forty-four new Internet Data Centers in sixteen countries. And *PC Magazine* gave our Small Business Hosting Service its Editor's Choice Award for ease of use and installation."

"As president of AT&T Business, my goal is to provide solutions and support that can keep our customers one step ahead. And by moving fast, staying flexible and maintaining a laser-like focus on the areas that concern you most, we'll continue to do just that."

Rick Roscitt—President, AT&T Business.



AT&T Business



PHILANTHROPY

CORPORATE CHARITY: WHY IT'S SLOWING

This year's performance will be the worst since 1991

The holiday season is hitting high gear, with the usual hectic round of glittering charity soirees for every good cause imaginable. But to many fundraisers, Corporate America will be playing the part of Uncle Scrooge. Corporate charitable contributions are likely to remain flat this year, according to a new Conference Board survey of 209 large companies. If that holds true across the board, it would be the worst philanthropic showing since the 1991 recession.

True, business giving to charities and nonprofits has climbed by 4.2% a year in the past decade, after adjusting for inflation, hitting \$11 billion last year. That's

according to the AAFRC Trust for Philanthropy, a nonprofit group in Indianapolis associated with the American Association of Fundraising Counsel, which promotes professional standards in philanthropy. At the same time, though, pretax corporate profits jumped by 5.6% a year since 1989, to \$836 billion. So as a percentage of pretax income, companies' charitable contributions remain stuck at nearly half the 2% peak of 1986 (chart). "Phil-

anthropy is in a catch-up mode with earnings," says Paul M. Ostergard, president of the Committee to Encourage Corporate Philanthropy.

COST-CONTROL FREAKS. After years of fat bonuses and overflowing coffers, the Grinchlike trend? For one thing, many companies that cut back on giving in the last recession never got back in the giving habit. The merger wave of recent years has hurt as well, as has the growth of cause marketing, by which companies link up with a do-good group to improve their image. Indeed, despite the boom economy of recent years, many executives cast a sharper eye on charity today. Most companies put their expenditures under the microscope in the 1990-91 slump. But even after the economy turned good, fierce competition and

inability to raise prices kept many companies focused on cost control. "It's always nice to say when times are good, you should give more," says John Rintama, Ford Motor Co.

"Philanthropy is in a catch-up mode with earnings," says one fundraiser

Innovation in the Customer Economy

The future of E-business is all about the value TO THE BUSINESS. Discover today's E-business best practices for enhancing your customer relationships, increasing your efficiency and supercharging your productivity.

Lead it. Shape it. Drive it.

BE THERE



ebusiness

conference and expo

December 12-14, 2000

Jacob K. Javits Convention Center, NYC

increase
productivity

enhance
customer
service

reduce
supplier
costs

build
better
relationships

empower
employees

create
a connected,
collaborative
environment

CONFERENCE PRODUCED BY

BusinessWeek AND **INFORMATIONWEEK**

ALSO FEATURING

Register
now for your
**FREE EXPO
PASS!**
A \$50 Value!

**mobile
commerce**
Conference and Expo
www.mccexpo.com

**Angel
SOCIETY**

Forums & Events
www.angelsociety.com

ARIBA
Making the net work for B2B

ARTHURANDERSEN

firehunter

hp
invent

IBM

iPlanet
e-commerce solutions

J D EDWARDS

SMARTpen
Digitize documents, charts and spreadsheets

MERANT

Microsoft

Sprint
The point of contact

**STERLING
COMMERCE**

STORAGETEK
INFORMATION MANAGEMENT

xpedior

AserA

EMC²
where information lives

haht
COMMERCE

Informix
SOFTWARE

intel

MicroStrategy
The Power of Intelligent Information

MIMECOM

NUASIS
The New World Between us and your Customer

**PEOPLE'S
Soft**

Peregrine

Rational
the e-development company

SAVVION

SONICWALL

SPACEWORKS

UNISYS

ORIENT
Business. Done Right.

Certified Diamonds Below Wholesale



Guaranteed!

Laboratory Graded
and Certified

◆
\$35 Million Inventory

◆
Plus...FREE
14K Gold Mounting!

sapeck.com



S.A. Peck & Co.

Diamond Importers and
Fine Jewelry Manufacturers
Since 1921

55 E. Washington St.
5th Floor
Chicago, IL 60602

1.800.922.0090
312.977.0300

Social Issues

Companies now see giving as a chance to advance their interests

group vice-president who oversees the company's giving. But "you've got to manage it so that what you commit to, you can sustain."

Corporate giving has also been set back by the economy's shift from manufacturing to services. Because manufacturers make tangible products like medicine, chemicals, and computers, it's easier for them to donate to a good cause. Cincinnati-based LensCrafters expects to give away more than 92,000

pairs of glasses this year. And Hewlett-Packard Co. last year contributed \$58 million, with about half the total in computers and other high-tech equipment. Overall, some 28% of corporate charity comes not in cash but in other forms, primarily goods, according to the Conference Board survey.

Point the finger, too, at the cost-cutting mentality after a corporate acquisition or merger. In Denver, for instance, Qwest Communications International Inc. is already curtailing its giving following its takeover last summer of regional Bell company US West Inc., whose foundation had been doling out about \$25 million a year. Qwest has stopped matching employee gifts to nonprofits—worth an estimated \$5 million annually—and told beneficiaries to expect more changes. With Qwest's Internet focus, it's now "a very different company," explains spokesman David Goldberg. "We have to be careful how we spend those dollars." Before the takeover, Qwest had no giving program at all; Goldberg says its priority now is shoring up poor service.

Indeed, among 124 corporations surveyed recently by the National Committee for Responsive Philanthropy in Washington, D.C., 46 had been involved in a big merger since 1996; of those, only one said giving would increase post-merger (the study didn't ask whether giving would decrease).

One of the biggest shifts in corpo-

rate giving involves a company's effort to treat philanthropy as an opportunity to advance their strategic interests. At the end of the day, we're all employees of the shareholders, and we're going to give away the shareholder's money," says Ford's Rintamaki. So, for example, Citibank created a program to offer small loans through nonprofits to borrowers who wouldn't qualify for loans, it helped people who otherwise would turn to loan sharks and

payday shops. But it also has helped itself by drawing people into the bank's system and learning how to serve low-income customers.

GENEROUS LOGIC. The bottom-line philanthropy has blurred the line between giving and marketing. A company might sponsor a cause that's important to its customer base, as cosmetics retailer L'Oréal Products Inc. does with its breast cancer research fund. Or it might align up with an organization's mission, using the group's name in its marketing in return for donating a portion of sales, as Welch Foods Inc. and Johnson & Johnson have done with the World Wildlife Fund.

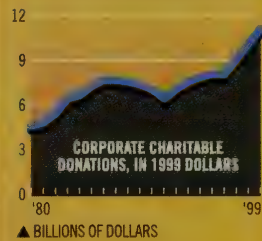
Such deals make business sense.

Two-thirds of consumers say that if price and quality are equal, they are likely to switch to a brand or retailer backing a good cause, according to a 1999 survey done for Cone Inc., a Boston marketing firm. What's more, the survey found that brand loyalty: Nearly 90% of employees of companies promoting causes felt a strong sense of loyalty to the firm, up from 67% at companies that did not.

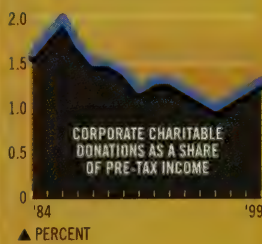
As the giving season hits its peak, charities and nonprofits are grateful for the corporate support they get. But some doubt many lament, as the economy appears to be softening, that businesses won't open the spigot more when the times were really rocking.

By Christopher H. Smith
in Washington

CORPORATE GIVING HAS GROWN...



...BUT IT HASN'T KEPT PACE WITH PROFITS



DATA: AAFRC TRUST FOR PHILANTHROPY

THE PERFECT
MARRIAGE:
DSL AND THE
COBALT
QUBE™ 3



The Cobalt Qube™3 is the perfect choice for turning a single DSL connection into a whole online business. Just think: Control your network investment by sharing your connection with your entire office seamlessly and securely. Control your productivity by sharing files across platforms (Windows, Macintosh, Linux, whatever) with anyone, anywhere. Control your communications by setting up a Web site for your own domain right in your office, and host email for everyone, whether in the office or on the road. And do all of this in minutes without hiring a network administrator! Sound exciting? Wait until you hear the price! **Starting at just \$999**, you can turn your simple DSL or cable line into a high-tech business tool!

Call Cobalt Networks at 650-623-2500 or visit our Web Site at www.cobalt.com/qube3.

You'll never look at your DSL the same way again.



WEB

EMAIL

SECURITY

STORAGE

NETWORK



**COBALT
NETWORKS**

CONNECTING THE DOTS

WHAT A GREAT LOCATION



Introducing the e-marketplace alliance: IBM, i2 and Ariba. Three



OR AN E-MARKETPLACE.

It names in e-business working together to help make your business
efficiently — whether you buy or sell ships, sleds or seafood. It's b2b^x3.

ibm
i2
ariba

www.ibm-i2-ariba.com or call 877 426 2676; priority code: emarket1

HOW SWEET IT WAS

After a gonzo year, forecasts of an ad slump

Every year in early December, executives from the world's leading media companies gather in midtown Manhattan for the Paine-Webber media conference, one of the industry's biggest confabs. In recent years, it has been a particularly bullish affair as new mergers and technologies inspired giddy speeches by moguls about the coming world of "interactivity" and "convergence." But at this year's mediafest, now called the UBS Warburg media conference after Paine-Webber itself merged into the Swiss investment bank, the mood was sober. After a record-breaking year, ad spending—the revenue engine for media empires—is about to grind into lower gear.

Indeed, the year 2000 was exceptionally kind to media businesses, from newspapers to television networks to billboard companies. But no media exec with any sense of history expected it to last. Sure enough, at the conference, ad forecaster Robert J. Coen of media buying outfit Universal McCann made his much-anticipated prediction: Ad spending will grow 5.8% in 2001, down from 9.8% in 2000. Still, "we don't see things falling apart just because there's some softness here and there," says Coen.

Some sectors of the media will feel more pain than others, though. Network TV advertising will grow only 1% in 2001, vs. 12.5% in 2000, Coen estimates. Besides the obvious loss of dot-com advertising, consumer companies are expected to cut back on ads, and high-tech gadgetry businesses might be headed for a shakeout. Slower consumer spending could pinch retailers, thus hurting ad revenues at newspapers, which are sensitive to swings in the re-

tail sector, says John Perriss, C media buying firm Zenith Media. Meanwhile, advertising on the Internet will grow more slowly next year—in 2001, vs. 65% this year (page 1).

The clincher for U.S. ad spending in 2001, Perriss says, will be sagging corporate profits. Profit-growth estimates for the Standard & Poor's 500 have lowered in recent weeks to 11.4% in vs. 19% this year, according to First Corp. Even so, ad budgets aren't easy targets for cutting they once says Perriss. "Marketing is coming more of a fixed cost for companies because of global competition," he says.

Of course, by almost any comparison, 2000 was an extraordinary year. Fueled early on by heavy dot-com advertising and then by the hit reality TV show *Survivor*, as well as the Olympics and lucrative political spots, overall ad spending will have grown this year by 9.8%, to \$11.5 billion, according to Universal McCann. That's the highest growth rate since 1996, when spending grew 16%—in a much more inflationary year, one marked by an Olympic year and a Presidential election.

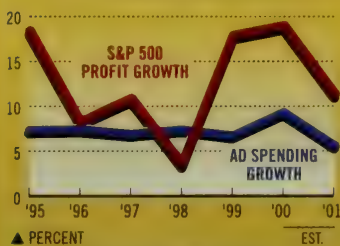
"CAPRICIOUS GROWTH"

In fact, for some companies, the first half of 2000 was nothing but boggling. Ad revenue at E! Entertainment Communications Corp., an Annapolis-based TV and radio company, grew an extraordinary 23% in the first and second quarters. That's because TV and radio, in particular, were the beneficiaries of optional dot-com advertising, which dried up by July. "We knew that the capricious growth would come to an end," says Ralph Guild, chairman and CEO of Interep National Radio Sales. He predicts more moderate growth of 8% in 2001. Indeed, Emmis' ad growth rate has already returned to single digits, enough for Wall Street to sell Emmis stock is down 60% since early 1999, to the \$24 range, from highs of \$74. "The hard part with Wall Street is it overreacts one way or the other," says Emmis CEO Jeffrey H. Smulyan.

Clearly, the Street doesn't like it's hearing about ad tightening. In the past six weeks, analysts have repeatedly lowered their ratings on media stocks. At Merrill Lynch & Co., J.



U.S. AD SPENDING: HEADED FOR A BIG DROP



DATA: FIRST CALL/THOMSON FINANCIAL, MCCANN-ERICKSON, BLUE CHIP ECONOMIC INDICATORS



WHEN EMPLOYEES ARE HAPPY WITH THEIR 401(K) PLAN, IT SHOWS. They work harder and stay with you longer. We should know. As the nation's 401(k) leader, we've been helping growing businesses and their employees secure their financial futures for over 50 years. No wonder more companies choose The Principal® for their 401(k) plans.* Investment options, recordkeeping, loan services, plan member education and asset allocation—we've got what you need, plus personalized service and local support to make the process easy. What's not to love? If you'd like to hear what a 401(k) plan from The Principal can do for your employees, call 1-800-986-3343 (ext. 80080). One of our representatives will be happy to help, no matter what you're wearing.

WE UNDERSTAND WHAT YOU'RE WORKING FOR™



www.principal.com

Reif Cohen downgraded News Corp., Fox Entertainment, and Walt Disney largely because of an ad slowdown she already sees. The Bloomberg U.S. Media Index, which includes 43 companies from Time Warner to Comcast to The McGraw-Hill Cos. (parent of BUSINESS WEEK), is down 24% year to date, compared with the 10% drop in the S&P 500-stock index. "The first and second quarters are going to be very difficult by comparison" for media companies, says Cohen. "We've seen the ad market turn sour. We expect single-digit growth in the coming quarters. The big question is whether it's low or high single digits."

HOLD THE EGGNOG. The reality is starting to sink in. NBC Chief Financial Officer Mark Begor sent a memo to the network's divisions in October recommending they postpone upcoming Christmas parties to help bolster the bottom line in light of the emerging slowdown. And in magazines, where the number of consumer titles doubled in the last decade, to about 4,000, the shakeout is coming. "The positive ad climate of the last couple of years has covered up a lot of circulation problems," says Dan Capell, editor of newsletter *Capell Circulation Report*. "Without those ad dollars, you are going to see a lot of titles disappear. After all, who can support 27 motorcycle magazines?" The squeeze is already on at some publications. Internet magazine, *The Industry Standard* will fold its special *Grok* edition, which focuses on specific Internet-economy topics, into the regular magazine because it couldn't attract enough advertising. And *The Wall Street Journal* is ceasing publication of its six weekly regional publications, which were barely profitable, so it can redirect resources into its national edition.

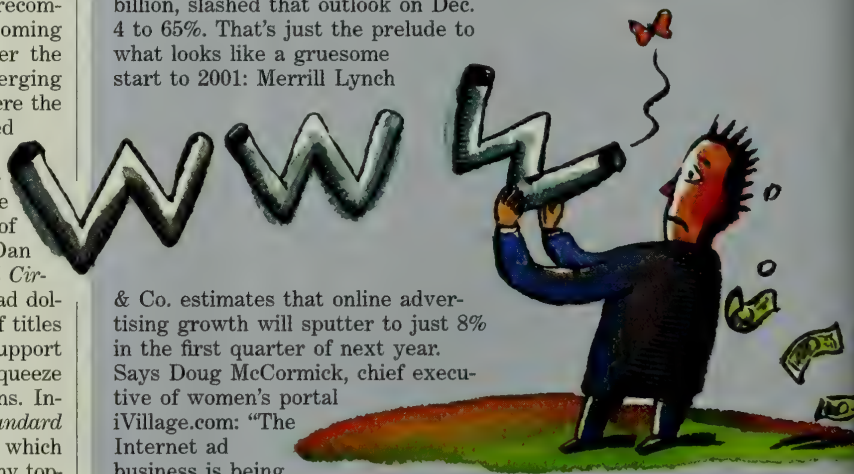
One executive who says he isn't fretting is Sumner Redstone, chairman and CEO of Viacom Inc., whose media properties now include the CBS and UPN TV networks, Paramount Communications, cable channels MTV and Nickelodeon, and radio giant Infinity Broadcasting. "Ninety-five percent of our prime-time ads are sold for the first quarter," boasts Redstone. And Viacom's third-quarter ad growth was up 13%, vs. 7% for the industry. That's not to mention looking ahead to big-ratings events at his company like the Super Bowl and *Survivor II*, both airing Jan. 28. But with a rocky stock market and an economy that appears to be tapping the brakes, not every media executive sleeps as easy as Redstone these days.

By Tom Lowry in New York

WHAT'S A DOT-COM TO DO AFTER THE ADVERTISERS BOLT?

The Internet was supposed to be a way to deliver a powerful advertising punch. But these days, online advertising is looking more like a punching bag. With the collapse of dot-coms and with disappointment over the effectiveness of Web ads, expectations are being downsized fast. Ad agency McCann-Erickson Worldwide Inc., which predicted in June that ads on the Internet would grow 75% in 2000, to \$3.2 billion, slashed that outlook on Dec. 4 to 65%. That's just the prelude to what looks like a gruesome start to 2001: Merrill Lynch

the free Net environment, few companies have been able to sell enough subscriptions to reach profitability. Worse, 70% of Netizens say they won't pay for subscriptions on the Web, according to a Jupiter Media Metrix study. "People are creatures habit. They don't want to pay for something they're used to getting for free," says Thomas J. Clarke, CEO of TheStreet.com, which splits its revenues evenly between Net ads and



& Co. estimates that online advertising growth will sputter to just 8% in the first quarter of next year. Says Doug McCormick, chief executive of women's portal iVillage.com: "The Internet ad business is being treated like the fire hydrant at the dog show."

PAY AS YOU GO. Suddenly, Web-site operators that depend on ads are rushing to create new revenue streams. High on the list: subscriptions—a business model once left for dead after it failed as a primary revenue engine for sites such as Slate.com. Today it's on the rebound: Jupiter Media Metrix says that 11 of the 100 most frequently visited Web sites charge for at least some premium content, up from just six sites last year. And that number appears poised to grow. iVillage.com has plans to launch a swath of premium content early next year, while media sites such as Terra Lycos and PlanetOut Corp. are planning to bolster offerings to paid subscribers. "I'm particularly bullish on the subscription model," says Ron Sege, president of U.S. operations at Terra Lycos.

He has his work cut out for him. In

subscriptions—after starting as a subscription-only site. Still, the revenue mix hasn't reversed the site's fortunes: Third-quarter revenues dropped 11%, to \$6.2 million, from its second-quarter revenues. Even *The Wall Street Journal* online (wsj.com) with more than 500,000 subscribers, continues to lose money, according to Neil Budde, the site's editor.

Despite the long odds, many online media companies are confident that Web subscriptions will pay off. PlanetOut, a gay-lifestyle portal, is beginning to charge for its Out & About travel newsletter and plans to introduce a personals service for a \$5 monthly fee next year. Terra Lycos will soon start charging for music catalogs. And iVillage.com is launching a premium health-advice service next year. Whether these will offset the drop in Net ads remains to be seen.

By Ben Elger
in San Mateo, Ca

Make room.
The new imageRUNNER
is coming.

Staple
Saddle Stitch
Hole Punch

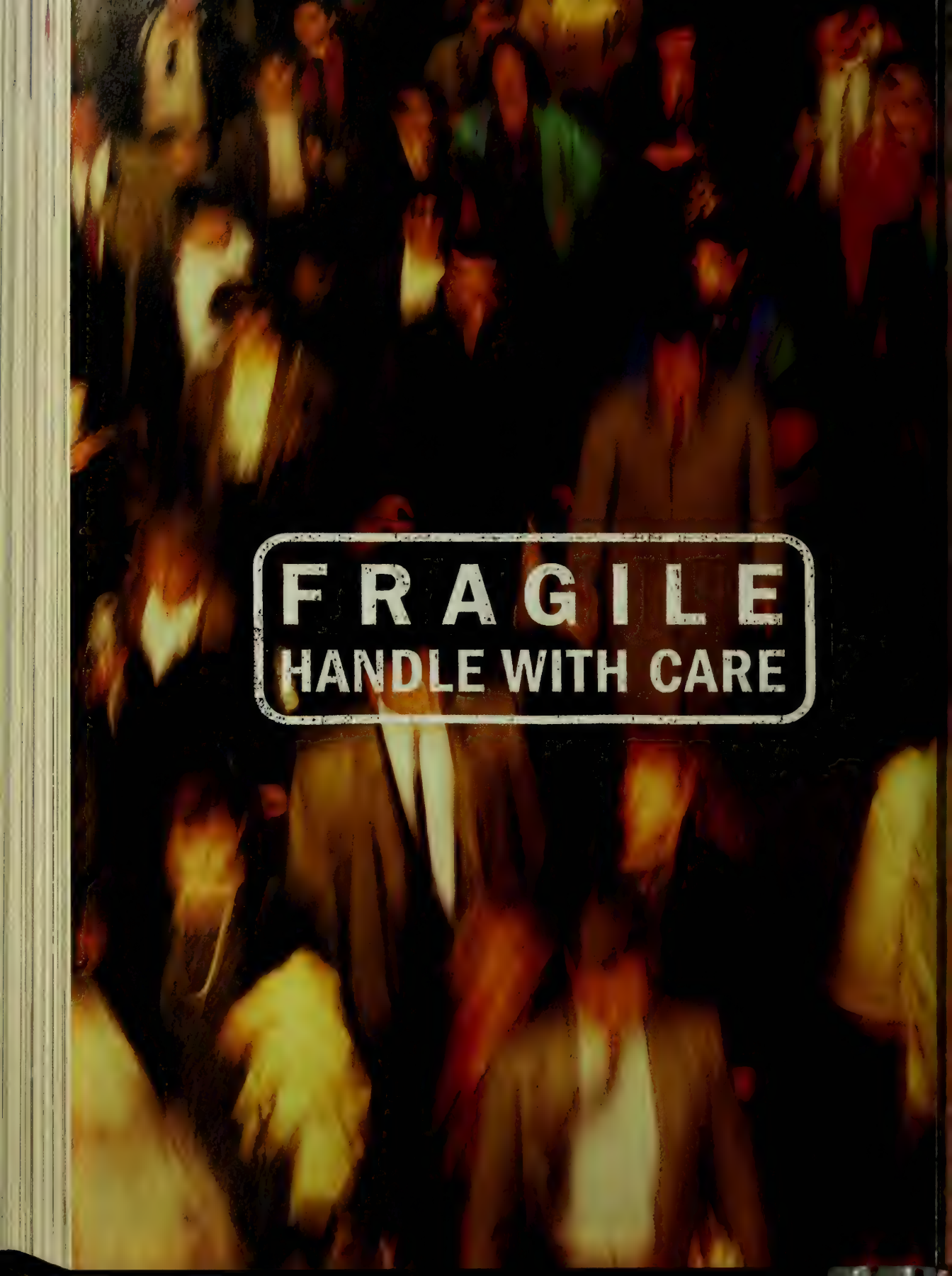
Out with the old, and in with the new digital
imageRUNNER 5000 and all it has to offer.

Like the ability to seamlessly connect to any network. To output
documents at 50 ppm and deliver full-finishing capabilities--right from
the desktop. Plus, it's built on the highly acclaimed imageRUNNER
product platform. So, put a fresh coat of paint on the walls,
something new is headed your way. At Canon, we're giving people the
know-how to realize the full power of the digital office.



imageRUNNER™
5000

Canon KNOW HOW™

The background of the image is a dark, out-of-focus photograph of a large crowd of people. The individuals are mostly wearing light-colored clothing, which appears as bright, blurred streaks against the dark background. The overall effect is one of a busy, crowded event at night. In the center of the image, there is a white rectangular sign with rounded corners and a thin black border. The sign contains the text 'FRAGILE' in large, bold, white capital letters, and 'HANDLE WITH CARE' in smaller, bold, white capital letters below it.

FRAGILE
HANDLE WITH CARE

SO OBVIOUS, it's easy to miss: Beyond the hype about eyeballs and page hits are real customers with unique needs and preferences - customers that demand an improved online experience.

To gain market leadership, you must serve up unprecedented convenience. Personalization. Know customers one-on-one. Create Web interactions tailored to each - their wants and needs, perceptions and personal histories.

And do it dynamically. In real time.

The prize? Clear competitive differentiation. Solid brand loyalty.

Stonebridge solutions make it possible with compelling Web services, integrating back-end systems and processes with everything required up front to enhance Web experiences and cultivate customer relationships.

Act now. Before your customers click with someone else.

Visit www.sbt.com or call 800.776.9755 to learn more about electronic relationship management and other Web-centric solutions.

The Fast Track To e-Business.™

STONEBRIDGE
TECHNOLOGIES

THE GREAT MI

BY DEXTER ROBERTS

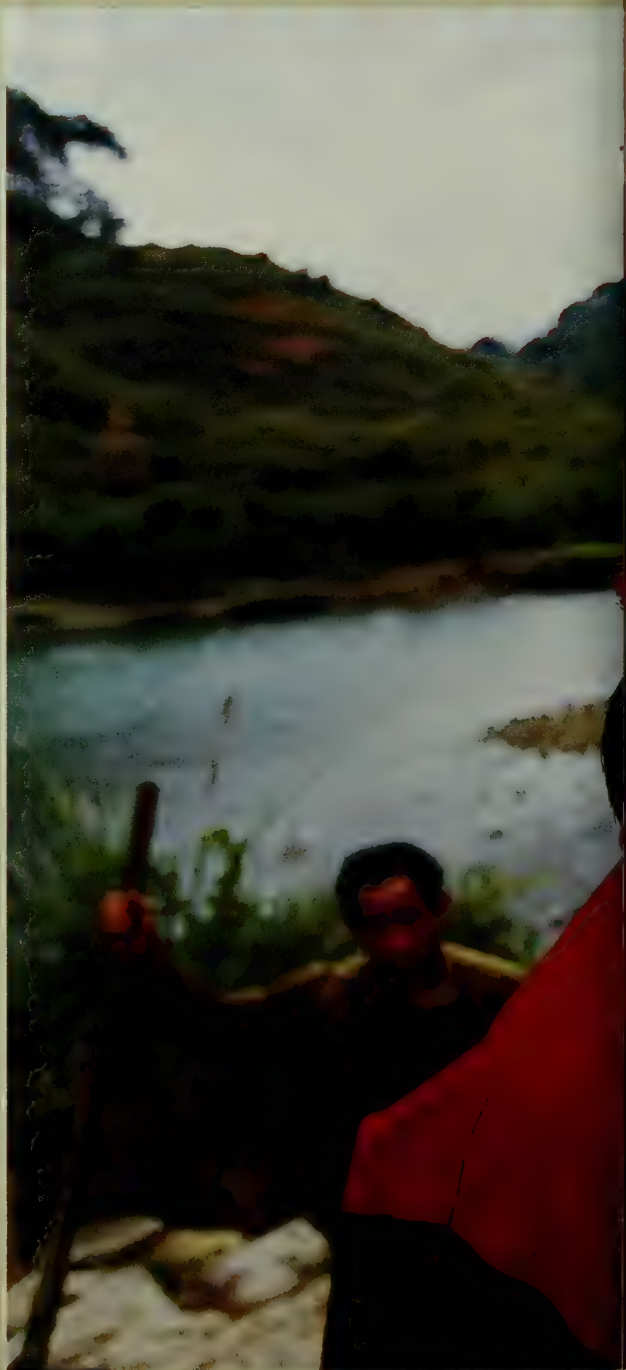
When I first met Mo Meiquan, in August of this year, she looked small and very young in her light-blue work smock. Just 18, she was clearly nervous about talking to a foreign reporter, maybe because we were sitting in a restaurant just across from the gates of Triton Media Co., where she worked checking video and audiocassettes for flaws. Winning her trust was crucial, because I hoped to understand what had prompted her to forsake her village in China's Southwest for the grinding life of an assembly-line worker in the nation's export belt. Meiquan avoided my gaze as she

Special Report

described the long hours and repetitive work that dominated her life.

The next time I saw Meiquan, she was a woman transformed: smiling, confident, and only too happy to talk. It was eight weeks later, and she was back in her ancestral village of Binghuacun. Meiquan's hometown is many miles—and centuries of culture—away from the city where she had been working. Getting there from Dongguan involves a 29-hour train journey, two hours in a bus, and a one-hour ride through mountainous terrain in a pony cart. Finally, Binghuacun appears over the brow of a hill, a cluster of 50 or so ramshackle wooden houses

HOME ON A VISIT *Mo Meiquan and Mo Yukai work in far-off Dongguan*



ATION

Chinese peasants are
fleeing their villages
to chase big-city dreams



Special Report

THE GREAT MIGRATION

clinging to a steep green slope. Like many other Chinese villages, it is home to one extended clan: In this case, everyone is named Mo.

After more than two years away, Meiquan has returned to help her parents and two brothers bring in the autumn rice harvest. In some ways, she feels it's good to be back. She is something of a celebrity in her bright-red vest and black dress shoes. Her relatives, many dressed in the blue homespun cloth worn by the local Buyi minority, are eager to hear her tell of life in the big, far-off city. They pester her about how much money she makes and what it's like to work in a factory. Meiquan revels in the attention.

But after a few days, village life becomes tedious. There are no phones in Binghuacun, so she can't call her friends in Dongguan. There are no bustling street markets to shop for new clothes or the latest pop music. And she frets about not making cash at home. Soon, Meiquan is spending much of her time commiserating with her distant cousin Mo Yukai, also home temporarily from Dongguan. But to return to the southern Pearl River Delta city, Meiquan needs a new identity card to replace one that has expired. Without it, she risks being picked up in a police sweep. As she awaits official approval, she dreams of her new life in Dongguan.

UPSURGE. Meiquan is part of an unprecedented exodus of peasants. In their tens of millions, they are leaving impoverished villages in search of the Chinese Dream: a decent job that will buy them the trappings of modern life. Over the past dozen years, 60 of the 300 people in Meiquan's village have left. A similar shift is under way in villages all across China, and nowhere more so than in the economically backward western hinterland.

As growth in the countryside stagnates, these young people are leaving the fields forever, breaking with a centuries-old way of life.



SHANGHAI ARRIVAL 100 million are on the move

risk a social convulsion. But they fear removing restrictions on internal travel, lest peasants descend on the cities en masse and spark instability.

Already, strikes and protests against rapacious officials, factory abuses, and taxes are a daily event across the nation. Many of the demos are breaking out in the cities, where angry, laid-off state-enterprise workers and mistreated rural migrants make for a volatile mix. The rise of such unrest in what is still technically a socialist workers' state is disturbing indeed. China's current leaders "came to power on the back of a peasant revolution,"

notes Thomas Bernstein, a professor of political science at Columbia University. "To think that the peasants might riot against them is very shocking."

As the pressure builds, it's clear that the world's most populous nation is in the midst of a grassroots revolution. China is being transformed from a rural, agricultural nation to an industrialized, urban one, and millions of peasants such as the Mos of Binghuacun are being squeezed by the change. Because China is so large, and because it is ruled by a Communist



Deutsche Banc Alex. Brown

Your company can go even further

Today, a Company's balance sheet impacts its income statement more than ever – large non-strategic holdings, a sub-optimal capital structure, growing stock option programs and more. But your financial strategy can be managed, exposures controlled, earnings smoothed and shareholder value created. Sometimes it's just a matter of knowing what to look for.

Having tackled some of the most complex financial issues facing today's top companies, we have the depth of thinking and experience to help you reduce your risk and create value. And as one of the largest banks in the world, with assets totaling over \$800 billion, no problem is too big or too complex for us. So put our talented experts to work for you.

Let our experience unleash the value of your Company.

Whoever you are

- CEOs and CFOs
- Corporate Treasurers
- Venture Capitalists
- Human Resource Executives

Whatever you need

- Capital Structure Optimization
 - Stock Option Hedging
 - Share Repurchase and Non-dilution Strategies
- Hedging Non-strategic Holdings
- Efficient Monetization Structures
- Tax Planning

EXPERIENCE
leading to results™†

Deutsche Bank





LURE OF THE LURID *Night life is only one of many urban enticements*

Party that values stability, order, and control above all, those pressures are seldom visible to outsiders. But Beijing's leaders are only too aware of them, and so, after years of tacitly accepting the floating population of

migrant workers, they are finally getting serious. In a potentially major development, officials are now debat-

European agribusiness. And if these newly minted urbanites become sufficiently prosperous, they could unleash a new surge in domestic consumption that could fuel growth for decades.

MAKE OR BREAK. The danger is that if the government does not damp down the migrant problem before the protests worsen, hard-liners could seize their chance to reverse reform. A conservative, antimarket backlash would undoubtedly scare off foreign investors. In the most extreme scenario, farmers, workers, and students might band together to challenge the leadership's hold on power. "China's farm workers have been marginalized and discriminated against," says Hu Angang, a senior researcher at the Chinese Academy of Sciences. He reckons the migrant population will double in the next few years. What happens next is uncertain. But it's clear that Beijing's leaders are turning their full attention to the people who could make or break China.

It is easy to see what motivates people like Meiquan to leave places such as Binghuacun, which life has changed little in generations. People cook over open hearths in simple, wooden houses. They use out-houses. They work hard for meager rewards. Consider 32-year-old Mo Wenzhi. His family is lucky to make \$100 a year—by farming one-tenth of an acre of rice, corn, and red chili peppers. So in 1989, he left Binghuacun and now

Special Report

THE GREAT MIGRATION

ing whether to begin relaxing half-century-old rules that officially confine rural citizens to their villages. Such rules have been flouted for years, but the new policies being considered would allow migrants more freedom to legally move to the cities on a permanent basis.

Beijing has two main goals: One is keeping track of all these people. When officials conducted a census in November, they found migrants living in the cities extremely leery of divulging personal information, for fear of being sent home. The second goal is economic: Beijing knows it must close the income gap between the cities and countryside, and one way to do that is to encourage the flow of villagers to the urban centers, so they can send some of their factory wages back home. Boosting the rural economy is crucial, because once China enters the World Trade Organization next year, the nation's 800 million farmers will not be able to compete with the cheap grain and meat produced by North American and

CHINA'S WIDE DIVIDE

THE RURAL ECONOMY

Workers employed:
495 million

Value of agricultural production:
\$174 billion

Annual remittances and savings of migrant workers:
\$14 billion

Per capita annual income:
\$266

THE URBAN ECONOMY

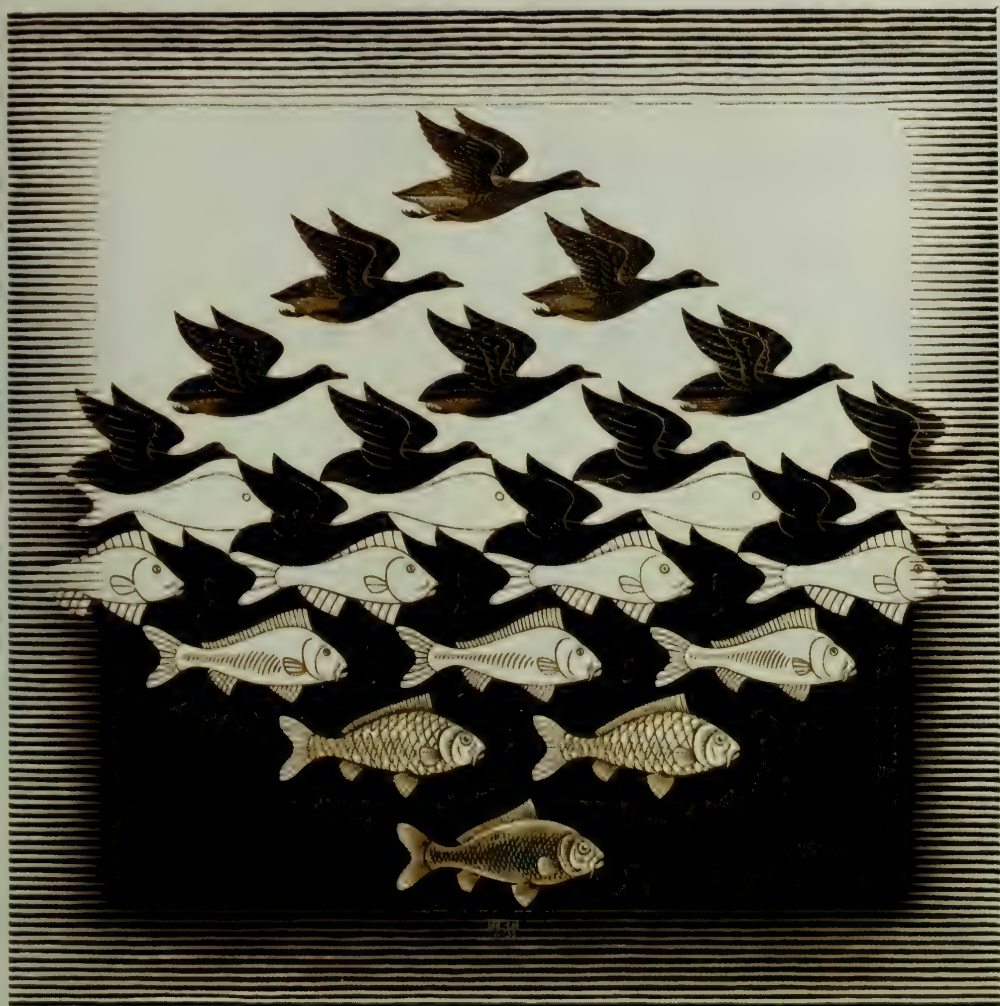
Workers employed:
210 million

Value of manufacturing output:
\$487 billion

Value of service output:
\$326 billion

Per capita annual income:
\$710

DATA: STATE STATISTICAL BUREAU, CHINESE ACADEMY OF SCIENCES



Integration problem? What integration problem?

We've done the near-impossible in the 10 years we've been in the business: integrate 1350 customers globally (like Nike, Barnes&Noble.com, PETsMART), handle a record-setting 10 billion transactions in one day, integrate thousands of disparate platforms and win Product of the Year from *eAI Journal*. SeeBeyond is also the strategic partner of choice for the top three independent systems integrators. So we're pretty sure that whatever your problem, it'll be no problem for us. Call 1-877-676-2877, or go to seebeyond.com. NASDAQ:SBYN

SEEBEYOND™



NEW YORK

TOKYO

FRANKFURT

LONDON

SINGAPORE

DON'T JUST TRACK STOCKS. STALK THEM.

 **NDB's StreamMachine**

Symbol	Last	Change	%	Qty	Bid	Ask	Size	Vol(000)	DayHigh	DayLow	Traded
COIL	40 1/2	0.00	0.0%	300	40 1/2	41	6x7	400	40 13/16	40 1/3	10:30:40
ENR	45 7/16	0.12	0.3%	1,800	45 7/16	45 1/2	95x55	7,114	45 7/8	44 1/4	10:30:39
FTF	40 1/2	0.50	1.3%	200	40 7/16	40 1/2	52x225	10,195	40 9/16	39 7/8	10:30:39
FS	58 7/16	0.125	0.2%	1,700	58 7/16	58 1/2	28x150	1,812	58 15/16	58 7/16	10:30:39
JNK	67 1/2	0.3750	0.6%	100	67 1/2	67 9/16	24x143	10,677	67 3/4	66 1/4	10:30:39
MST	70	0.9/16	0.3%	300	70	70 1/16	13x76	5,068	70 1/8	69 7/16	10:30:39
PR	44 5/16	0.1250	0.3%	300	44 5/16	44 11/16	100x500	8,443	44 15/16	44	10:30:40
NDB	33 1/4	0.12	0.4%	500	33 3/16	33 1/2	5x13	42,700	36	34 13/16	10:30:40

With National Discount Brokers' new StreamMachine, you can watch a stock's every move. It's simple: Just select the stocks you want to monitor and then, in real time, watch the information pour in. Everything from best bid and ask prices, to last trade prices and volume, to day's highs and lows. It's all there, changing at market speed. You can even set the StreamMachine to give you visual and audible alerts. Until now, this kind of tool was only available to professional traders. But now it's available, free of charge, to all NDB customers. For more information, visit ndb.com or call 1-800-4-1-PRICE. And find out what brokers have been hoarding all these years.



Quote display does not contain factual market data. System availability, trade execution and reporting times may vary due to market volatility, volume, system performance and other factors. NDB does not provide tax, legal or investment advice. Security products and services are offered through NDB. NDB is a National Discount Brokers Group, Inc., company. NDB is Member NASD/SIPC.

ndb.com 1-800-4-1-PRICE



NATIONAL DISCOUNT BROKERS | ndb.
We take you under our wing.

works as a factory cook in Dongguan. He frets constantly about his ailing mother, his wife, and a 14-year-old daughter he left behind. "It's so hard to make money from the land," he says.

Throughout its history, China has struggled to keep peasants such as Wenzhi under control. In the 1940s, Mao Zedong harnessed their pent-up resentment to pave his path to power. But then he chained the farmers to the land, withholding privileges enjoyed by the urban elite. In the late 1970s, Deng Xiaoping's economic reforms sparked unprecedented development along China's coast—but left the hinterland largely untouched.

Since Deng unleashed those revolutionary economic forces 22 years ago, tales of unfathomable riches have traveled inexorably inland—even as far as Binghuacun. For Meiquan, they arrived courtesy of her adventurous



FACTORY COOKING Mo Wenzhi's daily grind

Special Report

HEAT MIGRATION

woman-owned Shiqing Machinery factory in Dongguan.

ALIEN PLANET. With mixed emotions, Meiquan, who left school at 15, boarded her first-ever bus in June, 1998. Thirty hours later, she arrived in Dongguan, a chaotic city where Hong Kong and Taiwanese businessmen live in luxurious villas and their workers inhabit shabby dormitories. For Meiquan, it was like landing on an alien planet. Her first job was making belt buckles at a Hong Kong-owned factory in the industrial suburb of Humen. Meiquan's task involved polishing metal molds for 12 hours a day. For this finger-numbing labor, she earned \$30 a month—depending on how many molds she finished.

Conditions got decidedly worse when the factory got an unusually large order—\$340,000 worth of belt buckles that had to be finished within a few days. Her Hong Kong boss told Meiquan and her co-workers that no breaks would be allowed until the order was completed. After working 48 hours straight with almost no rest, Meiquan decided she had

older relative, Mo Rubo, who had left in 1993 and today earns \$120 a month working as a welder at the Tai-

workers find themselves victims of phony job-search companies. They pay a variety of fees, but the promised work never materializes.

Working conditions can be brutal and unsafe (page 188). And prejudice is rife. Migrant workers are blamed for the crime afflicting China's cities. Moreover, migrants increasingly find themselves subject to local restrictions that seem to change by the day. They are forced to pay a series of fees ranging anywhere from a day's to a couple of week's pay: \$3 for a work permit, \$7 for a health permit, and \$15 for a temporary residency permit. And cities such as Beijing, Shanghai, and Tianjin ban them from working their way up to better jobs. They want to keep those for local citizens laid off by state enterprises.

Without the correct paperwork, migrants can find themselves tossed in grim detention centers and held until friends or relatives can bail them out. These centers are infamous for their poor food and inadequate sanitation as well as beatings and forced labor. And migrants often are returned to the countryside. Wenzhi, the cook, was picked up twice but luckily had the \$12 to make bail.

Another man from Binghuacun wasn't so lucky. He was incarcerated for three months in a detention center in Huizhou, Guangdong. Wenzhi says the ordeal so fright-

ened the man that he returned home and may never set foot in a city again. Precisely such worries sent Meiquan packing for Binghuacun, where she is stuck waiting the three months required to get a new identity card. It will give her some security in the big city, and it allows her to apply for a temporary residency card and work permit. "Without doing

MO MEIQUAN'S FAMILY BALANCE SHEET

Assets of 7 family members: 4-room house, 0.64-acre field for growing rice, 0.59-acre slope for growing other crops; 4 pigs, 1 horse, 20 ducks

2000 INCOME

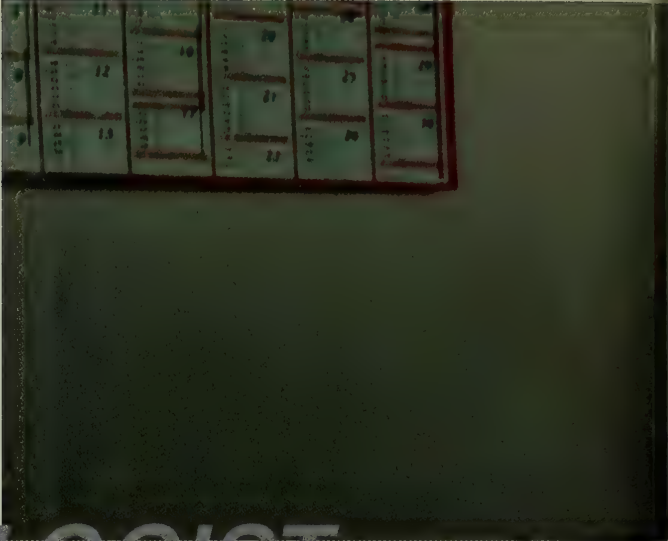
- \$12 from sale of 100 kg rice
- \$54 for 100 kg chilies
- \$25 for 150 kg rapeseed
- \$163 from selling pigs
- \$34 sale of 20 ducks
- \$145 from father's construction work
- \$241 remittance from Meiquan's factory wages

TOTAL: \$674

EXPENDITURES

- \$217 food
- \$96 transportation
- \$72 fertilizer and pesticide
- \$48 medicine, medical services
- \$36 local taxes
- \$7 road building & improvements
- \$4 power station maintenance
- \$6 education & culture
- \$60 cloth and clothes

TOTAL: \$546



THE *RADIOLOGIST* AND THE I.T. GUY CAN'T MAKE HEADS OR TAILS OUT OF THE LOW-RES X-RAY.

By the look of things, the patient has either a
crushed sternum or a shattered spine. It's hard to tell.

"Your guess is as good as mine," says the doctor.

The I.T. guy thinks it's a problem with the backbone...

of the information system. He thinks it'll take another
twenty minutes to download a high-res X-ray.

The system is already choking on insurance forms.

Meanwhile, the patient in the softball uniform
wonders when they will set his broken finger.

THAT'S WHEN IT HITS YOU. YOU ARE *SO READY* FOR





ago Data-rich image files put up to 1,000 times more load on a network than traditional data. An IBM Storage Area Network, Enterprise Storage Server™ and file-sharing solution allows your network to freely distribute content everywhere. Learn more by calling 1 800 426 7777 and ask for Storage Solutions.

Storage Solutions from IBM

ibm.com/storage/solutions70

@business infrastructure



HARRIED *Mo Wenzhi was twice picked up for permit irregularities but bailed himself out*

all of this," she says, "I could risk getting picked up."

Nonetheless, Beijing seems increasingly prepared to allow migrants to move more freely about the country. Behind closed doors, analysts say, top officials, including President Jiang Zemin and Premier Zhu Rongji, are reviewing ways to gradually loosen controls over migration. Among the changes being considered are those that would make it easier to change residency permanently and doing away with hiring practices that discriminate against migrants. But real change may have to wait until the 16th Party Congress in 2002.

Ultimately, of course, Beijing's leaders hope most migrants such as Meiquan return to their villages on a

permanent basis. The idea is that these rural folk, many of them illiterate, will take back skills picked up

in the cities. In the meantime, the government hopes that money the migrants send home—already as much as \$14 billion a year—will help boost rural economies.

BIG PLANS. In the villages, a little seed capital goes a long way. So far, Meiquan has sent \$241 to her father. He used it to buy an \$85 threshing machine, fertilizer, and four piglets. Before buying the thresher, he had spent \$72 a year renting one from his neighbor. Altogether, such remittances have helped buy 10 such machines in the village. Meiquan's father plans to sell his pigs during Chinese New Year and make a profit of \$163.

Binghuacun's party secretary, Mo Wenke, frets that local farmers won't be able to compete once China joins the WTO. He proposes opening a processing factory for red chili peppers or potatoes, cash crops that locals have taken to planting in recent years. "Of course, they should come back to invest," he says of the young villagers who have left for the city. "If they start a business, they can help us sell our products. If they open a factory, we can process our local products."

Beijing has even bigger plans, such as helping create more companies like Chaoda Modern Agricultural Holdings. From its base in Fuzhou, Fujian, Chaoda already has 21 farms growing 35 types of vegetables and eight varieties of rice on 7,000 acres, scattered across several provinces. Now, Beijing has given Chaoda the green light to list its shares in Hong Kong and so raise money for future expansion across China. This is all part of government policy to consolidate the nation's fragmented small-scale agricultural sector in preparation for international competition.

Remote villages such as Binghuacun are unlikely to see any investment from companies such as Chaoda, however. Even a plan to widen the village's main road is going nowhere. After two years of wrangling between two nearby township governments, most villagers still travel by foot or pony cart. "Without a new road," says party secretary Mo Wenke, "our village will never develop."

Across China, anger is mounting as local governments levy ever heavier taxes as they lose funding from Beijing. "We don't want to pay these taxes," says Wenzhi. "The local cadres don't do much to help us. But we have no choice." The tension between rural farmers and local officials is likely to worsen in coming months, as Beijing continues to cut funding to the townships. Binghuacun's farmers have yet to rise up in anger, but resentment over high taxation has prompted thousands of protests in other rural provinces.

In August, more than 10,000 farmers in Jiangxi took to the streets for several days, burning police cars and besieging government offices. Local officials had tried to quash an official pamphlet that outlined which taxes were acceptable and which were not. Vice-Premier Wen Jiabao, who is widely tipped to be China's next Premier in 2003, has repeatedly spoken out opposing high taxes on farmers and highlighting the need to reduce the size of township governments.

While Beijing is counting on migrant workers even-

Special Report

THE GREAT MIGRATION

Unrivaled



When business teams with technology...
VERITAS® gets you to the top.

In a rocky and fiercely competitive global economy, your data is your most valuable asset.

Unrivaled solutions from VERITAS give you the vital edge necessary to scale new business heights.

VERITAS, The Data Availability Company, provides you with essential, industry-leading software solutions, UNIX to NT, data center to laptop, to continuously access and protect your business critical data.

The Data Availability Company™


VERITAS™
BUSINESS WITHOUT INTERRUPTION™

Visit us at www.veritas.com

© 2000 VERITAS Software Corporation. All rights reserved. VERITAS is a registered trademark of VERITAS Software Corporation in the U.S. and other countries. The VERITAS logo and Business Without Interruption are VERITAS trademarks or registered trademarks of VERITAS Software Corporation in the U.S. and other countries. Other product names mentioned herein may be trademarks or registered trademarks of their respective companies.

tually to take their business skills back to the countryside, it is equally likely that the migrants will be bearers of unwelcome new ideas.

Indeed, migrants are becoming more aware of labor rights as they come into contact with other workers across China and read about labor abuses in such newspapers as *Southern Weekend*, which is published in Guangdong province. Migrants are beginning to understand what is guaranteed them by China's strongly worded but little-enforced labor laws. "Usually, the law

doesn't work," says Rubo. "But if I have a problem, I will check out what my rights are." As a result, more

grants are taking matters into their own hands. Migrant communities in cities ranging from Beijing to Shanghai to Guangzhou have created their own schools and clinics. "As long as one has the money," says Rubo, "we can take care of everything." Moves such as this are just one more way that the massive migration is loosening the Communist Party's control over not only the countryside but the entire nation.

The reality is that more and more migrants will become like Mo Rubo. Despite a robbery and tough living in the big cities, he has no intention of returning to the village. In his search for a better life, Rubo has worked in four provinces and a score of menial jobs. He is confident that his future will improve, and that he, rather than Beijing, will be responsible for that. Someday, Rubo wants to start his own business selling machinery parts rather than making them, as he now does in Dongguan.

As millions more Chinese peasants follow his path, moving their jobs and lives beyond the familiar orbit of party control, China is entering uncharted territory. Whether or not the government manages to handle the unfolding economic and social revolution is impossible to predict. But one thing is clear: Men and women like Rubo and Meiquan will play a major role in forging China's destiny—just as Mao originally intended.

Special Report

THE GREAT MIGRATION

migrants are organizing to protect their interests.

They also are aware that government pledges of aid have not been fulfilled. For example, a job-training program is aimed almost exclusively at laid-off employees of urban state-owned enterprises—despite pledges to include migrant workers. Similarly, plans to institute a nationwide social security network within three years in reality will cover only urban residents.

Faced with Beijing's unwillingness to extend them such benefits as health care, education, and pensions, mi-

A CRUSADER FOR INDUSTRY'S CASUALTIES

Visitors to Zhou Litai's Shenzhen apartment had better be ready for the sight of industrial carnage. Flinging open bedroom doors and marching in, the 43-year-old lawyer grabs a man's sleeve and yanks it up to show the stub of what was an arm. Pulling the covers off a bed, Zhou angrily points to where her leg once was. In the living room, four people are playing cards—a real feat, since all of them are missing hands or arms. At any one time, as many as 30 men and women are camped out at Zhou's flat, all victims of industrial accidents, all out of work, and most with no home of their own.

DEADLY. As Zhou graphically illustrates, the safety record for migrant workers in China's export-oriented factories is among the worst in the world. Last year, in Shenzhen alone, Zhou estimates, 20,000 workers were seriously injured on the job. Across the country, tens of thousands die working at factories, coal mines, and construction sites each year, according to Chinese press reports. Zhou, one of the few

lawyers in China who represent migrant workers, is devoted to making the workplace safer.

Born to a farming family in rural Sichuan, Zhou could find work only in a brick-and-tile factory, a dead-

when his rights are violated."

Zhou blames China's safety record on poor training, excessive overtime and outdated equipment, brought in mainly by Taiwanese and Hong Kong factory owners. Add to that

the dismissive attitude of officials and a lax attitude toward China's labor law. "There is very weak supervision by the government," says Zhou. "The law isn't enforced."

Since he moved to Shenzhen in 1997, Zhou has successfully brought 50 cases, winning as much as \$36,000 in compensation for his clients. In one case, he forced an employer to replace his client's prosthetic arm every four years.

It hasn't been easy. Factory owners and local officials have

tried to thwart him every step of the way. Zhou argues that he's acting not only for the injured but also for his country. "If we don't protect workers' rights," he says, "it will result in social instability." Given China's growing labor protests, it's hard to disagree.

By Dexter Roberts in Shenzhen



TOUGH BREAK *Playing cards is no picnic for those injured in accidents*

end job where he worked long hours for low pay. Determined to better himself, he studied on his own to become a lawyer, and not long after passing national law exams, in 1986, he began taking on the cases of migrant workers. As a former factory hand, he says, "I understand how a worker feels

COMMENTARY

By Lewis Braham

MSCI INDEXES: IT'S TIME TO REDO THE MATH

The road for international index funds is about to get bumpier. "We have clients calling us saying: 'What do we do, what do we do!'" says Vinu George, international equity strategist of Barclays Global Investors. Barclays' clients have reason to be worried. As the world's largest index fund manager, Barclays has the most to lose from changes planned by Morgan Stanley Capital International, a unit of Morgan Stanley Dean Witter, in the way it compiles its global indexes by region, country, and sector. Barclays has \$75 billion in MSCI-based funds.

MSCI's proposal—expected to be approved Dec. 10—would alter the way the firm calculates its index weightings. The result would be dramatic shifts in the holdings of money managers whose funds track the indexes. Ireland's weighting, for instance, is expected to increase some 72%—meaning international equity index funds would have to boost their share of that country's stock by a like amount. Most of the shifts won't be so sharp, but the notion of having to rebalance portfolios across the board is giving many index-fund managers fits. The money involved is huge: Some \$100 billion is invested in MSCI-based index funds worldwide. Active managers, who pick stocks rather than simply track indexes, are rubbing their hands in anticipation, since changes in MSCI weightings will be announced in advance, giving them the opportunity to front-run—trade ahead of time—those stocks whose values will benefit or suffer.

TORTIONS. Despite the anxiety, the reshuffling is all over, and investors will benefit. MSCI is proposing to eliminate a system of compiling indexes that had built-in distortions. In the present, weightings are calculated by multiplying a stock's price by the number of shares outstanding. In the future, MSCI would multiply price by the number of shares the public can trade. That makes sense because in many countries big blocks of shares are held by governments or other companies and are never traded. For



example, Japan's Ministry of Finance owns 53.1% of Nippon Telegraph & Telephone Corp. Under the new system, NTT's weighting will drop.

While it's normal for stocks to get a performance boost or drop when they're added or deleted from the Standard & Poor's 500-stock index, those will look like tweaks compared to this. According to Salomon Smith Barney, the reweighting will cause

an upheaval in the popular MSCI Europe, Australasia, Far East index (EAFE). Britain's weighting will rise 13.4% (table), for instance, while Japan's will fall 6.6% because of massive cross-ownership in its companies.

The opportunities for active managers to profit will only make it tougher on index fund managers. "Active money managers will

IN TOKYO : Japan's share may shrink

move against any change announcements immediately," says Theresa

Gusman, an inter-

national money manager at Scudder Kemper Investment Inc. "But passive index managers will have to wait until the date of the actual changes to buy or sell." That means Barclays' funds will be buying some stocks after money managers have already run up their prices and selling others after they've fallen. In other words, they'll be forced to buy high and sell low.

Sector fund investors may also be struck by MSCI's sword. Because many telecom companies such as NTT and Deutsche Telekom are partly government owned, Salomon expects the sector's EAFE index weighting to drop 9.7%. "With the telecom sector, there are some fairly obvious stocks you want to be underweight in right now," says Gusman.

While Barclays' George says many managers are "salivating" at the chance to front-run MSCI, he doesn't think the damage will be all that great. Although there is some talk that MSCI may try to make its index changes all at once in a "Big Bang," he believes the changes will be spread out over years. That could dampen the front-running effect. "If you're buying U.K. stocks, you'll be exposed to everything else that happens in the U.K. before the next series of changes occurs," he says. And though some short-term investors may get walloped, when all is done, the MSCI moves will likely create a fairer investing universe.

Staff Editor Braham writes about investing in New York.

Rejiggering EAFE

WEIGHTING
CHANGES (EST.)

THE BIGGEST LOSERS ...

AUSTRIA	-27.3%
PORTUGAL	-25.1
HONG KONG	-24.1
SINGAPORE	-23.2
DENMARK	-18.5

...AND THE BIGGEST WINNERS

IRELAND	+72.2%
BRITAIN	+13.4
NETHERLANDS	+9.6
FINLAND	+9.3
BELGIUM	+9.3

DATA: SALOMON SMITH BARNEY

CHINA

MICROSOFT MISFIRES

Its Web appliance, Venus, was going to rule China. What happened?

One box that solves two problems and offers three functions. That was Microsoft Corp.'s hope for Venus, a \$240-\$360 gadget running Windows CE software that turns Chinese TV sets into Internet appliances. Venus would solve two problems by making it both easier and cheaper for Chinese consumers to access the Web. The three functions: education, entertainment, and Web surfing. For Microsoft, Venus was the key to penetrating China, because it would make Windows nearly ubiquitous in living rooms from Shenzhen to Shanghai.

Fast-forward to late 2000: Venus seems more like one box containing two disasters and three catastrophes. Of the three main Chinese companies that signed up to sell Venus boxes, two have

pulled them from the market. Only Legend Computer is still selling the units in China—and it ships most of its supply to Southeast Asia. Microsoft won't reveal sales figures, but Sean Zhang, managing director of Microsoft (China) Research & Development Center in Beijing, concedes they are "below our expectations."

Why has Venus fizzled? Zhang blames both a lack of online content and the relatively high cost of Internet access. But others say Microsoft misjudged the willingness of Chinese to buy what is essentially low-rent technology. And with PCs selling for as little as \$600, there isn't much reason to buy Venus. Moreover, while Zhang says his company is committed to the project, local TV maker TCL International Holdings never sold Venus because it felt Microsoft wasn't fully behind the concept.

A DISMAL IMAGE. The Venus project is not the only misfire in Microsoft's China strategy. Besides the feeble market response to Venus, the Redmond (Wash.) giant continues to battle software pirates, a poor image with Chinese authorities and consumers, and a growing threat from local rivals offering inexpensive Lin-

ux-based service. Microsoft won't reveal its China revenues, but analysts say they're probably under \$100 million a year—less than the company makes in Hong Kong. "We are much smaller than we expected," says Microsoft General Manager Jack Gao, with a sigh. "We have a lot of things to improve."

So Microsoft is launching a fresh offensive, starting with public relations. A new China management team, headed by Gao, is trying to burnish the company's dismal image, which took a hit last year with the publication of a report by former executive Juliet Wang that trashed Microsoft's China strategy.

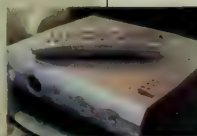
The report was aggressive and culturally insensitive. Gao has formed a new public relations division to combat negative press coverage—such as a report last year suggesting that the Chinese government had decided to withdraw support for Windows. And the company has launched retraining programs for workers laid off from state enterprises. This is not only a PR exercise; the workers will get jobs at Microsoft. As Gao says, "Even though our business is new, it's supposed to be, we want to



JACK GAO: "We have a lot to improve"

REGROUPING IN CHINA

- Venus, a much hyped project to turn Chinese TVs into Internet appliances, has fizzled, so Microsoft is trying to find customers in Hong Kong and Korea
- To counter negative publicity in the state-run press, Microsoft has launched a PR blitz, including sponsoring retraining centers for laid-off workers
- Microsoft plans an \$80 million expansion of its service center in Shanghai, which now handles requests from users in the U.S.



VENUS





source operating system. The threat is perhaps more political than anything else. Beijing likes to set one foreign company against another—as it has done with Boeing and Airbus. By playing up the potential of Linux, the government may be telling Microsoft that it had better play by its rules. Still, Linux is making inroads. TurboLinux, a San Francisco company that provides Linux support, recently won a contract to help the post office use the platform to automate some of its operations.

PERSISTENT PIRATES. But Microsoft faces no greater competitor than the thieves who have elevated software piracy to a fine art. Last year, overall sales of computer hardware in China topped \$18 billion. But software sales were a measly \$2.1 billion. In other countries, the ratio is closer to even. Blame the shortfall on the pirates. Because of all the counterfeiting, Microsoft sold only 2 million licensed copies of its software in China during the year ending in June.

have a long-term commitment." Microsoft is not just concerned with sales. It wants customers, too. So the company has been diligently courting China's new entrepreneurial class, offering training for the staffs of start-ups to use Microsoft software. Bill Gates, 28-year-old founder of Shanghai Net Systems (no relation to Jack), worked with Microsoft for three years developing an e-mail system that would work on various appliances. Microsoft paid to send him to last year's Consumer Electronics Conference in the U.S., and provided management training for many of his staff.

Microsoft has been currying favor with the government, too. When CEO Steve Ballmer visited China in September, he announced an \$80 million expansion of the company's Shanghai server center, which provides technical assistance to Microsoft software users in China and the U.S.

While there have been grumbles that Microsoft was set up for PR purposes, General manager, Jun Tang, insists Microsoft chose China for its engineering talent. That also seems the main reason the company set up its R&D center in Beijing two years ago. One of only

LEGAL PRODUCT

Unfortunately, most Chinese Windows users buy counterfeit versions

three such centers worldwide, its staff of 100 focuses on speech-recognition, multimedia, and wireless technology. Still, while Microsoft insists the two facilities are an integral part of its global strategy, their location certainly will ease the company's relationship with China's sometimes xenophobic leadership.

Yet Microsoft must still persuade Chinese companies to buy its products and services. Consider China Netcom Corp., a state-owned broadband provider that serves 17 cities. It plans to quadruple its coverage by 2004 and is looking for partners to help with a range of voice and data services. But China Netcom is playing hard to get. Besides Microsoft, it is considering bids from IBM, Hewlett-Packard, and Sun Microsystems. "We've seen what's good and bad," says Xingcha Fan, Netcom's vice-president for strategy and business development. "We want the best."

Other rivals are making headway, too. Increasingly, Microsoft must contend with companies offering Linux, the open-

Despite these setbacks, Microsoft's China team insists it is well positioned. The disappointing Venus gambit? Not to worry, says Sean Zhang of the Beijing R&D center. While the Venus boxes haven't been setting the sky ablaze in China, Microsoft is signing on partners elsewhere. In mid-2000, Hong Kong and China Gas Co., the city's monopoly gas utility, introduced a consumer Internet service using Venus software. Zhang says the company is talking to potential customers in South Korea and other parts of Asia. Meanwhile, he says, China will take time to develop sufficiently compelling Internet content to attract buyers to Venus: "The ecosystem for this kind of information appliance is not ready."

Chinese aren't ready to give up on counterfeit versions of Windows either. "We have a lot of users," says Jack Gao ruefully. "But we don't have a lot of customers." With Beijing intent on developing a local software industry, he says, cracking down on the pirates is in China's interest, too. That will take time. For now, a more humble Microsoft will have to keep trying to win friends in the emerging market it values most.

By Bruce Einhorn in Beijing, with Alysha Webb in Shanghai



MODEL CAR: With its European-style pizzazz, Toyota's Yaris is an exception

AUTOS

A PILEUP IN EUROPE FOR JAPAN'S CARMAKERS

They've been clobbered by currency rates and bad styling

This was supposed to be the breakthrough year. That at least was the thinking among Japan's carmakers 12 months ago, as they contemplated their plans for the vast European auto market. New models, new plants, new partners: Toyota, Honda, Mitsubishi, and Nissan figured they finally had the elements for some major gains. Even the laws were turning more favorable, as the European Union removed the quota restrictions on imported Japanese cars.

Well, the results are coming in for 2000, and a breakthrough year it's not. Breakdown may be a better way to describe it. Late last month, the Japanese carmakers released results for the first half of their fiscal year: Their combined operating losses in Europe reached \$470 million. "This was a big wake-up call for us," says Yohio Ishizaka, director of Toyota Motor Corp.'s European business, which reported a \$24 million loss. **PAINFUL.** A chief source of the problem is exchange rates: Japanese cars destined for the European market are mostly made in Britain and Japan, and the pound and the yen have been much stronger than the euro. That has jacked up costs to a painful degree. "Just as the import restrictions went away, we were hit by the currency market," laments Mazda Motor Corp. director Shigeharu Hiraiwa.

Fickle foreign-exchange rates are only

part of the problem, though. Mitsubishi Motors Corp. for example, makes its two top sellers in the Netherlands, which is not exposed to the stronger pound. Yet that positioning hasn't shielded the carmaker from steep losses and lower sales.

The deeper problem is the reputation for lackluster styling that stubbornly clings to the Japanese in Europe. "Their cars have never been very sexy," says Yves Mignières, sales manager at a Peugeot showroom in Paris. Only one Japanese car has caught the imagination of European drivers—the Toyota subcompact Yaris. Its distinctive grill and curvaceous dashboard show the sort of pizzazz Europeans expect from Volkswagen, Fiat, or Renault.

The Yaris is a huge success—but European sales for most other Toyota models are down sharply. Meanwhile, other Japanese stalwarts such as the Mazda Demio and Mitsubishi Carisma have failed to make a dent in Europe's all-important small-car segment. Adding to the problem is the mounting popularity in Europe of diesel-powered cars, an area where the Japanese are weak.

The fact that most Japanese carmakers manufacture in Britain may affect the styling issue. "In Britain, taste in cars is transatlantic," says a manager at a European carmaker. "The Japanese didn't see that they weren't producing cars adapted to European tastes." The Japanese also grapple with issues such as dealer networks that lack marketing clout and low levels of brand awareness.

This is a sorry state of affairs. After 30 years of marketing in Europe, Japanese only have 11% market share overall, far lower than the 29% they enjoy in the U.S.—or even 16% allowed under the old quota system. As a result, Japan's auto giants don't have as much as they could from the worldwide volumes that keep a car's overall production costs low.

Look, then, for some major changes in strategy. To reduce their exposure to currency swings, Toyota and Nissan will jack up the number of parts sourced from the Continent for the cars they make in Britain. Both carmakers also winnow out hundreds of poorly performing dealers from their networks. Toyota will reduce its roster of European showrooms from 3,440 to 2,000. The No. 1 Japanese carmaker is closing a plant in Valenciennes, France, next year to make the Yaris. That will muffle the impact of currency hits and soothe lingering anxieties in France about foreign incursions.

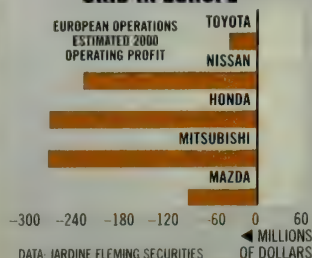
The Japanese also may finally get some serious help from their European partners. Nissan, a third-owned by Renault, now plans joint European production of separately-marketed models—the Renault Clio and the Nissan Micra—based on shared platform. Mitsubishi, allied with DaimlerChrysler, is pressing ahead with plans to launch a compact car on a joint platform.

The biggest need is for more marketing that show some panache. Toyota, for one, says the Yaris has taught it about European tastes. Now its executives hint that a new sports car

will be in the works. "We have perhaps a soul version of its high performance GTI," says a Toyota executive. "We have lots of weapons," says Managing Director Yohio Ishizaka. Better play them fast.

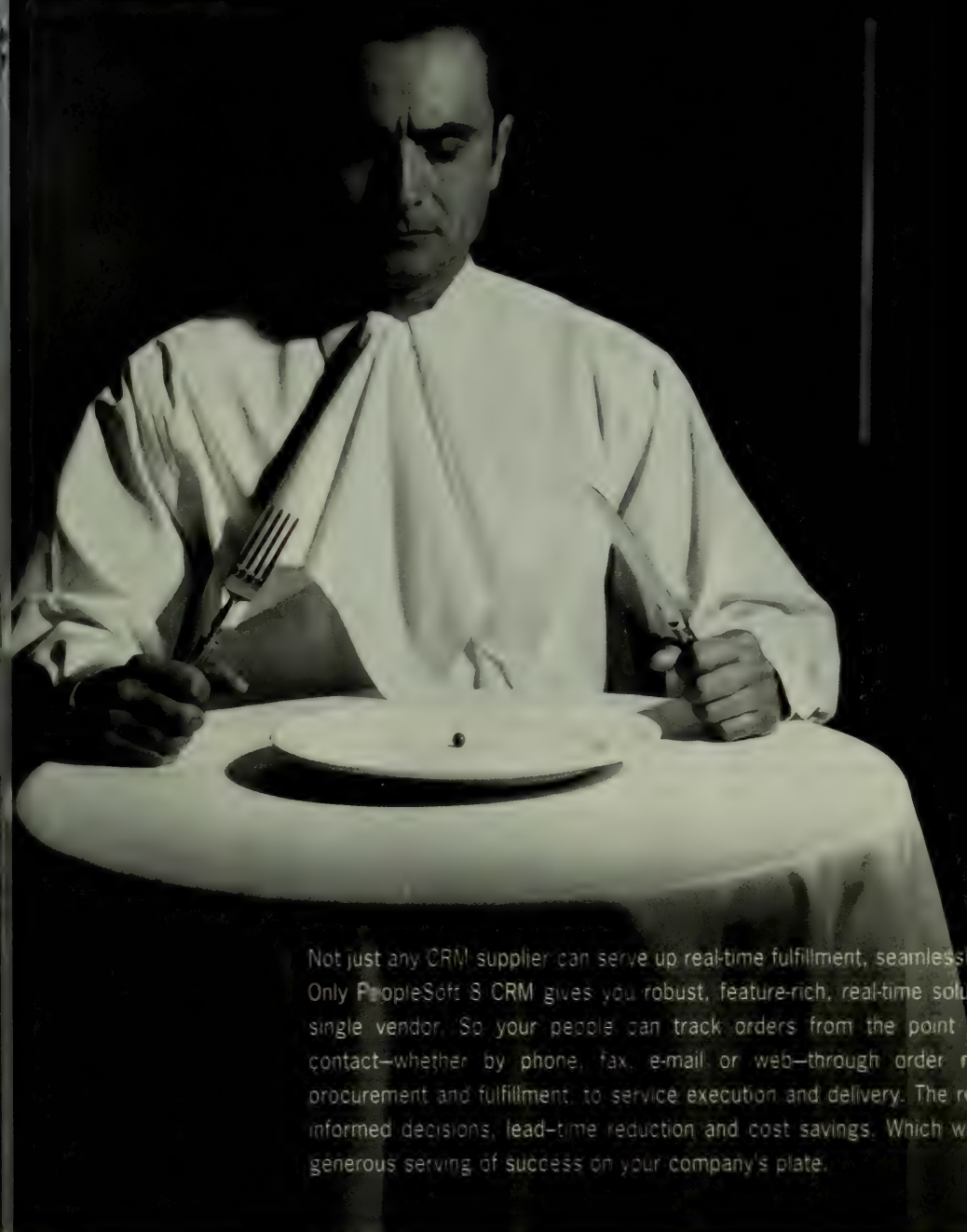
By Chester Hays
in Tokyo and
time Tierney in
furt, with Ann
den in Paris

JAPAN'S CARMAKERS SKID IN EUROPE



ER CRM VENDORS PROMISE FRONT AND BACK END INTEGRATION.

THEIR RESULTS NEVER PROVIDE FULFILLMENT.



Not just any CRM supplier can serve up real-time fulfillment, seamlessly integrated. Only PeopleSoft 8 CRM gives you robust, feature-rich, real-time solutions from a single vendor. So your people can track orders from the point of customer contact—whether by phone, fax, e-mail or web—through order management, procurement and fulfillment, to service execution and delivery. The result is more informed decisions, lead-time reduction and cost savings. Which will help put a generous serving of success on your company's plate.

PeopleSoft CRM powered by

vantive

CUSTOMERS • EMPLOYEES • SUPPLIERS

People power the internet.

PEOPLE
Soft

EXECUTIVE SUITE

JUST THE YANK FOR REUTERS

Tom Glocer is tech-savvy and—best of all—impresses investors



VERSATILE: Lawyer Glocer, 41, has written software for use in law schools

On Dec. 3, when the board of Reuters Group PLC sat down to pick a new CEO to succeed Peter J.D. Job next July, there was really only one candidate: Tom Glocer. A 41-year-old graduate of Yale Law School, Glocer will be the first American and the first nonjournalist to run the venerable but still formidable British financial-information giant.

On paper, Glocer looks like just the man to preside over the shift now taking place at Reuters. The company is spending \$725 million over a four-year period to revamp its main businesses. This is a monumental transition from Reuters' proprietary network-delivered system to delivery of the company's products over the Internet and wireless. Glocer is tech-savvy, has the respect of fellow employees and, most important, impresses investors. "He has a lot of gravitas," says Neil Carter, an analyst at ABN Amro in London. "He is also suited to communicate strategy and lead the troops."

Being an American doesn't hurt. Reuters' power base may be in Europe, but the U.S. has greater potential as a

market for its financial information and trading products. To date, the U.S. has not been as strong as it should be for Reuters. Glocer, currently the boss of Reuters America, is changing that, however. He has presided over a big push to customize information for clients in the equity markets. That tactic is partly in response to the success of Bloomberg LLC in the U.S., which offers pretty much the same high-priced product to all its customers.

Reuters is doing very well pushing Reuters Plus, a moderately priced offering for retail brokers that now has 50,000 customers, and Reuters Pro, a service for institutional investors. "We have to understand the difference between a portfolio manager at Fidelity and a broker at Merrill Lynch," says Glocer. For the nine

months that ended Sept. 30, the revenues of Reuters America were up to \$1.37 billion.

Glocer is a lawyer who knows technology: He has even written software to help teach litigation technique in law schools. A relative newcomer to Reuters, he joined the company in 1994 from the white-shoe New York law firm of Davis, Polk & Wardwell, where he worked in mergers and acquisitions. **SOUND SHIP.** Coming to Reuters was a smart career move. Starting in the legal department, he soon became general counsel and then, in 1996, got his hands-on management job running Reuters' Latin America operation. In 1998, he had taken over the whole Reuters business and in January of this year added the title of CEO of Reuters. Reuters' 1999 revenue, the company's largest unit, was \$2.3 billion in revenues in 1999.

For now, it seems, Glocer will be a sound ship. Several years ago, when analysts worried Reuters would lose out to the dot-coms in financial data and electronic crossing networks in derivatives trading, a field where Reuters' Instinet Corp. operates. Such fears have faded since the dot-coms have crashed and burned and as Reuters' financial staying power and brand name came to the fore. This year, ABN Amro forecasts a 12% rise in operating profits, to \$832 million on sales of \$5 billion. The London stock has rebounded, rising almost 50% this year to about \$18 a share.

Analysts expect that, given Glocer's background, he will be a more aggressive wheeler-dealer than Job. And he will have plenty on his plate. The company has announced that it will eventually spin off a portion of its Instinet securities-trading system. But as Instinet competes more and more for customers, Glocer may someday be tempted to sell off the whole division.

Even so, Glocer's moves may focus on selling operations in whole or in part. A downturn in the financial

markets could prompt consolidation of financial information business and an attractive asset for the auctioneer. At that stage, it will be up to Glocer to make the choices. Based on his strong background and experience, he is a good bet.

By Stanley Reed
in New York

REUTERS' NEXT BOSS

Tom Glocer

AGE 41, born Manhattan

EDUCATION Columbia University, 1981—B.A., political science; Yale Law School, 1984

FAMILY Married to Marrit, a Finnish cookbook author; two small children

HOBBIES Tennis, cooking

BIGGEST CHALLENGE Switching Reuters to a Net-based system



Every day, 150,000 people buy
a mobile phone that's Mobile
Internet-ready. They want an
Internet that's as personal
as the other things they carry.
Ericsson is already helping

mine

The new Internet. It's more than mobile. It's personalized.

network operators to deliver this
by bringing together systems,
network expertise, devices and
content in an end-to-end solution
that makes a Mobile Internet
portal simpler for operators
to launch and manage. And
ideal for their customers to
customize. Welcome to the new
Internet. This time, it's personal.

www.ericsson.com

The Mobile Internet Revolution.

It's an everyday thing.

ERICSSON 



***At the end of the day, you'll like our network.
Because with our network, there actually is an end
of the day.***

*Managing global telecommunications should be your job, not your life. That's why you'll love the reliability of Global One. We do everything we can to make things simpler for you. Our Customer Support Centers give you a single point of contact that's easy to reach day or night. And our Global One Guarantee program has real teeth in it. So you can count on us to carry your world while you carry on with your life. For more information, call 1-877-460-4141 or visit www.globalone.net.
Global One. Your world. Our shoulders.*

GlobalOne SM

A Member of the France Telecom Group

BY ROSE BRADY

IN CHINA TAME E CORRUPTION BEAST?

Zedong famously warned that a single spark could start a prairie fire. Now China's current crop of leaders are worried that the country's ever more numerous cases of corruption could ignite an inferno—one that might see the Communist Party go up in smoke. Graft on an unprecedented scale is stretching all the way up from the rice fields of rural China to high levels of government. The shakedown of peasants to massive smuggling cartels that rob the state treasury of much-needed cash, the fact that graft has reached a level where it threatens the country's continued economic progress. Indeed, after seeing a top-gang anticorruption film, *Live or Die*, in 1997, President Jiang Zemin described the film as a "powerful shock and a provoking."

CRIMES. Certainly, the hunt against corruption is increasing in intensity. In late 1997, Justice Minister Gao Changli dismissed from his job—detained for questioning corruption charges, Beijing sources say—mid-September, a former deputy head of the National People's Congress, Cheng Guang, became the most senior official to be executed since the People's Republic was founded in 1949.

During the first eight months of this year, Chinese prosecutors filed more than 23,000 criminal corruption cases. Re- corruption cases have increased 9% annually and the number of officials under investigation has been shooting up at a rate of 12% per year, says Pei Minxin, a scholar at the Carnegie Endowment for International Peace in Washington. The biggest case in Chinese history, 14 officials and officers were sentenced to death in mid-November for smuggling \$6.4 billion in goods into China through the coastal province of Fujian. And authorities recently released the results of an investigation into officials in booming Guangdong:



GUILTY: Cheng was executed

The report estimated that corrupt officials purloined \$1.9 billion in funds, largely from provincial businesses.

The stepped-up anticorruption efforts reflect fears among leaders that widespread criminality could destroy what's left of the party's legitimacy as the country enters a difficult phase of its economic reforms. China's entry into the World Trade Organization means that millions more workers will lose their jobs as factories are restructured or shuttered. The problem is that corrupt officials are living it up while workers struggle. It's hard to tell steelworkers in Shenyang, to take a recent example, that they're being laid off when a top municipal official lost \$1.3 million in stolen funds at a Macao casino.

EROSION. "People in China can tolerate short-term pain provided there is a sense of justice, that the pains are equally shared," says the Carnegie Endowment's Pei. He thinks that a stronger legal system, a freer press, and more grassroots democracy are needed to check corruption. Inevitably, though, those changes would force the Communist Party to surrender its monopoly on power.

Corruption now costs China the equivalent of 8% of GDP annually in lost taxes and tariffs, figures Hu Angang, a senior fellow at the Chinese Academy of Sciences. And it looks set to worsen. China's courts are too weak to fight corruption effectively. Its fitful experiments with local democracy are too small to do the job. Luckily for China's leaders, the sparks of graft in the countryside haven't yet grown into a nationwide fire: That would take a unifying national issue rather than a collection of local grievances. But, there's plenty of kindling in a country tired of being ripped off by its own officials. China's leaders are—and should be—worried.

By Mark L. Clifford in Hong Kong, with Dexter Roberts in Beijing

GLOBAL WRAPUP

NAME FOR MILOSEVIC?

In spite of his hopes for a comeback, the political destruction of former Yugoslav President Slobodan Milosevic is nearly complete. His menacing rule fell to pieces after he tried to win Yugoslavia's Presidential election in November. Now his Socialist Party (SPS) is crumbling, too. Polls show the SPS may garner only 3% of the vote in Dec. 23 elections for the regional Serb parliament—the 5% threshold needed to claim a seat in the legislature. More than 60%

of the electorate is expected to vote for the Democratic Opposition of Serbia, the coalition that ousted Milosevic by organizing protests and strikes.

Such a strong showing will give a boost to Yugoslavia's new President, Vojislav Kostunica. He needs to consolidate his power so he can purge government ranks of Milosevic's corrupt cronies, prosecute the former President for fraud and abuse of power, and launch reforms to fix the country's ailing economy. But Kostunica is unlikely to ship Milosevic off to The Hague for prosecution for war crimes.

That would look too much like caving in to the NATO powers that bombed Serbia during its war with Kosovo in 1999—even though Kostunica is now asking them for economic aid.

Meanwhile, Kostunica faces his own troubles with Kosovo. Militant ethnic Albanians who want independence recently killed four policemen in Serbia. Kostunica will have to walk a fine line: exercising restraint to avoid ruffling NATO troops stationed in Kosovo, even as he tries to maintain security on the Serbian-Kosovo border.

By Christopher Condon in Budapest

E-COMMERCE



FEDERATED'S FINGERHUT FIASCO

How the cataloger's grandiose Net dreams turned ugly

Remember Fingerhut Cos.? When Federated Department Stores Inc. acquired the company for a lofty \$1.7 billion in February, 1999, it looked like an Old Economy company on its way to becoming a New Economy darling. The savvy old catalog retailer was rapidly opening e-commerce sites and buying equity stakes in online retailers. With its expertise in filling catalog purchases, Fingerhut was offering order-fulfillment services to other Net retailers. Federated's acquisition couldn't have looked smarter when Fingerhut snagged order-fulfillment contracts with up-and-comer eToys Inc. and heavyweight Wal-Mart Stores Inc. last year and *Fortune* declared Fingerhut one of the "10 companies that get it."

These days, all Fingerhut is getting is

an avalanche of trouble. The company's Internet sales fell so far short of expectations this year that Federated is shuttering five of its eight e-commerce sites. Federated stopped investing in a sixth site, clearance retailer Andys-Garage.com, and is likely to close or sell it. Fingerhut has seen its fulfillment contracts drop to 8 from 22 after allegations of poor service and a messy dispute with eToys. Worse, Fingerhut botched a plan to provide additional credit to its core catalog customers.

The result is an ugly collection of special charges and layoffs. Federated took a \$795 million hit because of Fingerhut's troubles in the third quarter and expects losses from unpaid credit-card bills to cost it an additional \$350 million to \$400 million this year. Par-

ent company Federated, which owns Bloomingdale's and Macy's, is cutting 550 positions at Fingerhut, 10% of its workforce. "In the annals of corporate acquisitions, this is one that the outset was pretty stupid," says an S. James, a retail analyst at S. James & Co., a Boston investment firm that holds 2.7 million Federated shares. "Like many managements, they sucked in at the top of a cycle."

Forget Internet visionary. Now Federated looks like a Digital Age cautionary tale. The company and CEO James M. Mermerman appear to have been blinded by the Net's hype. While Fingerhut grand plans for its Internet and e-commerce businesses, the company's executive stock options have been dismal. Federated projects its overall Net sales would hit \$2

billion by 2004 with the addition of Fingerhut, but it's now clear that revenue will fall well short of the goal. In sales will total only about \$180 million this year.

Fingerhut fiasco is a reminder of the problems of specializing on the Net is far from simple. While pundits predicted catalog companies and direct marketers would have a natural advantage on the Web because they know how to sell without retail stores, that's not the case. Sure, Dell Computer reaps \$1.5 billion in sales from its site each month. But Fingerhut, like many other companies, found itself floundering in the wired world: Its technology was lacking, its operations were inefficient, and its management didn't have the experience to tell the difference between the players and the pretenses on the Net.

Federated is working hard to turn the best of a bad situation. Ronald Deikel, the company's vice-chairman and chief executive behind the Fingerhut deal, admits that "the acquisition has not worked out the way we hoped." Still, he says, Fingerhut is proving important strategically because it's helping Federated bolster its own Internet and catalog operations. For example, Federated is using the catalog company's skills in gleaning information from customer databases to create more targeted marketing for customers of its catalogs and e-commerce site. Fingerhut has successfully taken over management of Federated's order fulfillment center and is starting to handle fulfillment of Federated's catalog and Net orders from its own warehouse. "Hind-

sight is always 20/20," says Tysoe. But "the acquisition was a good strategic move for us."

Or was it? Whatever additional skills Fingerhut brings to Federated, the two companies don't fit well together, and eventually, they're likely to be separated. Here's why: At its core, Fingerhut lends money to people who can't get credit anywhere else. That kind of volatile, risky business is very different from the upscale department-store operations most Federated shareholders are looking for. Already, Federated's shares have tumbled 35%, to \$35,

MISMATCH Federated's experience shows how awry a traditional company's e-commerce alliance can go

from their peak in January. Investors will likely continue to penalize Federated's stock as long as Fingerhut is part of the company. "That's why I believe they will ultimately sell the business or spin it off to shareholders," says analyst Jeffrey S. Stein of McDonald Investments Inc. Tysoe says Federated will consider anything that's in the best interests of shareholders.

To understand how Federated and Fingerhut got into this jam, turn back the clock to 1998. The catalog company was still independent. It was racking up revenues of nearly \$2 billion annually by selling pots, toaster ovens, and other items at high prices to a base of largely poor customers. To drive sales,

Fingerhut offered easy

credit at high interest rates. But Ted Deikel, Fingerhut's longtime CEO and chairman, wanted more. With the stocks of Amazon.com Inc. and America Online Inc. soaring, Deikel figured it was time to remake his company into an e-commerce player. In the spring of 1998, he hired William J. Lansing, a 40-year-old business-development officer at General Electric Co., to develop a Net business and boost catalog sales.

The company's new president was a blur of activity in the eight months before the Federated acquisition. He carved out the e-commerce employees into a separate group, ramped up hiring, and boosted capital spending for the company's three fledgling Web sites. He started an e-tailing site for GenXers called TheHut.com, along with an accompanying catalog.

He bought minority stakes in four e-commerce sites, including mountain-sport content site MountainZone.com and FreeShop.com, which offers trials of magazines and other goodies. He also bought three catalog outfits and started others from scratch.

EASY MONEY. Lansing showed an innovative touch as well. Fingerhut had loads of excess capacity at three warehouses in Minnesota, Tennessee, and Utah. In fact, the 1 million-square-foot Utah facility was vacant because the home-shopping venture Deikel built it for never panned out. Lansing's solution? Use them to provide warehousing, packaging, and shipping services to other catalog and Web companies.

To turbocharge sales, Lansing pushed a plan to provide Fingerhut's customers with easy money. Even before he arrived, the company had started to offer some customers credit cards to buy Fingerhut goods instead of making them buy products on an installment plan. Lansing sped up the rollout, giving credit cards to 4 million customers in two years instead of the previously scheduled three years. The company also started offering credit cards to riskier customers and aggressively extending them credit.

Almost from the start, there were signs that such vast change was creating problems. "The infrastructure was always a step-and-a-half behind," says a former Fingerhut executive. Fingerhut's November, 1998, acquisition of the Popular Club catalog, which sells fashion apparel, bedding, and other goodies, was a case in point. Within months of the deal, Fingerhut moved Popular Club's fulfillment operations from New Jersey to Fingerhut's Minnesota facility. But



that tripled how long it took to get mailings to Popular Club's largely Northeast-based customers, causing sales to plummet, say a former Popular Club employee and a former Fingerhut executive. Fingerhut moved Popular Club's fulfillment back to New Jersey last summer.

LOST ORDERS. Fingerhut also struggled with the technology it needed to be a big Net player. The company found that it was too difficult to modify its existing software to communicate with fulfillment customers and its warehouse network. So Fingerhut created another version of the software called Fingerhut Logistics Software, or FLS, to handle orders for other companies. But FLS had kinks in it, say former Fingerhut execs. In some cases, notice of a customer's purchase would get lost between the company's central computers and its warehouses, causing days of delay. At other times, the software lost track of inventory so Fingerhut didn't have an accurate measure of what was in stock at the warehouse.

Zimmerman and the rest of Federated's management saw few problems with Fingerhut when they acquired the company in February, 1999. Federated paid \$25 a share—30% above the cataloger's stock price just before the deal, and nearly four times the shares' \$6.62 low just four months before. Although Federated officials now say Fingerhut's Internet forays were not a major reason for the purchase, they cited those initiatives at the time of the deal. Zimmerman plugged the fulfillment business in one newspaper article, and management discussed the potential gains from Fingerhut's Net investments with Wall Street analysts. "They did communicate that to the Street when they first announced the acquisition," says McDonald Investment's Stein. "That was part of the plan."

Federated certainly did nothing to slow down Lansing. Two months after the acquisition, the company promoted him to head a new operating unit called Federated Direct, which included Fingerhut's catalog

and Net businesses and most of Federated's catalog and Net operations. During the rest of 1999, he launched three more e-commerce sites and made four more investments in Internet startups. Over the summer, he landed fulfillment contracts with eToys and Walmart.com.

Lansing's vision was anything but modest. With Fingerhut's infrastructure, Federated's merchandising expertise, and his growing network of Web sites, Lansing figured he could create a "strategic incubator." The Web sites would share customers and warehouses and promote each other's offerings. Lansing thought the combo could become bigger even than Amazon. "Yes, I had very bold aspirations. That's true,"

says Lansing, who left Fingerhut in March for NBCi, the TV network's line arm. He says his Net investments were strategically sound and Fingerhut was a "world leader" in fulfillment when he departed. "We had a good business and we made it better," he says.

While Lansing was thinking big, Fingerhut's operational problems were getting worse. Shortly after the Federated acquisition, Fingerhut acquired a minority stake in Hand Technology, Austin (Tex.) company that sells computers on the Net. Fingerhut shipped computers for Hand out of a Minnesota facility, but there were problems right away, according to Hand's Andrew Harris. Fingerhut had a

time keeping track of computers in its warehouse, so it wouldn't sell products that weren't in stock. Fingerhut also was unable to ship Hand with basic shipment details, such as computer model numbers. "They were really struggling with their information systems," says Harris. "DISCONNECT." By the end of 1999, differences began to emerge between Lansing and Federated's management, according to former Fingerhut execs. While Lansing wanted to pursue his growing network of e-commerce sites, his bosses were becoming enthusiastic in the wake of early declines in Net retail stocks. Rather than seeing cut more deals, Federated wanted him to focus on what Fingerhut could serve as a store, catalog, and Web site. When both sides came down to set a budget for Fingerhut for 2000, Lansing wanted for about \$200 million, according to a former Fingerhut executive. He got \$100 million. While Tysoe wouldn't comment on the budget figure, he concedes that "there have been some serious disconnect there."

Lansing's big plan was to even more to grow over the Christmas season. Execs at Federated were warring with Fingerhut over escalating costs. People close to eToys tend that Fingerhut was in some cases, sending out partial orders, so eToys had to pay for two se-

FINGERHUT'S AVALANCHE OF ERRORS

Federated Department Stores acquired Fingerhut in February, 1999, in hopes of using its Internet and catalog expertise to boost Federated's fortunes. Since the \$1.7 billion buy, plans haven't worked out.

Overblown Expectations

Federated planned to use Fingerhut's Net savvy to boost its overall Internet sales to \$2 billion to \$3 billion by 2004. With Federated's total Net sales expected to hit just \$180 million this year, it's clear that was way too optimistic.

Troubled Web Sites

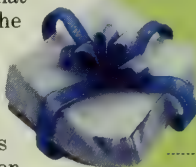
With visions of becoming a larger Web retailer than Amazon.com, Fingerhut launched eight sites, including auctioneer AndysAuctions.com. But Federated pulled the plug on most of the sites in October. AndysAuctions is being closed, and four other sites will be folded into fingerhut.com.

Faulty Fulfillment

Because of its expertise in filling catalog orders, Fingerhut thought it could provide warehousing and distribution for other e-tailers. It won fulfillment contracts with 22 companies, including eToys and Walmart.com. But e-tailers complained of slow service and poor inventory controls. Only eight fulfillment contracts remain.

Bad Debt

After Fingerhut made it easier for its traditional catalog customers to use credit to buy goods, its unpaid debts soared. Federated disclosed in July that higher reserves to cover bad debts will reduce its earnings this fiscal year by \$350 million to \$400 million.



STILL WAITING FOR HIGH-
SPEED INTERNET ACCESS?



JUST LOOK UPSM



of waiting for broadband? StarBandSM is here now. StarBand is the
company to deliver two-way, high-speed Internet access via satellite to consumers.
ays on and it's available virtually everywhere. If you can see the southern sky,
get StarBand. Just look up: StarBand is available now at selected DISH NetworkSM
and through MSN[®] HighSpeed - Satellite at your local RadioShack[®] store.
info go to www.StarBand.com or call toll-free 1-800-421-3464.



STARBAND.

www.StarBand.com

shipments. In other cases, Fingerhut took so long to assemble orders that eToys had to pay for express shipments. By February, the parties broke off their contract, and Fingerhut launched an arbitration suit, claiming eToys had failed to pay for \$14.8 million in services. The dispute has only gotten messier since. In August, eToys CEO Toby Lenk said in an article in *The Boston Globe* that he had fired Fingerhut—prompting Fingerhut to sue for defamation. Neither side will comment, but in court documents, Federated blames the fulfillment problems on eToys' own disorganization.

EToys wasn't the only one questioning the quality of Fingerhut's fulfillment. Mark Amodio, head of e-commerce at Children's Place, a New Jersey children's-apparel retailer, says its Net orders sometimes are sent in two shipments or are canceled because of difficulties in tracking inventory. MountainZone.com and Walmart.com also had inventory troubles. Tysoe concedes that the fulfillment business has been challenging but declined to discuss specifics.

DEBT SQUEEZE. The Fingerhut situation went from bad to worse this year. First, Federated's stock slid nearly 31% from the first of the year through the end of April as investors got more nervous about Net retailers. Then, in July, Federated disclosed that rising delinquencies in Fingerhut's credit business would cut earnings this year by at least \$350 million. Federated blamed the rise in bad debt on aggressive lending practices, which occurred under Lansing. To turn the business around, Federated is tightening credit standards—but that is expected to cut Fingerhut's core catalog sales by as much as 39% this year, to \$850 million.

In October, Lansing's grand vision abruptly came to an end. Federated announced that all five Web sites he started will be closed or folded into other sites. The company will no longer invest in e-commerce companies. And Federated will stop pursuing new third-party fulfillment contracts. Tysoe says it is too costly to serve dot-coms.

In hindsight, he says, it's easy to question the wisdom of the acquisition. Was the deal a mistake? "I have to let others tell you that," he says. With Federated's market capitalization down about 18%, to \$7 billion, the answer is pretty clear.

By Robert Berner in Chicago

VIDEO GAMES

POW! BIFF! WHACK!

Sega is gaining but still can't catch Sony

In the cutthroat video-game business, this Christmas season features an epic shoot-'em-up between Sega Corp. and Sony Corp. You could call it the X-mas Deathmatch—except, almost everyone agrees, the players are poorly matched. Sega is the struggling underdog, and this could well be the company's last great battle.

In fact, earlier this year, many analysts had already given up on Sega. Through much of the past 18 months, the buzz surrounding Sony's upcoming PlayStation 2 game console was so thick you could slice it. Sales were roaring in Japan, and its Oct. 26 U.S. launch was sure to be a knockout. Sega's Dreamcast machine, meanwhile, was posting decent sales, but never stole the thunder from older, more primitive consoles from Sony and Nintendo Co.

Then, last summer, Sega got a big break. Gremlins crept into Sony's semiconductor production process, forcing the company to trim U.S. sales projections. Instead of the one million-plus PS2 units Sony had promised by Thanksgiving, the company was suddenly talking about 500,000 to 700,000.

SMART ALECK. Sega leaped into action. At the end of August, Sega of America President Peter Moore slashed Dreamcast prices to \$149 from \$199 and rushed thousands of extra units out to retailers. In early October, he approved an unorthodox ad campaign whose pitchman was a smart-aleck kid snidely offering condolences



UNDERDOG: Sega has the most games but Sony's PlayStation has the edge

to Sony. And Sega made sure gamers were aware that only 500,000 units were available for the PS2, compared with 200 for Dreamcast.

Despite all that, the results have been mixed. In the past few weeks, Dreamcast's unit share of the \$2 billion U.S. game-console market jumped to 20.5%, from 12.1% in September— inching up on PS2's 26%. But just 2.6 million units sold to date is far short of the 5 million units analysts say it needs to attract new developers. That hurts, because revenue on games is where Sega makes most of its meager profits. Meanwhile, Sega's share of total U.S. industry revenue has slumped to 19.8% from 31% last Christmas, while Sony's stake is 48%. And Sega is strapped for cash, too. Unlike its competitors, it lacks the resources or the will to go for a new console.

Instead, for future revenues, Sega is banking on an online game site called SegaNet, crafted around Dreamcast.

That's a novel idea. But if money doesn't roll in, Sega's management may just compound its losses on Dreamcast, by cutting production, and throwing away its thing it's got into its core business and game software business. Considering the estimated \$163 million loss on the console so far, that may be Sega's smartest move yet.

By Cliff Edwards
San Francisco



GAMES PEOPLE PLAY

	MARKET SHARE (UNITS SOLD)	
	Q4'99	Q4'00*
DREAMCAST	18.8%	17.5%
NINTENDO 64	32.1	14.8
PLAYSTATION	49.1	31.6
PLAYSTATION 2	**	36.3

*Through Nov. 18

**Not yet introduced

DATA: PC DATA

Networking Solutions

WHAT
OUR NETWORK CARRIED MORE?

NETWORKS ■ PHOTONIC NETWORKS
AT IF ■ OUR NETWORK CARRIED MORE?
terabits DWDM
SYSTEM ON A CHIP
MOBILE INTERNET

ALL THE NETWORKING EXPERIENCE YOU COULD ASK FOR IN ONE COMPANY.

As one of the world's most trusted developers of intelligent solutions in networks, computer systems and semiconductors, NEC can bring you the bandwidth, reliability and longevity you need to succeed. Our newest photonic network platform will transmit 3.2 terabits per second – that's the equivalent of sending 1,600 complete feature length films in just one second, using just one strand of a fiber optic cable. See how the advanced technology and experience of NEC can help you build faster, more reliable networks today, and far into the future.

imagination
solutions

NEC

www.nec.com

MEET THE 'COMPLETELY DIFFERENT EDS'

Despite a drastic reorganization and suddenly satisfied customers, skeptics remain

When Electronic Data Systems Corp. landed the U.S. government's biggest-ever technology outsourcing deal—a \$7 billion contract to build and maintain computer networks for the U.S. Navy and Marine Corps—Champagne corks popped and Sousa marches played over loudspeakers at the sprawling EDS headquarters in Plano, Tex. For CEO Richard H. Brown and his team, the surprise win over three rivals was proof positive that the once foundering technology-services giant was back. Wall Street was impressed, too. The company's stock jumped nearly 10% after the Oct. 6 announcement.

But for many investors, it's too soon to celebrate. Despite nearly two years of painful cost-cutting and reorganizing and six consecutive quarters of rising profit margins, EDS still must prove that it can reignite its sluggish top-line growth. Brown has done "an exceptional job" of restructuring EDS and boosting profitability, says analyst David M. Togut of Morgan Stanley Dean Witter. "But [revenue] growth is much more difficult than restructuring."

TRAILING THE FIELD. Indeed, despite seven quarters of record contract signings totaling nearly \$42 billion, EDS's third-quarter revenue was virtually flat from a year ago. If you strip out revenues from former parent General Motors Corp.—a flat-to-declining business that makes up 18% of EDS's sales—and exclude the effect of divestitures and currency swings, the growth was a healthier 8%. Still, that's well below the market rate of 14% growth for the businesses that EDS is in—everything from its strategy consultancy, A.T. Kearney, to managing data centers and creating electronic marketplaces. With investor expectations outstripping results, the



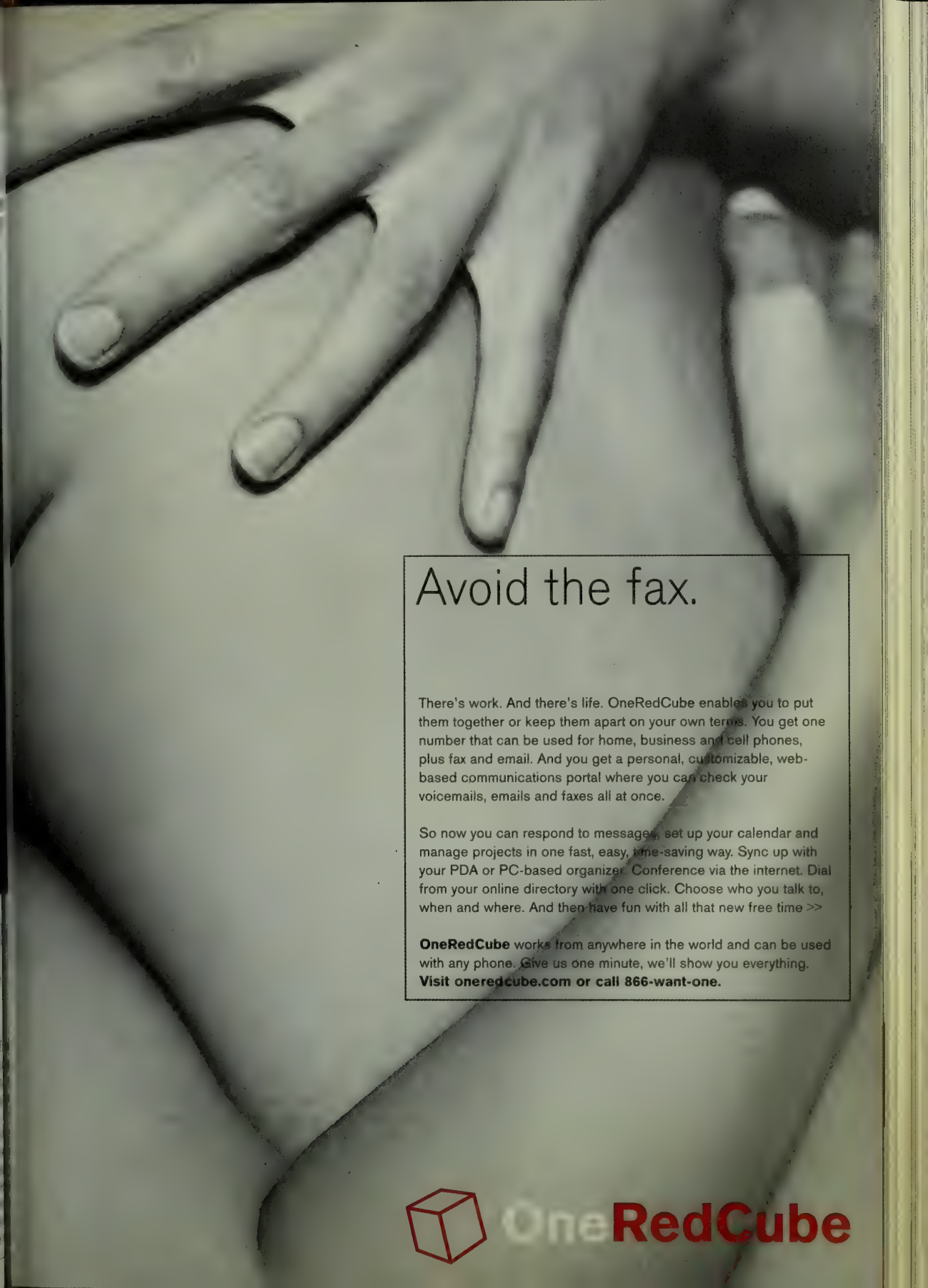
FOCUS CEO Brown says double-digit growth for 2001 is in the pipeline. Predictions aside, third-quarter revenues were lackluster

stock now trades at about \$56—well below its 52-week high of \$76 in February.

The unflappable Brown, former chief of Cable & Wireless PLC, counsels patience. "We're still extremely confident that the revenue is there to get," he says. With most of the restructuring completed, he says the recent contracts and improved customer renewal rates—86% now, vs. an abysmal 70% in 1998—will produce faster growth in the fourth quarter and double-digit gains in its

non-GM business next year. "There's absolutely no flaw in the performance of EDS," insists Brown, pointing to the billion-plus backlog of contracts and rich pipeline of potential deals.

Brown, a New Jersey native who joined EDS in January of '99, is only IT-services chief struggling with sluggish growth. Computer Science Corp., Perot Systems, and other industry players have had similar disappointments. Heavy spending on



Avoid the fax.

There's work. And there's life. OneRedCube enables you to put them together or keep them apart on your own terms. You get one number that can be used for home, business and cell phones, plus fax and email. And you get a personal, customizable, web-based communications portal where you can check your voicemails, emails and faxes all at once.

So now you can respond to messages, set up your calendar and manage projects in one fast, easy, time-saving way. Sync up with your PDA or PC-based organizer. Conference via the internet. Dial from your online directory with one click. Choose who you talk to, when and where. And then have fun with all that new free time >>

OneRedCube works from anywhere in the world and can be used with any phone. Give us one minute, we'll show you everything. Visit oneredcube.com or call 866-want-one.



OneRedCube

es and frenzied Net initiatives in 1999 dampened sales earlier this year. And the strong dollar is pinching international players such as EDS, which gets 42% of its revenues from overseas.

Still, EDS faces some self-made hurdles. As part of Brown's \$1 billion cost-cutting effort, the company terminated about 125 contracts and sold units with subpar profits. That left a \$600 million hole in revenues to fill this year. Brown let a third of his salesforce go to make room for better performers but only recently staffed up to prior levels. And a massive shuffling of executives followed some 13,500 layoffs and early retirements, hurting critical sales relationships with existing customers.

Brown's drastic medicine was sorely needed. The scrappy business founded by Ross Perot and sold to GM in 1984 had grown fat and complacent. Some 48 "strategic business units" operated as separate fiefdoms, bloating costs and confusing customers. By the mid-'90s, EDS was an also-ran in the budding world of the Internet—and had ceded leadership in services to a revitalized IBM. In 1996, EDS was spun off by GM and forced to cut prices for its former parent to lock in a new, long-term services deal. EDS quickly found itself struggling to meet sales and earnings targets.

Brown hit EDS like a neutron bomb. Only 10 of the 37 top officers who were there when he arrived remain. The 48 fiefdoms have been streamlined into four business divisions. A weekly report ranks the top 40 managers against their sales targets and is shared with all of them. A computerized "service excellence dashboard" shows how more than 1,000 contracts are performing—with red highlights on the trouble spots, as ranked by customers and EDS executives. Brown regularly visits customers and employees and responds to the hundreds of e-mails he gets monthly from workers. "There's a sense of urgency that hasn't been there before," says EDS Vice-President Robb R. Rasmussen.

Pleased customers have taken notice.

REACTION Critics contend that EDS lacks truly innovative e-business expertise. In November, it launched a soup-to-nuts Web un

William C. Van Faasen, CEO of Blue Cross & Blue Shield of Massachusetts Inc., says Brown stopped by for a visit to hear his concerns within two months of taking the top job at EDS. In seven years as CEO, it was the first one-on-one meeting Van Faasen had had with an EDS chief. "They listen better" now, he says. Jack Sandner, CEO of FreeDrive Inc.—which offers data storage services via the Net—was astonished at EDS's newfound focus. In more than a decade as chairman of the Chicago Mercantile

sourcing chief Douglas L. Fre says such deals, still 75% of EDS's revenues, are getting smaller and slower than the 10-year megacontracts of a few years ago. And profit margins are getting slimmer as competition up. Customers are looking for outsourcing deals built around specific technologies or business processes, like over the management of the human resources or accounting departments. IDC analyst Traci Gere. That flexibility "has not been a hallmark of EDS in the past," she says.

NEED FOR SPEED. EDS will need to be even speedier if it wants to be a major player in e-business services, the fast-growing tech-services market: Research house GartnerGroup expects it to increase more than sixfold by 2000 to \$158 billion. EDS's e-business customers often cite the company's good work, but give it mixed reviews when it comes to providing "really innovative, cutting-edge types of solutions," says Gartner analyst Frances Karamouzis.

To improve on that score, EDS last November launched bluesphere, a new Web site to offer customers Web design, integrated with back-end applications such as billing and procurement. Analyst E. Keirstead of Lehman Brothers says figures giants like EDS and IBM are positioned to take market share from e-business niche players such as Salesforce.com and Razorfish. "The projects that are left are larger, more complex deals requiring global companies with experience integrating heavyweight core systems," Keirstead says.

With most of the jolting change behind it, will EDS finally take off? Lynch & Co. analyst Stephen Clellan thinks so. He figures non-core revenues—the number most analysts track—will grow 11% next year, and core revenue a paltry 4% increase in 2000. Earnings should jump 15%, to \$1.3 billion. Sandner admits, profitably implementing complex deals is where the real money is.

Even EDS executives concede they've done the easy part in pruning the company. Now, they've got to deliver on growth promises to reap their rewards on Wall Street. Until then, the best way to turn down the Sousa and those Champagne flutes in storage is to

By Wendy Zellner in Plain

TROUBLED TIMES AT EDS: DICK BROWN'S TURNAROUND PLAN

PROBLEM	SOLUTION
Bloated costs	Cut 13,500 jobs and sold assets to slash costs by \$1 billion annually.
Muddled marketing strategy	Replaced complex structure of 48 units with four lines of business to focus marketing message and foster better cooperation among divisions.
Dissatisfied customers	Developed a computerized "service excellence dashboard" to track how customers and EDS execs rate performance on contracts.
Insular corporate culture	Partnered with hardware and software suppliers, such as EMC and Ariba, to extend EDS's technology capabilities and sales reach.
Stodgy reputation	Built skills in areas such as Web-hosting, data-storage, and online exchanges to tap into hot e-commerce markets.

Exchange, Sandner had worked with EDS and found the experience to be "like rowing a boat in mud." But less than two weeks after Sandner and Brown chatted at a White House dinner in August, EDS teams were combing through FreeDrive. Ten days later, EDS had agreed to invest in FreeDrive and to provide Web-hosting and data-storage services to the startup. "This is a completely different EDS," marvels Sandner.

EDS has no choice but to be faster and nimbler. Even its bread-and-butter outsourcing business—handling data centers, networks, and other tech chores for customers—is rapidly changing. Out-

*Living another 40 years would be great
if our money wasn't going to run out in 30.*

*We're Debbie and Joe, 45 and 41.
I'm an accountant. He's in sales.
We're going to spend our retirement
exploring the six other continents.*

RETIREMENT PLANNING

Got a lot of plans for our retirement. Outliving our money isn't one of them. So the pros at MetLife showed us how, with the right planning and investments, we can make our money last longer down the road. They offer a range of products like IRAs, mutual funds and annuities to help us through those retirement years. And we plan on having a lot of them.

800-MetLife or visit us at www.metlife.com.

GET MET. IT PAYS.®

MetLife 
Financial Services

MetLife Insurance Company, One Madison Ave., NY, NY 10010. Mutual Funds and Financial Planning Services offered by MetLife Securities, Inc., NY, NY 10010. ©2000 Metropolitan Life Insurance Co., NY, NY E00074L3Q MLIC-LD PEANUTS © United Feature Syndicate, Inc., www.snoopy.com

By Timothy J. Mullaney

THIS RACE ISN'T EVEN CLOSE

Conventional wisdom is a funny thing. This time last year, Amazon.com Inc. was king of the world. The company was worth more than \$40 billion, CEO Jeffrey P. Bezos was *Time's* Man of the Year, and thousands of you—you, because I can't buy tech stocks—were getting rich going along on Jeff's ride. This year, to some, Amazon looks more like the *Titanic* than the most famous line in the movie about it. Its market cap has slid to a lowly \$9.4 billion. And to hear some pundits tell it, the big boys are coming to get Jeff and kill his company dead, the biggest bul-

laxing point of view, for what you get, and when I've shopped for complex goods such as consumer electronics, I've found good sales help. But I want my shopping experience to include a bit of entertainment, whether I'm online or not. Part of the value a traditional store provides is giving me ideas and making me feel comfortable. With their "greeters" and easy-

that its International Standard Book Number is 046503912X. This data may help Walmart.com's warehouse keep track of inventory, but it does not do diddly for me.

It's a different scene at Amazon.com. You get reviews from Amazon itself from *The New York Times*, and from Amazon users who love and hate the book. You're also alerted to related

books, just as a good salesperson would do. And you learn that sales have been heavy to people working for the U.S. House of Representatives and the Justice Dept.—a measure of the book's influence.



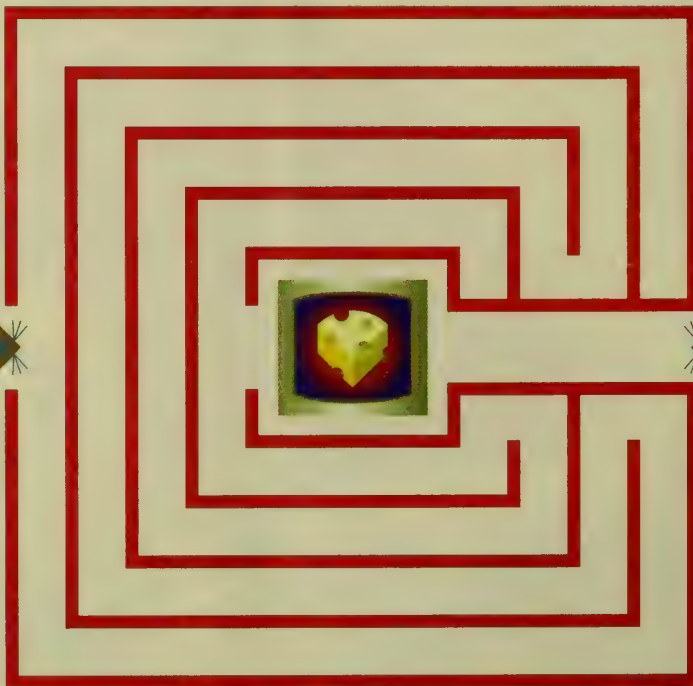
ly of all being Wal-Mart Stores Inc.

Trouble is, the case for Amazon getting crushed by Wal-Mart doesn't stand up when you do some side-by-side comparing of their Web sites. What's wrong with Walmart.com?

Put simply, it settles for taking orders for the products people come looking for rather than enticing them to buy things they hadn't even thought of buying. Amazon is much more ambitious. Once you've visited the site, it knows who you are when you come back and suggests items based on what you bought before.

Customers can make a purchase with one click of the mouse. The site's easy to use—and fun to boot.

Our little test was simple: I shopped at each e-store for books, toys, records, and electronics to judge the convenience and the value each site provides. I like Wal-Mart's traditional stores fine—they're



This isn't about frills. Walmart.com doesn't even give customers the basic Take electronics. I went shopping on both sites for portable CD player and boomboxes, and Amazon's superior could hardly be

to-follow floor plans, Wal-Mart stores do a pretty good job of this. But Walmart.com doesn't measure up to its own brick-and-mortar stores, much less to Amazon.

In fact, it's just plain boring. The eye-glazing treatment begins at the home page, which is a long list of categories. But to understand Walmart.com's true dullness, try shopping for books.

Consider Stanford law professor Lawrence Lessig's *Code & Other Laws of Cyberspace*. At Walmart.com,

you learn in three sentences that *Code* was published last year, is "categorized by the Library of Congress as intellectual property," that it weighs 1.32 pounds as shipped, and

missed. Both sites had plenty of good machines at prices I was willing to pay, but only Amazon had enough information to help me make good decisions. On a GPX CD player, for example, the Amazon review and 38 user reviews were supplemented by a table that let me compare the features with those of other players. Simple one-click boxes referred me to accessories and batteries. At Walmart.com, I got a jargon-filled quickie list of features with no explanations and the news that a similar player weighs 1.9 lb. I also got few choices, which surprised me. I bought the player at Amazon.

The personal touch matters online as well as off, and Walmart.com just doesn't bother to reach out to shop-

WEB REVIEW

Amazon.com vs. Walmart.com

HEWLETT-PACKARD EZENIA! ERICSSON TRELLIX ALCATEL AUCTIONROVER.COM LANTE BOO
J.D. EDWARDS COMMERCE ONE ICG COMMUNICATIONS FOOD.COM DELOITTE CONSULTING IXI
TICKETWEB TRELLIX MICROSOFT ECAMPUS.COM PEOPLESOFT ROCKWELL SOFTWARE LANTE
PEOPLESOFT J.D. EDWARDS LANTE AUCTIONROVER.COM ERICSSON ALCATEL IBM BOOKS

IBM's software is built with precision. With vision. With Rational.

NETWORK ASSOCIATES EZENIA! MICROSOFT FOOD.COM SUN MICROSYSTEMS ALCATEL HEWL
ERICSSON FOOD.COM SUN MICROSYSTEMS RECRUITSOFT.COM CALICO COMMERCE COMMERC
COMMERCE ONE IBM TICKETWEB MICROSOFT RECRUITSOFT.COM TRELLIX EZENIA! J.D. EDW
PARTS AUCTIONROVER.COM BOOKSONLINE.COM CASE PARTS CONTEXT INTEGRATION ECAMPUS

the world's largest IT company and a leading provider of e-business software
solutions. IBM uses Rational's e-development solutions, from visual modeling to
testing, in conjunction with IBM's VisualAge® application development tools
and WebSphere software platform. They're not alone. Thousands of companies
apply Rational's software engineering best practices, unified tools and
to increase their software development speed and quality. In fact, 47 of
the top 50 e-businesses use Rational's software. Want to build software better
faster? Visit us at www.rational.com/IBMsucces1 for the complete IBM story.

Rational
the e-development company

Rational Software Corporation. Rational, Rational logo, the e-development company, Rational Suite PerformanceStudio and ClearCase are trademarks or registered trademarks of Rational Software Corporation in the United States and other countries.

VisualAge and WebSphere are registered trademarks or trademarks of IBM Corporation in the United States, other countries or both.



pers the way Amazon does. In category after category, I found Walmart.com's recommendations to be off target. Why? They weren't in any way tailored to my tastes and interests. Among the new CDs it offered me on a single list of "new releases": ones by Pope John Paul II and the rapper Nas. In contrast, on Amazon, once I filled in a questionnaire about myself, it showed me all kinds of books and movies I would consider buying, including Stephen King's *On Writing: A Memoir of the Craft*, which I purchased. I was stunned by how quickly the site zoomed in on my interests.

In fact, if anything, Amazon was a little too responsive. Just when I thought I had it trained to recommend stuff I like, I went and bought one lousy Backstreet Boys CD—for a teenager, not for me. Amazon decided I was even more juvenile than I actually am and offered as a top video pick *Our Lips Are Sealed*, starring the Olsen twins. It had no way of detecting that I had bought a CD for someone else. The choice was,

to put it mildly, a far cry from the boxed set of *The Sopranos* videos that Amazon had been pitching me before.

While Amazon took me almost effortlessly to where I wanted to go, Walmart.com's navigation features missed the mark more often than not. It couldn't locate some of the popular toys for 3-year-olds even though one toy in question was from the well-known brand Playskool. My trip to its online photo store, which Walmart.com promotes on its home page, landed me at a broken link, one of many niggling performance problems I noticed. My search for romantic comedies starring Tom Hanks turned up *Nightmare at 43 Hillcrest*, a drama about a wrongful accusation of drug-dealing, before his hit *Sleepless in Seattle*.

Prices at the two sites were roughly equal. I would have paid the same \$14.97 at both for cyclist Lance Armstrong's *It's Not About the Bike*. Walmart's price beat Amazon's for the Britney Spears CD *Oops I Did it Again*, \$11.38 to \$13.28. But Amazon

underpriced Walmart a Sony Mavica digital camera, \$449.99 to \$499. Shipping costs at the two sites were about the same.

On Walmart, for arrival in three business days, shipping for a music CD cost \$2.88, and \$3.57 for a DVD. Amazon's price: \$2.98 for either a CD or a DVD. Shoppers who are really concerned about price should probably bag both sites and use shopping "bot" sites that comb the Web for the lowest prices on specified goods.

To sum up, Spike Lee said it best in a Nike Inc. commercial about women's hoops a few years back: Basketball is basketball, and athletes are athletes. Translation: It doesn't matter if you started out as an e-store or a bricks-and-clicks store. What matters is whether or not you've got game. Right now, Amazon.com is a very good store, and Walmart.com is still learning the online fundamentals.

Mullaney writes the Clicks & Mobs column for Business Week.

SHOOTOUT AT THE CHRISTMAS CORRAL

Conventional wisdom has it that dot-com retailers will be toast as traditional players such as Wal-Mart Stores make an even more aggressive push online. To find out if that's true, we tested Walmart.com against Amazon.com, the leading online retailer. Forget the revisionist hype: Amazon is better. A lot better.

CONTENT	Amazon kicks Walmart's butt when it comes to telling you about the goods you're considering buying. At Amazon, you get reviews and, in some categories, detailed comparisons between models. Walmart usually gives you two sentences and a UPC code, plus useless info about how much the product weighs. Looks like it was designed more for the shipper than the shopper.	AMAZON.COM click	WALMART.COM MAS
CONVENIENCE	Walmart has a reasonably convenient checkout process, but Amazon's one-click checkout has it beat hands down. It's the most dangerous thing to happen to impulse buyers since the credit card. Also, Walmart falls below par because it's often difficult to find what you want, though it usually carries more stuff than Amazon.	click	MAS
VALUE	In keeping with the spirit of this holiday season, bargains abound at both sites. Walmart seems a bit cheaper, but not for every item. Both can be routinely beaten by shopping bots for the most price-conscious consumers.	click	click
FUN	By far the biggest thing separating these two sites is how much care—and even joy—goes into how the goods are presented. Amazon recognizes you when you arrive and offers you merchandise related to your tastes. Walmart seems like an online warehouse. You're left on your own to wander through the aisles.	click	MAS

DISTANCE LEARNING 2000



*I*n a business world where the only constant is change, continuing education is becoming a mandatory course of action. But what if your professional advancement has been stalled by geographic or time constraints? Thanks to the boom in online educational programs, you can take a lesson from executives worldwide who are increasingly turning to the Internet to improve their skills without interrupting their careers.

Whether you're hoping to move up in your current job or transfer to another industry, BusinessWeek's Distance Learning Directory can help you choose the right virtual classroom to meet your real-world demands. This new directory is an introductory guide to the ever-expanding roster of prestigious schools offering undergraduate and professional programs online. And with a growing interest from overseas for a U.S. education and constant need to update career skills, you now have more educational opportunities than ever to remain in demand and on top of the latest developments.

To stay competitive in a dynamic job market, you have to be able to act on, rather than react to, the newest trends. The BusinessWeek Distance Learning Directory provides you with critical resources to help you find the right online curriculum.

Now
you can
earn an
MBA
without
a
Bachelor's
Degree.

Introducing the
Certificate Access
Program



For more information

www.open.edu

1-800-232-7705

Virtual learning.

Virtually anywhere.

Earn your MBA or
Management of
Technology here.

Knowledge to Go Places
Pioneers in Distance Education

www.biz.colostate.edu
1-800-491-4MBA

Colorado
State
University

Reach Your Potential

CyberU Will Take You There
The Corporate Education Solution

- Comprehensive Training Platform
- Best-in-Class Online Education
- Personalized Employee Training
- Cost Effective, Rapid Deployment

CYBER U

www.cyberu.com

310.581.2005

CES@cyberu.com

**COLLEGE
LEARNING.comSM**

Education & Training

...anywhere you want

1-561-799-1211

email: info@CollegeLearning.com

Ten Post Office Square, Suite 600S, Boston, MA 02109, USA

ANYTIME, ANYPLACE.

OUR COMMUNITY OF LEARNERS IS AT YOUR FINGERTIPS



www.dcs.ecu.edu

Professional degree and
certificate programs that fit
today's lifestyle.

m
EAST
CAROLINA
UNIVERSITY

An experienced leader in on-line learning technology

Suffolk Online eMBA

Complete your entire MBA online.
 24-hour-the-clock course accessibility
 Additional residential courses &
 International seminars
 Distinguished Faculty
 CSB-Accredited
 Full-time or Part-time Study

www.SUFFOLKEMBA.org

The Graduate Programs of
**THE SAWYER SCHOOL OF
 MANAGEMENT**

Suffolk University
 Boston, Massachusetts

The Future of Higher Education



www.harcourt.edu

Harcourt Higher Education

AN ONLINE COLLEGE

Harcourt Higher Education • 43 Thorndike Street, Bulfinch Square • Cambridge, MA 02141 • 1-800-856-9635 ext. 1044

DISTANCE LEARNING 2000 COMPANY INFORMATION

BizLink
businessweek.com/BizLink

For more information on the companies in this directory, you can select from the three easy options listed below through BizLink. Companies will be found in the December 18, 2000 issue.

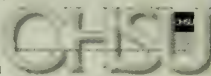
Colorado State University
 CyberU
 East Carolina University
 Harcourt Higher Education

5. International Center for Distance Learning
 (CollegeLearning.com)
 6. Oregon Health Sciences University
 7. Suffolk University
 8. United States Open University

Medical Informatics is the application of information technology to health care. Oregon Health Sciences University offers an eight-course Graduate Certificate Program in this area. The program is ideal for mid-career individuals seeking to enhance their knowledge and skills. The program is flexible, completely Web-based, and offers campus library access. Visit the program Web site at www.ohsu.edu/biointformatics/distance/ or test a demo at distance.ohsu.edu.

For more information, contact Program Administrator, Division of Medical Informatics and Outcomes Research, OHSU, at:

phone 503 494-4563
 fax 503 494-4551
 e-mail
informat@ohsu.edu



Internet
 To request information and/or link directly to company
 Web sites through our electronic reader service program@
businessweek.com/BizLink

Enter the desired number(s) listed above, CLEARLY print your
 address, phone and fax numbers and fax this page
 (any of this page) to the USA +1-941-596-3019

Fax this page and mail to: Business Week, c/o
 BusinessWeek.com 1951 J & C Blvd. Naples, Florida 34109-9962

BusinessWeek

Name	_____
Business	_____
Address	_____
Code/City	_____
Country	_____
Phone	_____
Fax	_____

To Reserve Space in the 2001 Distance Learning Directories, Call 1-800-424-3090.

HEIR TODAY, GONE TOMORROW

How top-flight execs McNerney and Nardelli left GE with breathtaking speed



3M: GE JUNIOR

3M's far-flung divisions should
sales of \$17 billion this year

DIVISIONS

EXPECTED 2000

INDUSTRIAL MARKETS

Tapes and abrasives for industry

TRANSPORTATION, GRAPHICS, AND SAFETY

Signage and respiratory products

HEALTH CARE

Medical and dental products

CONSUMER AND OFFICE PRODUCTS

Post-it notes and Scotch tape

ELECTRO AND COMMUNICATIONS

Electronics and telecom components

SPECIALTY MATERIAL

Textile, packaging, and Scotchgard

DATA: 3M

It took all of five business days for Corporate America to snap up two of the most sought after CEOs-in-waiting, General Electric Co. alumni W. James McNerney Jr. and Robert L. Nardelli. The two veterans, both top contenders for Jack Welch's CEO job, were expected to leave their posts. But their swift departure only underscores the urgent need for top-flight talent at some of the nation's largest and most vaunted corporations. Indeed, Welch noted that only one hour after GE announced Jeffrey R. Immelt as his successor, headhunter Heidrick & Struggles was on the phone inquiring about the two also-rans.

And for good reason. Both men have impressive résumés and endured test after tough test from Welch. But the GE pedigree also means they will face soaring expectations from investors—just look at the 11% jump in 3M's share price the day McNerney signed on. So now comes a new test: Can these men deliver outside the confines of GE?

MCNERNEY: A SHORT JUMP FROM GE TO 3M

As he sprints through a series of get-acquainted calls with the media, W. James McNerney Jr., the newly named chairman and chief executive of 3M, begs for more time before laying out his action plan. Only nine days earlier, McNerney still was in a three-man race to succeed his legendary boss at General Electric Co., chairman and CEO John F. Welch. Now, after losing out at GE, he is set on Jan. 1 to become the first outsider to run 3M in its 98-year history. "I've been here only three hours," McNerney pleads.

It shouldn't take the former president of GE's \$10.5 billion-a-year aircraft engines unit long to feel right at home. Although clearly dwarfed by GE, 3M is a whole lot like the industrial powerhouse McNerney, 51, left behind on Dec. 5 after 18 years. 3M is highly regarded for its premium brands, market dominance,

global reach, and diverse operation. Indeed, the St. Paul (Minn.) conglomerate boasts a lineup of more than 60,000 products, from Post-it notes and O sponges to those familiar lime-green highway signs and a new family-mune-response drugs. "This is very similar to the company that Jack Welch took over 20 years ago," observes William Fiala, an industry analyst at Edward Jones. Like GE, 3M is "a respected company that is chugging right along."

And with McNerney in charge, investors foresee even better times. Known for his skills at rallying employees and attention to key customers, McNerney turned his division into the profitable industrial unit at GE. At GE, the management expertise that McNerney's protégés are known for at GE, McNerney was like a star quarterback in the free-agent market.

He'll have a lot of great assets to work with at 3M. The company

Seamless e-business demands seamless software.

E-Business Kit	E-Business Suite	
Microsoft	Database	Oracle
Emprise	Marketing	Oracle
Siebel	Sales	Oracle
Clarify	Support	Oracle
3M	Webstore	Oracle
Commerce One	Procurement	Oracle
AP	Manufacturing	Oracle
?	Supply Chain Mgmt	Oracle
AP	Financials	Oracle
PeopleSoft	Human Resources	Oracle

Get the complete
E-Business Suite
from Oracle.

Or an e-business kit
from lots of vendors.
The choice is yours.

ORACLE
SOFTWARE POWERS THE INTERNET™

Attend Oracle AppsWorld,
February 2001, Paris and New Orleans.
For details visit www.oracle.com/appsworld

been able to regularly reinvent itself, thanks to a research-and-development budget that tops \$1 billion a year, and a knack for rifle-shot acquisitions. Already, a third of its sales come from products introduced within the past four years. An example: Abrasives that had been used in everyday sandpaper have been refined and now are used to polish semiconductors. Notes McNerney: "A big mistake I could make would be to declare these businesses mature before their time."

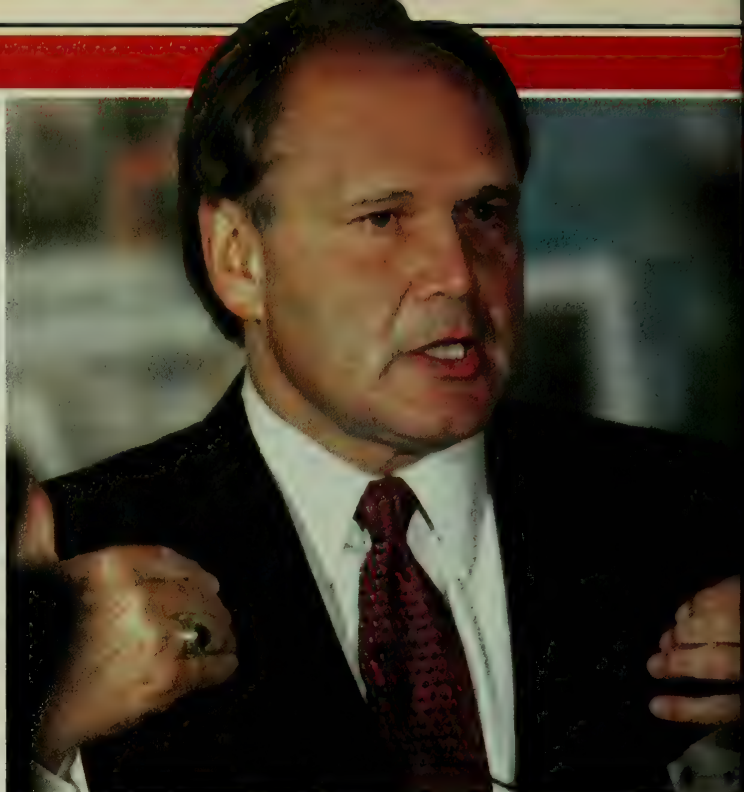
SHARP FOCUS. After an embarrassing stumble in 1998, when management was blindsided by Asia's financial collapse, 3M is again posting double-digit sales and profit growth. The corporation expects its operating earnings to hit \$3.15 billion in 2000, up more than 10% from 1999, on record sales of \$17 billion. Meanwhile, its share price is at an all-time high, hitting \$119 on Dec. 5, as investors celebrated McNerney's appointment.

McNerney will attempt to improve on that stellar performance with management practices he learned from mentor Welch. Among them: a sharp focus on quality improvement, cost-cutting, and consistent, best-in-industry sales and profit growth. "What he needs to do—and what he will do—is inject some of GE's performance-minded culture into 3M," predicts Jack L. Kelly, an analyst with Goldman, Sachs & Co.

3M's board began its search for a new chief executive last spring, when Chairman and CEO Livio D. "Desi" DeSimone confirmed his intention to step down by July, 2001. But 3M directors essentially put the process on hold until GE's board declared Welch's successor. That finally happened on Nov. 27, when GE went with Jeffrey R. Immelt, president of the company's medical-services unit.

McNerney, a popular and athletic Harvard MBA grad who considered Lucent Technologies Inc. before agreeing to move to 3M, says that he will need months before he puts together his team and "stretch" goals. But he says two units have already caught his eye. One is the \$3.4 billion health-care division, where sales and earnings are forecast to grow more than 10% a year, thanks in part to its pipeline of pharmaceuticals. The other is the \$2.5 billion electro and communications unit, which is expected to grow 25% annually on the global buildout of the telecom and power-generation industries. The businesses may not approach GE's scale, but those are growth rates that even GE would like.

By Michael Arndt in Chicago



NARDELLI: TAKING ON A FIXER-UPPER

Can Robert L. Nardelli, who made his name at General Electric Co. selling \$40 million turbines to utilities, make the switch to selling 3¢ washers and screws to weekend handymen? This is the question, now that Nardelli—a runner-up in the John F. Welch succession sweepstakes—has been tapped to head up Home Depot Inc. in Atlanta.

For all his successes in reviving GE's locomotive and turbine divisions, Nardelli has little experience in consumer businesses, much less the hardware retailing market that Home Depot has come to dominate.

STUMBLE. That's part of what makes the appointment, which was announced on Dec. 5, so fascinating. In any case, Nardelli won't have much time to learn the ins and outs of the retailing business. After a two-decade run, during which Home Depot pushed many rival retailers into bank-

ruptcy, its recent stumbles—it ready signaled that it will miss expectations for a second quarter—have left the company trading 35% below its high March. Nardelli "is coming in at a time when the company is facing its greatest challenges in many years," says Mark D. Mandel, an analyst with Robinson-Humphrey Co. in Atlanta.

While Home Depot co-CEO Arthur M. Blank, whose problems largely to the industry collapse in the price of lumber makes up nearly 20% of Home



AS GROWTH SLOWS...

Home Depot's same-store sales are slowing as the economy weakens

8.5% Average annual growth in same-store sales since 1990

5% Average growth in same-store sales last two quarters

PROFITS ARE TAKING A HIT

Net income growth is slipping, too

35% Average annual growth in net income since 1990

17% Expected growth in 2000 net income

DATA: HOME DEPOT INC.; J.P. MORGAN SECURITIES INC.

sales, many investors are worried that the company's sales are expected to be flat this year with \$2.7 billion in net income. They have hit the wall that has other powerful competitors such as Wal-Mart Inc. and Target Inc. For Nardelli, real tests are ahead. He admits that he almost no moon period can't run the company any longer.

9 8 7 6 5 4 3 2 1

Rate your enterprise software investment.

If the answer isn't 10, you need to find out about Hummingbird's platform

independent software solutions. Visit www.hummingbird.com/scale6 or call 1-877-FLY-HUMM.



Hummingbird™

Hummingbird EIP

Where the future of e-Business takes flight

through the cracks in this transition," says Nardelli, who says he intends to "understand at a granular level" every dollar spent at Home Depot's warehouse stores.

Despite retailers' traditional reluctance to reach outside their industry for new leadership, those who know Nardelli believe he's up to the job. They see his achievements at GE as being comparable to the home-improvement chain's ambitious plans to more than double its size to 2,300 stores in the next four years. Above all, the 52-year-old former college football player is known for setting ambitious goals and motivating his troops to meet them. "He's a good teacher," notes Josef Schmee, a professor at Union College and a GE consultant. "He follows Jack Welch's advice that half your time be spent teaching others."

Under Nardelli, GE Power Systems in recent months installed five times the number of turbines as it did a year ago—a logistical feat that required Nardelli to place unprecedented demands on suppliers. He launched an exhaustive review of 250 suppliers, send-

ing audit teams to 85 of them to determine their ability to meet GE's increased demands. The result: Prudential Securities Inc. analyst Nicholas P. Heymann estimates that GE's Power Systems unit will generate \$2.7 billion in operating profits, more than twice the result two years ago. "My ability to really analyze the core business, look at strategic investments for growth, and leveraging e-business are the kinds of skills that are very portable," says Nardelli.

HOT PROPERTY. Still, his choice took Wall Street by surprise. Home Depot's situation wasn't considered particularly dire yet, and Blank, 58, wasn't known to be considering stepping aside. Blank had taken over as CEO when co-founder Bernard Marcus resigned from that job three years ago. Now they will be co-chairmen. In fact, Blank has been searching since last summer for a strong No. 2 executive. Nardelli became available in late November, when GE decided to replace Welch with Jeffrey R. Immelt, head of its medical-imaging division. That decision instantly turned the other two contenders for the job—Nardelli and W.

James McNerney Jr., head of GE Aircraft Engines—into America's most eligible CEO candidates. But when Home Depot approached Nardelli, he was clear he was interested only in a job. Blank then agreed to step aside. "Realizing that we had a terrific opportunity to add a business super star to Home Depot, we moved quickly," Blank said in a press release.

Given Nardelli's forceful personality and strong work ethic, Home Depot officials believe he will adapt quickly to the company's tough-love culture. Many other outsiders have found it intimidating. "He has the same value outlook on life we have," says Kenneth G. Langone, who sits on the boards of both GE and Home Depot.

For his part, Nardelli has no doubt that his broad experiences will serve him well in his new job. The truth is, serving weekend warriors probably looks like a walk in the park compared with satisfying Jack Welch.

*By Aixa M. Pascual in Atlanta
Pamela L. Moore in Connecticut
Nanette Byrnes in New York*

TINKER, TAILOR, SOLDIER, HEADHUNTER

Code names. Private aircraft. Out-of-town airports. Hastily arranged meetings. For eight days, the life of master headhunter Gerard R. Roche had all the makings of a bad spy novel. But instead of a pulp-fiction potboiler, this was the real-life story of how a kingmaker bagged the two biggest trophies in Corporate America: W. James McNerney Jr. and Robert L. Nardelli.

When the two executives were passed over in November in the race to succeed General Electric Co. CEO John F. Welch, dozens of companies started vying for their services. But Roche, the chairman of search firm Heidrick & Struggles Inc., pulled off a coup by nabbing both in rapid succession on Dec. 4 and 5. First came the announcement that McNerney would take the CEO's post at 3M. Home Depot Inc. quickly followed, claiming Nardelli as its new CEO. As Roche tells the tale, it wasn't easy.

When Welch chose Jeffrey R. Immelt as his successor on Nov. 27, McNerney and Nardelli were officially free to roam, and Roche leaped into action. With the media, not to mention



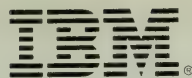
ROCHE: The headhunter's quest had all the earmarks of a bad spy novel

headhunting rivals, focused on the executives' every step, secrecy was paramount. Frantically calling board members at 3M and Home Depot to set up interviews, Roche used code names for the two executives—"Meatball" for Nardelli, a reference to the GE logo, and "Engine Man" for McNerney, after the aircraft-engine business he runs at GE.

On Saturday, Dec. 2, Roche put Nardelli on a private plane bound for Atlanta—instructing the pilot to land at an out-of-town airstrip to avoid attention—where he was to spend two grueling days interviewing with the Home Depot search committee before meeting with the full board on Monday. On Dec. 3, he put McNerney on a private plane to St. Paul, Minn., where the 3M board was waiting. Compared with the cloak-and-dagger arrangements for the interviews, getting the directors was a snap. Says Roche: "They realized they had one of the very best management talents in the world available to them.... It went extremely well."

And not just for McNerney and Nardelli, who as two of the most sought-after executives in recent history are expected to command generous pay packages. Roche won't say how much Heidrick & Struggles made, but search firms typically charge one-third to half of the executive's first-year compensation. A small fortune? Sure. But you won't hear 3M or Home Depot complain.

By Louis Lavelle in New York



THE ONE CARRY-ON YOU'LL FORGET YOU'RE CARRYING.

Introducing the **NEW** extra-light IBM ThinkPad® X20 notebook. About 1" thin and starting at 3.1 lbs. light³ – it leaves room in the overhead compartment for a second bag.

You know the routine. Waiting in line for the red-eye, the strap of your overnight bag cutting into your shoulder. We've been there, and that's why we've designed a notebook that's just about 1" thin, yet packed with a huge hard drive, a new Compact Flash slot for expansion and two USB ports for connectivity. It's the new ThinkPad X20 notebook from IBM, based on Intel® low-power mobile technologies that provide high performance for users on the move. It's just 3.1 lbs. light, but it boasts a spacious 12.1" SVGA screen and a top-mounted ThinkLight™ for easy in-flight use. And because we all know what can happen in those overhead compartments, the new ThinkPad X20 features Titanium Composite in its top cover for lightweight durability.⁴

When you're back at the office – or at your hotel – snap into the optional UltraBase™ X2 media slice to give your ThinkPad full desktop-like features. You'll have access to Ultrabay™ 2000 media drives, stereo speakers and more ports for greater connectivity. All in all, a new ThinkPad X20 notebook is the perfect solution to stay productive on the fly. As for fighting for the armrest... you're on your own.

e-business tools

DIRECT TO YOU

ibm.com/thinkpad/6444

1 888 **ShopIBM**, advantage code 6444
to buy direct or to locate an IBM reseller.

NEW IBM ThinkPad X20

300MHz Intel Celeron™ processor 500MHz
1" SVGA TFT display
1MB SDRAM
GB HDD
100MHz 56K V90 modem
ATI Rage Mobility M graphics controller
Microsoft® Windows® 98 Second Edition
Lotus® SmartSuite® Millennium Edition®
Titanium Composite cover
UltraPort connector
ThinkLight keyboard light
3.1 lbs. travel weight, slim 11" profile

NEW IBM ThinkPad X20

Mobile Pentium® III processor 600MHz
featuring Intel SpeedStep™ technology
12.1" XGA TFT display
128MB SDRAM
20GB HDD
Mini PCI 10/100 EtherJet™ adapter with
56K V90 modem
4MB ATI Rage Mobility M graphics controller
Microsoft Windows 2000
Lotus SmartSuite Millennium Edition
UltraPort connector
ThinkLight keyboard light
3.6 lbs. travel weight, 12" profile

\$2,199¹

\$3,099¹

SuccessLease™
Small Business **\$78/MONTH²**

SuccessLease
for Small Business **\$103/MONTH²**

STANDARDIZE YOURS:

UltraBase X2 Media Slice **\$199³ or \$7/month⁴**
4X/20X-10X* CD-RW Ultrabay 2000 Drive
\$9⁵ or \$14/month⁴
ThinkPad Dock
\$9⁵ or \$18/month⁴

ThinkPad Port Replicator **\$149³ or \$5/month⁴**
ThinkPad Carrying Case with Portfolio
\$99⁵ or \$4/month⁴
64MB 100MHz NP SDRAM Memory Upgrade
\$119⁵ or \$4/month⁴

GET YOUR THINKPAD DIRECT FROM IBM TODAY!



IBM recommends Windows 2000
Professional for business.

¹ Price available from IBM directly for ThinkPad X Series Part #266211U, UltraBase Part #08N1180, Ultrabay 2000 Drive Part #00N8252, ThinkPad Dock Part #263110U, and ThinkPad X Series Part #26235U, Part #02K8667, Carrying Case Part #01N0835, Memory Upgrade Part #20L0254; reseller prices may vary. IBM price does not include tax or shipping and is subject to change without notice. ² SuccessLease administered in the U.S., Canada and other countries by third-party providers of business financing approved by IBM Global Financing. SuccessLease terms and conditions provided by the third party. Featured payments are based on a 36-month term with pre-specified purchase option at the end of lease, to qualified business customers only, installing in the U.S. A documentation fee and first month's payment due. Any taxes are additional. Other lease terms and structures are available. Offer may be withdrawn or changed without notice. Options must be leased with system unit. ³ Actual weight and thickness may vary by components, manufacturing process and options. Weight includes battery. Thickness may vary at certain points on the system. ⁴ Titanium Composite Carbon Fiber Reinforced Plastic has three times the plastic as tested by IBM using the high flex modulus test on 2/28/00. Available on select models. ⁵ MHz/GHz only measures microprocessor internal clock speed; many factors affect application performance. ⁶ Pentium III processors featuring SpeedStep technology; this denotes maximum performance mode; battery optimization mode is approximately 80% of maximum performance mode. ⁷ GB equals one billion bytes. ⁸ Ring to storage capacity; accessible capacity may be less. ⁹ These modems are designed to be capable of receiving data at up to 56Kbps from a compatible service provider, and transmitting data at up to 115Kbps. Actual speeds currently limit maximum download speeds to about 53Kbps. Actual speeds depend on many factors and are often less than the maximum possible. ¹⁰ Some software may differ from its retail version, and may not include user manuals or all program functionality. For non-IBM software, applicable third party licenses may apply. Warranty, service and support for non-IBM products, if any, are provided by the third party. IBM makes no representations or warranties regarding non-IBM products. All products ship with an operating system. IBM reserves the right to alter/withdraw offerings at any time, without notice. All IBM product names are registered trademarks or trademarks of International Business Machines Corporation. Lotus and SmartSuite are registered trademarks of Lotus Development Corporation. In the U.S., the Intel Inside logo and Pentium are registered trademarks and Celeron and SpeedStep are trademarks of Intel Corporation. Microsoft and Windows are registered trademarks of Microsoft Corporation. Product and service names may be trademarks or service marks of others. ©2000 IBM Corp. All rights reserved.



CHRYSLER LOT: A billion-dollar fourth-quarter

AUTOS

DETROIT HITS A SPEED BUMP

Another boffo year is forecast—but so is an overseas onslaught

Things were looking up for bartender Cindy Wuest last May when she landed a \$16-an-hour job at Chrysler's Jeep Cherokee plant in Toledo, Ohio. Or so she thought. The 25-year-old single mother of four has already been laid off twice since then and faces another week out of work this month as the auto maker tries to clear out excess inventories. "It's going to be a pretty terrible Christmas," she says.

Wuest isn't the only one looking at a blue Christmas. After running full-tilt through the first half of the year, auto makers are hitting the brakes. Layoffs in this industry, which topped 51,000 in November, now account for about one out of every eight layoffs in the U.S., says John Challenger, CEO of Chicago outplacement firm Challenger, Gray & Christmas Inc. And next year won't be any better as car sales cool and competition intensifies.

It's not that the bottom is falling out of the market for cars and trucks. A projected sales slowdown to 16.5 million vehicles, from this year's red-hot

17.5 million units, would still make 2001 the industry's third-best year ever.

Nevertheless, the trend is ominous—especially for Detroit. Even as the U.S. industry has enjoyed an unprecedented five-year boom in auto sales, the Big Three have seen their share of the market get chipped away by Asian and European rivals. In 1997, General Motors, Ford Motor, and Chrysler owned 71.9% of the market. By the end of 2001, their market share is expected to drop to 65.3%, according to Standard & Poor's DRI. Asian carmakers will pick up most of the difference, followed by the Europeans. And while both groups have been boosting U.S. production, neither match-

es the Big Three in U.S. employment. Asians, for example, account for almost 30% of U.S. sales but represent only 16% of U.S. production.

Detroit is showing signs of the slowdown. Overall industry sales dipped 3.4% in November compared with the same month of the previous year, but Big Three sales slid 7.6%. Chrysler's unit of Germany's DaimlerChrysler, is expected to lose as much as \$1 billion in the fourth quarter after losing \$1.2 billion in the previous quarter (page 94). It plans to close several more plants before the end of the year, including the Toledo plant. Ford and GM are also slowing sales in the fourth quarter and are using production slowdowns and layoffs to clear vehicle inventories.

Why are the Big Three so positioned heading into the downturn? In recent years, GM, Ford, and Chrysler have concentrated on higher-profit truck and SUV offerings languished, says John Brown, market analyst for SAIC Inc. in Thousand Oaks, Calif. The Big Three have weak car offerings, their trucks and sport-utility vehicles are under assault by Japanese makers, who are about to flood the market with attractive SUVs like the Acura MDX from Honda.

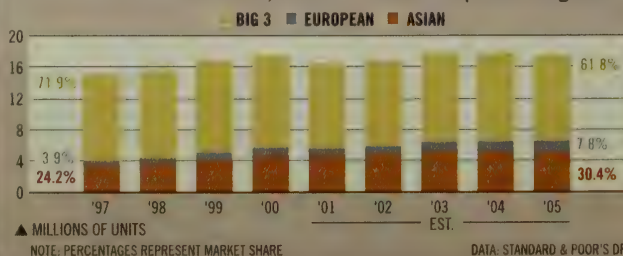
SUPPLIER WOES. And bad times are hitting suppliers. Fewer cars and trucks mean suppliers will need to make fewer cars and trucks. Banc of America Securities analyst Tadross recently downgraded his portfolio of suppliers. Supplier Corp. has idled 3,500 workers this year. Diesel engine maker International Corp. has put 1,100 on the unemployment rolls. Delphi Automotive Systems Co. it will idle 1,700 workers in Michigan, Ohio, and New York.

Analysts have been predicting an industry downturn for several years now, energy costs are rising, consumer confidence is falling, the economy is slowing, and the market is anyone's guess. At least for Detroit makers, it looks like the party is over.

By Jeff Green

THE BIG THREE FALL BACK

In a flat U.S. auto market, Asian carmakers are poised for growth



Relieves upset revenue.



Some fizz in your biz with 30,000 advertisers on your site.

Bring with GoTo's innovative Web Search, Shopping and Auctions marketplace
connect you to over 30,000 advertisers and merchants who pay for targeted
traffic. If you have a high traffic site, we'll get your revenue bubbling over.

For more call John Gentry, VP, Business Development, at 626-685-6170.





the distance between you
and everything you care about
is no greater than
the distance between you
and your wireless phone.

attws-sf.com
I 800-IMAGINE®

WIRELESS FROM AT&T.

YOUR WORLD. CLOSE AT HAND.



CELLULAR ONE IS NOW AT&T WIRELESS SERVICES.

HOW UNIVERSAL TOLE XMAS

cking to a smaller-is-
r script, Ron Meyer
rned the studio into
ottest in Hollywood

gory slasher scenes at Univer-
Pictures two years ago weren't
on the screen but in the corpo-
te offices, where it was the
who were getting bloodied. That
k when the Seagram Co. film-
unit was piling up box-office
te the Brad Pitt clunker, *Meet*
ck, and the talking pig fiasco,
ig in the City. By that time, top
duction executive Casey Silver
d over a Thanksgiving
l, following the studio's
marketing executives.
Biondi Jr., who over-
film and theme park
y for Seagram, also
ut the door. "I felt like
guy standing," recalls
aken Ron Meyer, pres-
d chief operating offi-
niversal Studios. "I fig-
had better start doing
ifferently, or the next
ing fired was going to

Since then, Meyer has stuck with a
smaller-is-better script, cutting down on
the number of films, squeezing budgets,
and sometimes going with one major
star instead of two. And, with a re-
vamped marketing team in place, Uni-
versal has been the hottest studio in
town since the summer. When the
clamorous Jim Carrey film, *Dr. Seuss'*
How The Grinch Stole Christmas,
passed \$100 million at the end of its
first week in November, it became Uni-
versal's fourth \$100 million film this
year, the most of any studio. Previous
blockbusters included *Meet the Parents*,
Erin Brockovich, and *Nutty Professor*
II: The Klumps. "It's kind of hard to
overestimate just how hot they are

right now," says Paul Dergarabedian,
president of box-office tracking firm Ex-
hibitor Relations Co.

Universal's timing couldn't have been
better. By Dec. 8, shareholders at Sea-
gram and French utility and communi-
cations company Vivendi are expected
to complete their planned \$25 billion
merger. The hit streak "came at the
right moment," says an obviously
pleased Vivendi Chairman Jean-Marie
Messier, who will head the new Vivendi
Universal. "There will be immediate
synergies," he says, such as merchandise
and related products, including Grinch
and Nutty Professor products sold
through Vivendi's publishing and soft-
ware unit, Havas.

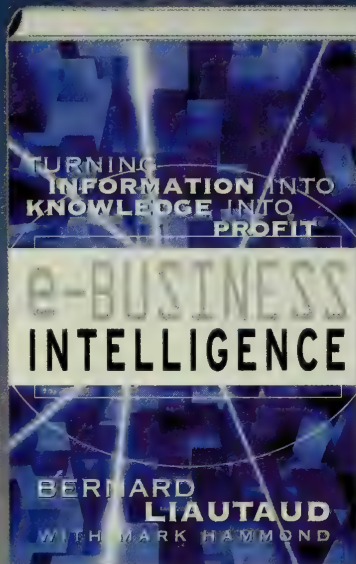


CHEAPER CHASE. Messier and
others credit Universal's turn-
around to the team of Meyer, a
onetime partner of superagent
Michael Ovitz, and Stacey
Snider, 39, a University of Cal-
ifornia at Los Angeles law
school graduate who started in
Hollywood in the mailroom of
a talent agency and worked
her way up the ranks at Sony
before moving to Universal.
She was elevated to the stu-
dio's top film production slot
after the 1998 firings. Meyer
is famously close with top stars
like Sylvester Stallone and di-
rectors like Ron Howard, while
Snider rides herd on filmmak-
ers. *Meet the Parents* director
Jay Roach says she pressured
him to cut a key chase scene

COMPETITION

nily Man, with
nd Cage, is up
Cast Away

WHAT drives the INTELLIGENCE STRATEGIES of today's E-BUSINESS GIANTS?



Bernard Liautaud, President and CEO of Business Objects, the world's leading provider of e-business intelligence, brings managers up to speed for the Internet economy and arms them with a new model for tapping the power of information in their companies.

e-Business Intelligence shows how forward-thinking companies are using intranets, extranets, and business-to-business e-commerce to transform the information in their databases into a corporate intelligence gold mine.



Available Everywhere
Books Are Sold
Visit us at
www.books.mcgraw-hill.com



A Division of The McGraw-Hill Companies

Entertainment

CLEVER MOVE

Meet the *Parents*, with De Niro and Stiller, was the first movie to hit theaters after the Olympics



in his film, relenting only when he substituted a cheaper chase scene that had the cars going 35 mph and stopping and starting at stop lights. "It ended up being funnier," he says, "and she probably saved \$500,000" off the film, which cost \$54 million to make.

What has really impressed Hollywood insiders, however, is Universal's shrewd marketing and release strategies. *Meet the Parents*, starring Robert De Niro and Ben Stiller, was released in early October, becoming the first film in theaters after the summer Olympics emptied cineplexes.

Universal's marketing team made a hit out of the cheerleading film *Bring It On*, recutting its ads to emphasize the clash between squads from white and black high schools and then using the Internet, MTV, and the WB network to target women under 25. As a result, the film, which cost \$9 million to make and an additional \$10 million to market, sold \$17 million in tickets on its opening weekend. It has grossed nearly \$68 million.

RECORD CROWDS. The box office gods are just as likely to turn on a studio as smile on it, and Universal is doing what it can to bolster its fortunes. It partners with other studios for bigger-budget films, as it did with Dreamworks on *Gladiator* and Sony with *Erin Brockovich*. Universal also recently renewed its five-year deal with director Howard's Imagine Entertainment, which produced *Nutty Professor II* and *Grinch*. Deals like that can be pricey, and Universal gave 35% of the profits from *Grinch* to Howard, producer Brian Grazer, star

Jim Carrey, and Dr. Seuss' widow Audrey Geisel. But a *Grinch* attraction already drawn record crowds, Universal's Orlando theme park, say, er, and the studio says *Grinch* merchandise is selling briskly.

Whether Universal can keep its streak alive will depend as much on fiscal discipline as on the film making *Hannibal*, the sequel to *Intelligence of the Lambs*, but is split \$84 million cost with MGM. And a sequel to *The Mummy* at over \$100 million above the \$85 million price

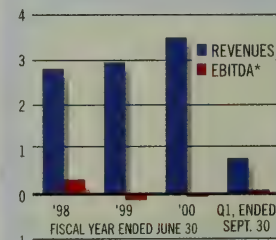
last year's first film, it gave Brendan Fraser a small raise. Universal hopes to create a franchise from Robb Grum's spy novel *Bourne Identity*, spending only \$10 million to make the movie shooting in Prague instead of Paris.

Not that even Universal has so far has been able to make the studio spend \$100 million to make a movie featuring Stallone as an undercover agent.

Stallone as an undercover agent drug-treatment facility that is considered so bad by insiders that Universal is contemplating releasing it overseas. And the studio faces a tough season. And the studio faces a tough season. And the studio faces a tough season. And the studio faces a tough season. And the studio faces a tough season.

By Ronald Grover in Universal City, Calif., with Carol Matlack in Hollywood

UNIVERSAL STUDIOS' BRIGHTER PICTURE



▲ BILLIONS OF DOLLARS
*EARNINGS BEFORE INTEREST, TAXES, DEPRECIATION, AND AMORTIZATION

DATA: COMPANY FILINGS



Our steel is the world's purest,
because the landing has to be flawless.

high-stress, narrow-tolerance situations,
Timken® steel performs. For the hypercritical
needs of transportation, medicine, and industry,
Timken provides the widest range of engineered
products in the world. Where steel just won't do,
Timken specialty steel is performing every day.

TIMKEN

WORLDWIDE LEADER IN BEARINGS AND STEEL

FOR MORE ABOUT THE TIMKEN COMPANY, CALL 330-471-3620 OR VISIT WWW.TIMKEN.COM
TIMKEN IS THE REGISTERED TRADEMARK OF THE TIMKEN COMPANY (NYSE: TKN).

MAYA LIN'S WORLD

It honors the rhythms of nature and respects the land. Corporate America is embracing that vision

The woman who designed the extraordinary Vietnam Veterans Memorial in Washington, D.C., is bringing her skills and sensibilities to Corporate America. Maya Lin infuses her architecture for American Express, Principal Financial Group, and Aveda cosmetics, her furniture for Knoll and her residences for former CEOs with the same calm introspection and quiet emotion she brings to her monuments.

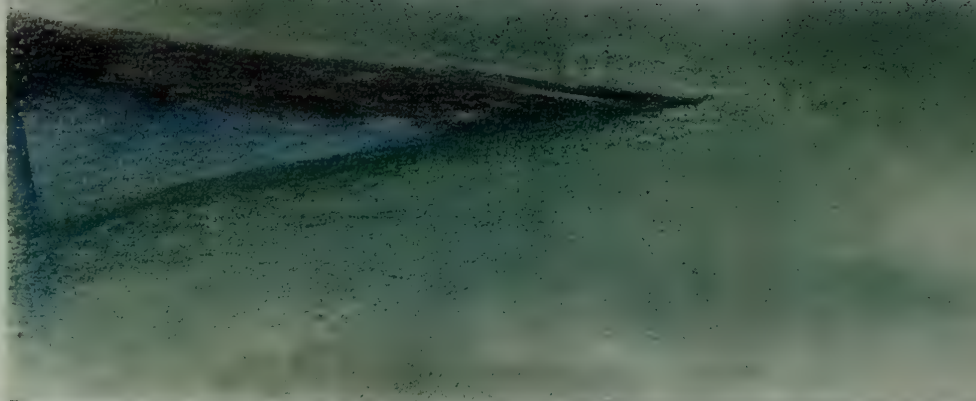
In her use of natural materials—rock, wood, water—her respect for the land, her use of flexible space, and her integration of East and West, Lin is very definitely of the moment. If the most famous architect of our day, Frank Gehry, is all about gargantuan, computer-shaped, titanium temples to high technology, then Lin is about restraint, the environment, organic materials, and a new kind of architectural humanism. Lin is the anti-Gehry.

Lin's monuments are designed to be touched and to generate emotion. "Active participation involves the viewer in a direct and intimate dialogue with the work," says Lin in her new book, *Boundaries*. Touch the names on the Vietnam Veterans Memorial and



Maya Lin at work
in her downtown
New York studio

ANDREW BRUNO

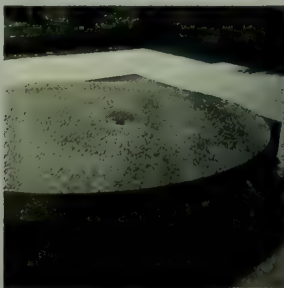


you remember loved ones who died in the war. Touch the water flowing over the Civil Rights Memorial and it ripples over the names of those killed in the struggle.

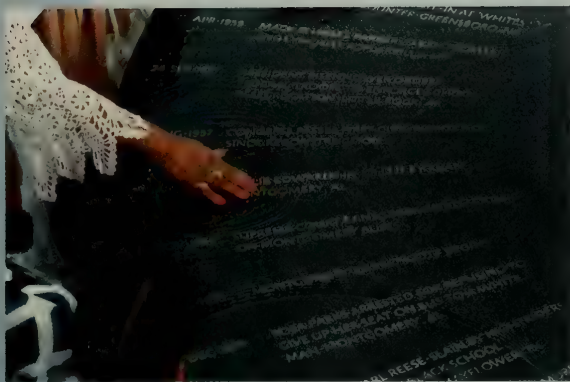
Photo Essay

Lin's father, who came to the U.S. from China in the late 1940s, was a potter. He taught his daughter how to sculpt. As an undergrad at Yale University, Lin shaped the Vietnam memorial in mashed potatoes in the dining hall. Even today, she doesn't use 3D software to design, preferring pen, paper, and models.

Lin designs her monuments, landscapes, houses, and furniture to reflect rolling hills and open, flowing spaces. Her architecture and sculpture don't dominate but integrate with their surroundings. They are calm. They don't shout.



20 Years of Vision: Lin, 21, with a model for her Vietnam Veterans Memorial, 1982; the Women's Table at Yale University, 1985; Lin at work in Barre, Vt., on the Civil Rights Memorial, 1989; Langston Hughes Library, Haley Farms, Clinton, Tenn., 1999; Lin

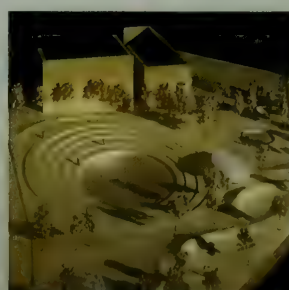
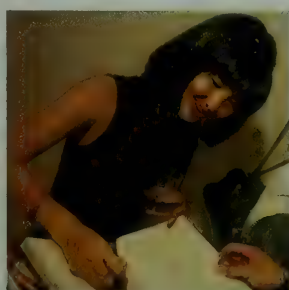


Please Touch: Lin originally submitted pastel drawings to the competition for the Vietnam Veterans Memorial in Washington, D.C. This is one (far left), published for the first time. The memorial was completed in 1982. In 1988, Lin completed graduate school and began work on the Civil Rights Memorial in Montgomery, Ala. It quotes Martin Luther King Jr.: "...Until justice rolls down like waters and righteousness like a mighty stream." Water flows over the inscriptions

Lin's latest corporate work reflects the themes she has developed in her 20-year career. Her Winter Garden for American Express has a water wall that offers soothing sounds and a floor that undulates like a hillside meadow. The flowing spaces in her apartment for Peter Norton, founder of software maker Norton Utilities, can be zoned off with sliding partitions, much like a traditional Japanese house. Her wall in the lobby of the headquarters of the Principal Financial Group has a creek running through it, an open invitation to feel the flowing water.

Maya Lin, 41, offers an alternative aesthetic to the big, brassy, look-at-me architecture of our wildly prosperous era. It may be time for America to listen to her—again.

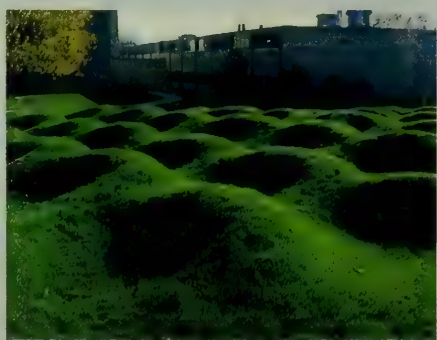
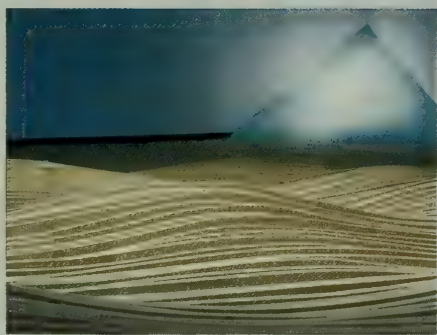
Text by Bruce Nussbaum; photo editing by Sarah Greenberg Morse



er designs for Knoll, 1999; Weber House, Williamstown, Mass. 1991-93; Lin's book party for Boundaries at Gagosian
rk, 2000; model for a skating-rink park in Grand Rapids, Mich., now under construction

PHOTOGRAPHS BY SHEPARD SHERBEL/SABA, NORMAN MCGRATH/CORBIS SYGMA, ADAM STOLMAN, TIMOTHY HURLEY, COURTESY OF KNOLL (PHOTOGRAPHER PHILIP GREENBERG), NORMAN MCGRATH/CORBIS SYGMA, JACK POTTLESTO

Photo Essay



the "Avalanche" exhibit, Southeastern Center for Contemporary Art, Winston-Salem, N.C., 1998; Wave Field, FXB Aerospace Engineering Building, University of Michigan at Ann Arbor, 1995



Sculpted Forms

Rolling hills inspired Lin's curvilinear lounge chair, which also conforms to the contours of the human body. Non-Western objects, such as Chinese porcelain pillows and African headrests, were models for Lin's collection for Knoll Inc., the office-furnishings maker. The collection, called Stones, consists of seats and a coffee table made of precast concrete. "Avalanche" is a traveling exhibit

Beautiful Curves: *The Longitude lounge chair and the Stones collection of chairs and tables for Knoll, 1998; from*

14 tons of recycled blue-green glass to form an ice-mount sculpture. Lin sculpted the Wave Field landscape at

University of Michigan to resemble ocean waves. Researching fluid dynamics, she created a landscape in which students can sit, read, or doze.

Hackers...accessed Microsoft computers by
the QAZ Trojan, typically delivered via e-mail."

—Wall Street Journal, 10/27/00

"The technology failed....Products will
not save you....[A security service] will be better
equipped to see and respond to hacks."

—eWeek, 10/27/00

[The attack on Microsoft] is very worrying because
we had detection for it for three months."

—Interactive Week, 10/27/00

When the attack happened,
Microsoft's virus defense wasn't
ready for it. Will you be? 

myCIO.com's VirusScan ASaP
uses the Internet to deliver
anti-virus services that auto-
matically update your entire
network with all the latest
cures. Instantly. So it shuts out
bugs before they can infect
even one single person. 

What's more, myCIO.com is an
easy upgrade because it's built
on McAfee technology, the anti-
virus software used by most
businesses. It's another part of
the world's #1 Internet security
software at Network Associates.

 So don't let your security
take a turn for the worse. Let
myCIO.com exterminate all of
your problems automatically.

Visit myCIO.com/promo/quote
for 10% off VirusScan ASaP.

©2000 Network Associates Technology, Inc. All Rights Reserved. Network Associates, myCIO.com, McAfee, and VirusScan are registered trademarks of Network Associates, Inc. and/or its affiliates in the U.S. and/or other countries. Similar trademarks are the sole property of their respective owners.

VirusScan ASaP. You never have to update your anti-virus
. Even if you're a technological superpower.

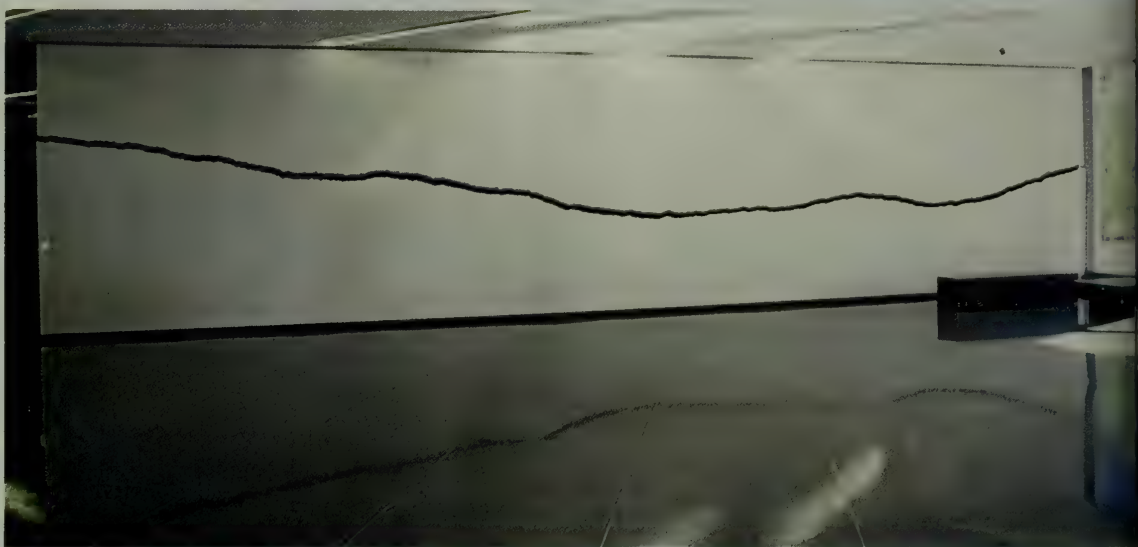


myCIO.com
Your Chief Internet Officer

Photo Essay

Calm, Cool, and Open:

The apartment of Peter Norton, New York, 1996-98 (top); "A Shift in the Stream," a wall sculpture in the lobby of the Principal Financial Group building, Des Moines, Iowa, 1997.



How She Sees It

To Lin, architecture is not about walls that contain space. It is about how people interact with light, sound, and materials. On the Norton apartment: "I envisioned a home that could fold in on itself, like origami, changing shape or function depending on how it was used." Principal's wall: "As you walk closer to the wall, you hear the soft murmur of a continuous stream of water flowing in the wall's crevice, into which you can just put your hand to touch the water."

f your data center wasn't built for broadband, it might be a bit outdated.

is the only web hosting company
from the ground up for broadband.
That means to your web presence is:

data centers directly connected to the
best Tier 1 Internet backbones that are
broadband ready now—and infinitely
scalable to the future requirements of the
best applications and content.

to hosting that ranges from co-location services
to custom managed solutions.

professional services team that has the depth of
knowledge required to solve your broadband issues.

Learn more, visit aperian.com today, or call 1-866-APERIAN.

Nothing else is ancient history.

APERIAN

Built for Broadband.™

Photo Essay



Let There Be Light

For American Express Co., Lin was brought in as an artist and acted as an architect and landscaper. AmEx wanted a wall of water (and ice in the winter) for its Winter Garden. When Lin arrived, plans for the structure were already drawn. She redid them, making the building much lighter. She also added birch trees.

Inviting: Lin walks through her Il Cortile Mare landscape sculpture at the American Academy in Rome, 1998 (above); models of her Winter Garden for American Express in Minneapolis (below)



Lin put down an undulating wood floor that synchronizes with a rolling grass landscape. Inside and outside are seamlessly connected. AmEx will build it in 2002.



Omron Technology at work.



Hole #4 Kemper Lakes Golf Course, Long Grove, Illinois

You tell when Omron products are hard at work? When you're not. A global technology
Omron designs and manufactures innovative solutions to make your life easier,
productive, and more comfortable. From industrial automation to electronic components.
Healthcare devices to fleet management systems. We make it all work for you.
The human side of technology. www.omron.com

OMRON®

AUTOMATION | ELECTRONIC COMPONENTS
HEALTHCARE | AUTOMOTIVE ELECTRONICS | SOCIAL SYSTEMS

NEW WAYS TO
BLOCK SPAM,
WHY SOY FOODS
CAN BE RISKY

BusinessWeek Lifestyle

Making Mincemeat Out of Unwanted E-mail

New software can help you get the upper hand over "spam"

BY LARRY ARMSTRONG

You've got mail—junk e-mail—and plenty of it. "Legally lower your taxes offshore." "Does your stock portfolio look like 'SWISS' cheese?" "Viagra now only \$4.50 online!" The number of mass e-mailings has grown 400% over the past year to nearly 5,000 a day, says Brightmail, a San Francisco outfit that sells an early-warning system to companies and Internet service providers who try to block junk mail before it hits your "inbox." It's only going to get worse, says market researcher Ferris Research: Within the next five years, 40% of your incoming e-mail is going to be spam, up from 10% today.

Spam is Web speak for what's technically called "unsolicited commercial e-mail" or "unsolicited bulk e-mail." If you're like most people, you don't have a clue what to do about it. Every morning, you work your way through your inbox with one finger on the delete key, ready to annihilate any suspicious-looking messages that smell remotely of spam.

You can find better ways, and, surprisingly, the easiest may be right under your nose. These days, virtually all the popular e-mail programs, such as Microsoft Outlook, Eudora, and Netscape Messenger come with sophisticated filters that—if you go to the trouble to set them up—will scan and sort your e-mail into different folders, including the trash can. If you're using an earlier version of those e-mail programs, you can download easy-to-use antispam software from the Internet for free, or at a nominal cost.

RED ALERT. Here's how it works. All the programs allow you to create rules that screen incoming messages. Outlook's "rules wizard," for example, takes you through a series of clickable statements and fill-in-the-blank fields, and lets you add exceptions to the rule. To wit: Move this message to the "spam" folder if "Viagra" is in the subject line or body except if it's from "mydoctor@office.com" or "mywife@home.com."

While you're writing the rules, the program will ask you to create new folders to sort the incoming messages according to your criteria. Once you've instructed the program how to spot spam, those unwanted messages will go to a "spam" folder that you can deal with at your leisure. Or, if you're confident you won't be discarding something important, move it directly to Trash. In Outlook, you can click the right mouse button

to identify unwanted messages as junk, automatically installing a simple filter that will ever block that sender. By now, though, spammers have wised up and never mail the same address twice.

You can use the same filtering technique to sort and highlight the messages you want. A handy rule, for example, is one that flags a message from yourcompany.com and puts it in a special folder. You can even have a message from yourboss@yourcompany.com show up in red—and sound an alert when one arrives. (You can also turn the volume down.)

Online

The newest versions of other popular e-mail programs, such as Eudora and Netscape, work roughly the same way. The filtering prowess of proprietary systems, such as America Online's, and based mail from the likes of Yahoo! or Microsoft Hotmail, is much more limited. In AOL, for example, you cannot filter by key words, domain names and e-mail addresses. And Hotmail will let you screen the "to," "from" and "subject" lines, but you cannot block mail based on offensive words and phrases in the body of a message.

You also can download special software from the Internet that will let you filter out spam. Whether your e-mail program can do it or not, Top picks include SpamKiller (\$29, www.spamkiller.com), SpamEater Pro (\$29, www.hms.com), and Spam Buster (free, www.contactplus.com). The programs come loaded with thousands of filters and the ability to write your own. A personal favorite is SpamKiller, which is flexible enough to work on both office e-mail networks and home Internet service providers. It's an e-mail program that boots, displaying the complete text of messages, not just message headers. These

DO take advantage of your e-mail reader's ability to filter messages. Banish spam based on keywords and sender's addresses.

DON'T use your primary e-mail address to post on Internet message boards or list in online member directories. Use an alias address instead.

How



ors have their disadvantages, though. the e-mail can take a few minutes, and rams generally won't work with Web closed systems such as AOL. st way to avoid spam is to keep your -mail address off the mailing lists in the . If your ISP gives you more than one e-ress, set up an alternate so that any l go to a mailbox you never have to sign up for an e-mail account at any of mail services, such as Yahoo Mail or and use that address for registrations. ers use programs called "bots," for rowl the Internet and harvest all avail- il addresses. So don't allow your name l address to be published in an online or inadvertently sign up for mailing you aren't interested in. This usually at during the registration process you

Spammed

ir e-mail program's ability to display way, tiny images called Web bugs ally alert the spam sender's server ge has been opened.

spam. Ignore even mail that promis- u from the mailing list; it only veri- -mail address is valid.

will have to uncheck the boxes that the Web site has so conveniently checked for you. If you have a Web page, don't put your e-mail address on it: Bots are programmed to capture anything following the words "mail to."

For the same reason, many experts will tell you not to use your main e-mail address to post on bulletin boards or Internet news groups. That's a tougher problem, however, because the most likely reason you're there is that you want to interact with other posters. Many people use an alias, either a forged address or a throw-away e-mail account, and ask that replies be posted within the news group. Another technique is to "munge" your e-mail address, inserting a word or phrase that humans will know to delete but bots won't (at least not yet). Example: johndoeNOSPAM@isp.com.

Finally, don't reply to spam, even if it contains an invitation to remove yourself from the mailing list. Some spammers create mailing lists by randomly pairing common names with popular ISPs; a reply verifies that your e-mail address is valid. In some cases, even opening a questionable e-mail will generate a signal to the sender tagging you as a live one. Toss it out before you open it.

Technology may be on the side of the spammers, who always seem to be a step ahead. But now you have your own arsenal of tricks. Use them, and much of the spam will simply disappear before it lands in your inbox—unlike that paper stuff clogging the mail slot back home. □

E-mail filters allow you to create rules that screen and sort messages. You can send them to a spam folder—or trash them

The Dark Side Of Soy

Supplements may do more harm than good

BY KATE MURPHY

You see soy in everything from burgers to breakfast cereals. Studies show it can lower heart disease risk by reducing LDL, or bad, cholesterol—the Food & Drug Administration even said so in 1999. And many food companies claim it's helpful in treating hormonally linked problems, such as prostate cancer, osteoporosis, and hot flashes. If you believed all the hype, you'd be feasting on soy morning, noon, and night.

But wait. Eating too much soy may do you more harm than good. Research scientists and doctors say that soy and its chemical components may promote cancer, dementia, reproductive abnormalities, and thyroid disorders. "You don't want to go overboard with soy," says Bonnie Liebman, who is director of nutrition at the Center for Science in the Public Interest in Washington, D.C.

You especially don't want to take a soy supplement, energy bar, or powder that contains isoflavones, a chemical in soybeans. Isoflavones are phytoestrogens, or plant substances that behave like weak forms of the hormone estrogen. Estrogen relaxes the capillaries and primes the liver to get rid of cholesterol, so likely it's the phytoestrogens in soy that help reduce your chance of developing heart disease.

WHOLE FOODS. But despite what makers of dietary supplements would have you believe, research has shown that isoflavones alone have little effect on cholesterol levels. "It's probably the many different chemicals found in soy along with the fiber that work together synergistically to produce beneficial effects," says Claude Hughes, author of several studies on soy and director of the Center for Women's Health at Cedars-Sinai Medical Center in Los Angeles.

Worse, consuming isoflavones at high levels "has been shown to have long-term detri-

mental effects," says Dr. Kenneth Setl, leading soy researcher and professor of gynecology at the University of Cincinnati College of Medicine. For example, farm animals given quantities of isoflavone-rich feed have decreased reproductive, thyroid, and liver problems. A study published in 1998 in the *Cancer Research* indicates isoflavones promote the growth of human breast-cancer cells implanted in rats. Plus, women drinking isoflavone-infused soy drinks have been shown to have increased proliferation of breast cells. To inhibit breast-cell growth, the greater the risk of breast cancer. Alice Lichtenstein, professor of nutrition at Tufts University in Boston, warns that isoflavones and other chemicals extracted from soy foods are essentially drugs, and you can ingest harmful amounts because of the vast quantities that can be packed into a tiny pill.

The best way to take advantage of the health benefits is to follow the example of the Japanese and stick with whole foods. As a result, the Japanese tend to be healthier and live longer than Americans, and they eat only 7 grams to 10 grams per day of whole soy foods such as tofu, soy milk, and edamame, as well as the fermented versions, tempeh and miso. Unlike soy hot dogs, ice cream, chips, and candy, which often are made out of soy protein isolate derived from the soybean through chemical extraction, whole soy foods "are closer to what Mother Nature intended," says Gregory Y. R. H. of the department of public health at Wake Forest University School of Medicine in Winston-Salem, N.C. That way, none of the potentially beneficial components have been discarded during processing.

Even with whole soy foods, there are risks. If you are pregnant, at risk of developing hormone-sensitive tumors, such as breast and prostate cancer, or have a family history of dementia, researchers and physicians advise against eating too much soy in any form. But if you do belong to one of the risk groups, just remember to stick with natural forms of soy, and avoid those that come out of a laboratory.



Best of the Bean

Edamame A specialty soybean harvested while immature so that the seeds fill 80% to 90% of the pod. Lightly cooked in boiling salt water, it's served as a snack, mixed with vegetables, or added to salads or soups.

Miso Cooked soybeans that are fermented with rice to produce a salty paste. It is used as a condiment and as a base for soups.

Soy milk Soaked, ground soybeans that are briefly simmered, then pressed to release a rich, beige liquid. May be used as a substitute for cow's milk.

Tempeh Fermented soybean cake with a nutty, mushroom flavor and chewy texture. Fried, baked, broiled, or steamed, it is often served in place of meat.

Tofu Cooked soybeans that are pureed into a custardlike cake. It has a neutral taste and can be added to stir-fries, blended into smoothies, or whipped into dips or spreads.

Where Did My Mutual Fund Go?

What to do if your fund is being merged or liquidated

BY ANNE TERGESEN

When mutual-fund investors are confronted with poor performance, they often head for the exits. Increasingly, fund companies are doing the same. So far this year, fund management companies including Liberty and Pilgrim have pulled the plug on a record 222 funds, or one out of every 49. They do it by merging weak funds into better performers, or by liquidating a fund's holdings and returning the proceeds to investors. With the bull market in retreat after a decade in which the number of funds has nearly quadrupled, the pace of mergers and liquidations is bound to pick up.

These practices allow fund families to bury offspring with poor track records and asset bases so small they are unlikely to become profitable. According to Morningstar, funds merged or liquidated this year scored in the bottom third of their peer groups when ranked on three-year returns (table). Since most funds need \$100 million in assets to turn a profit, small, underperforming funds are most likely to go out of business.

DREARY RECORDS. This year, the dustbin is full of bond and international stock funds. Looking ahead, floundering Internet funds might follow the tiny de Leon Internet 100 into oblivion. Down 50% this year, the fund liquidated on Oct. 30.

The urge to merge is a marketing call as much as an investment decision. Sweep away bad performers, and dreary track records disappear from fund literature and databases, making fund families look better than they really are. Because three-year returns are "a big driver of sales, if a fund is not doing well by then, it is a candidate" for a phase-out, says John Benvenuto, a consultant at Financial Research in Boston.

Mergers and liquidations are a mixed bag for shareholders. Unless you hold a disappearing fund in a tax-deferred retirement account, such as a 401(k), there will be tax consequences. Investors might

find their asset allocation strategies in disarray when a fund they've been merged into follows a different path than the one they bought. On the other hand, mergers tend to funnel investors into better-run portfolios with lower expenses.

Funds don't go out of business quietly or overnight, so you'll have advance warning. Indeed, before killing a fund, a company is required to get approval from shareholders and the fund's board of directors.

Approval is rarely denied.

Taxes top the list of shareholder concerns. When one fund is merged into another, no taxes are due. However, those transferred into a suc-

Mutual Funds



If it looks as if a fund is about to be liquidated, you may want to bail out quick, because when the fund begins selling its shares, prices could plummet

cessful fund inherit a share of its unrealized capital gains. This means that when the new fund sells a winner, investors merged into the fund get a share of the capital-gains distribution. They have to pay taxes on that gain—even though they were not around when the profits built up.

In assessing whether to stay or go, ask the fund company for an estimate of the new fund's next capital-gains distribution. If one isn't available, go to the fund's most recent shareholder report and find its "realized but undistributed gains." If a fund had \$1 a share in such gains and the merger gave you 1,000 shares, for example, you would have a \$1,000 taxable gain coming your way. Compare that to what you might owe if you sold the fund before the merger. Of course, if your original fund stake is under water, sell it to reap losses with which to reduce your taxes.

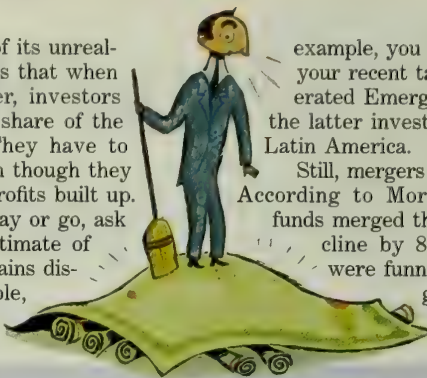
GET A HANDLE. Fund mergers can drive up tax bills in other ways. When surviving funds inherit stocks from defunct siblings, their managers often sell the transferred holdings. Of course, if the winners outweigh the losers, this selling would subject shareholders in the combined funds to taxes.

To get a handle on what your new fund plans to do with its hand-me-downs, look in the proxy statement you will receive ahead of a shareholder vote on the merger. You can also request a statement of additional information that details what the combined fund's financial statements and holdings are expected to look like.

Another problem with fund mergers is that you might wind up with something that doesn't suit your needs. If you purchased shares in the Federated Latin American Growth Fund, for

example, you might not be satisfied with your recent tax-free transfer to the Federated Emerging Markets Fund. The latter invests only 25% of its assets in Latin America.

Still, mergers can bring some good. According to Morningstar, shareholders of funds merged this year saw their portfolios decline by 8.2%, on average, while funds that were funneled into larger funds with greater economies of scale rose 1.7%. Most merger channel investors



Traits of Vanishing Funds

Funds that have merged or liquidated this year display, on average, the following characteristics:

	ASSET SIZE (MILLIONS)	ASSET CHANGE OVER 12 MOS.	AGE (IN YEARS)	3-YEAR RANK VS. PEERS (100=LOWEST)	AVERAGE EXP. RATE
MERGED FUNDS	\$78.1	-12.5%	7.3	66.7	1.4%
LIQUIDATED FUNDS	\$12.7	-29.4%	5.2	65.4	1.7%

DATA: MORNINGSTAR

better performers. The Liberty Newport Utilities Fund, for instance, has a three-year annualized return of 14.7%. That's about twice the 7.3% earned by the fund it is taking over, Liberty Newport Global Equity. The two funds slated to merge in January as part of a liquidation at Liberty, which is merging 17 of its nearly 100 funds and liquidating four.

Still, if a merger leaves you overexposed to one type of investment and underexposed to another, sell it and buy one that better suits your needs. Indeed, shareholders in Liberty Newport Global Equity who stay put will have a larger exposure to utilities—31%, vs. 4.4%—they may have bargained for.

Of course, when it comes to liquidation, selling is the only option. But because these funds are laggards, shareholders frequently reap gains with which to reduce their taxes.

In a liquidation, bail out fast to avoid being caught in a fire sale. When funds that specialize in thinly traded securities such as small caps sell in bulk, they unleash a wave of selling that can drive stock prices down. This undermines their ability to secure fair prices.

Even before a liquidation is announced, it's possible to detect signs that a fund is heading out (table). Small funds with a history of poor returns are most vulnerable. So are funds hit by shareholder redemptions, says Morningstar analyst Matthew Gries.

To be sure, not all funds that go out are in trouble. Mergers between funds of similar companies frequently result in the elimination of overlapping funds. For instance, this year, group is folding several CitiFunds into its Citi Group lineup. Still, stars are rarely killed. If your fund company is throwing in the towel, maybe it's a sign that you should, too.

Warning Signs

Is your fund heading for a merger or liquidation? Here's a list of tip-offs:

SIGN	COMMENTS
CONSISTENTLY POOR PERFORMANCE	Shareholder defections make the fund less profitable to run.
SMALL & DECLINING ASSET BASE	Funds with less than \$100 million in assets are generally unprofitable.
INVESTMENT STYLE IS OUT OF FAVOR	Bonds and international stocks have fared poorly in recent years; funds in those categories top this year's list of mergers and liquidations.
FUND IS A FADING FAD	This year's flavor: Market-neutral funds. Future candidates include Internet funds.

ceiva™
net-connected digital
PICTURE FRAME



WHAT TO THEIR WONDERING EYES SHOULD APPEAR...



If you're wondering what to get someone this holiday season, here's something to look into. Ceiva. It's the world's first digital picture frame that lets you share photos over the internet. It's easy to set up. Easy to use. You don't even need a computer to receive photos. Every day the Ceiva frame automatically updates and displays your new photos. And anyone you want can send you photos from just about anywhere. So give someone a Ceiva picture frame this holiday season. And open up a totally new way to look at pictures.

SHARE **photos**
EVERYDAY

ceiva.com or 1.877.MY.FRAME

Available at **CIRCUIT CITY**  **Gateway**  **amazon.com**, **ceiva.com**

©2000 Ceiva Logic, Inc. All rights reserved.
Ceiva is a trademark of Ceiva Logic, Inc. Patents pending.



Turning Value Into a Gold Mine

How PIMCO fund manager Schneider does it

From tractor makers to insurers to hospital companies, John Schneider's stock picks have one thing in common: value. That has put the PIMCO Funds portfolio manager right in the market's sweet spot this year, as investors move away from momentum moonshots and toward certifiably grounded stuff (table). *BUSINESS WEEK's* Robert Barker reached Schneider recently by phone at his Manhattan office. Excerpts of their chat follow. The full version is at *Business Week Online*.

John Schneider: Value Seeker

FUNDS PIMCO Renaissance and PIMCO Value

TICKER SYMBOLS PQNAX and PDLAX

TOTAL RETURN* 25.2% and 21.6%

TOP PICKS Aetna, Health Net, ACE, Archer-Daniels-Midland, Deere

WEB ADDRESS www.pimcofunds.com

PHONE 888 877-4626

*Through Dec. 1

DATA: BUSINESS WEEK

Q: What's working for you?

A: Value stocks, and we've had some pretty good stock selection.

Q: Insurance stocks among them?

A: Absolutely. Property and casualty insurers. ACE, XL Capital, Everest Re, and Loews, which is a conglomerate, but it owns CNA.

Q: Do you still own those, or are you taking profits?

A: I still own them all. I

think they've got quite a bit in front of them. I've [trimmed] back a little.

Q: You also have lots of health-care stocks. Which ones do you favor?

A: In the HMOs, I own Aetna and Health Net. Aetna has been the laggard of the group, but it's now in the process of trying to raise prices and cut costs. It's not going to be a quick turnaround. Health Net is actually doing things much better.

TOP OF THE WORLD: Schneider is high on health care and insurance

They've been growing earnings by 20%-plus, they're getting out of territories where they're a weaker player, like Florida and Nevada. I expect more earnings improvement as they get out of money-losing businesses, such as Medicare.

Q: Why are they cutting Medicare?

A: You've had medical inflation in the high double digits, call it—7%, 8%, 9%. Government in the past couple of years has only been raising the price they give HMOs for the Medicare business by 2% or 3%. So the vise has just been getting tighter. HMOs have been able to offset that to some degree by reducing benefits, but everybody has been losing money.

Q: I gather you also like hospital companies such as Tenet Healthcare?

A: It's an acute-care chain, the second-largest in the country. They're getting price increases.

Q: You also own Healthsouth. Why?

A: It's a little different. They are the largest inpatient and outpatient rehabilitation hospital in the country, with something like 30% market share. What's going on there is the government has been paying them for in-patient rehabilitation at cost. So, for Healthsouth, this is a very big part of their business, and they've been receiving no profit on it. Now, the government has just enacted a system where they pay a fixed dollar amount. Healthsouth is a quality provider, but also a low-cost provider because of its efficiency, and they are going to be able to make a significant profit on this.

Q: How significant?

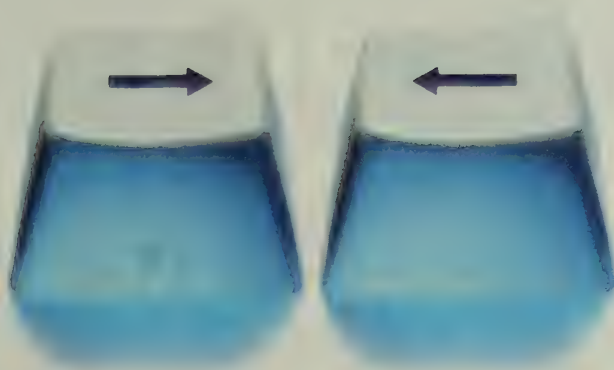
A: When fully enacted, this will add something like 20¢ [per share] to earnings, which is well above Wall Street's earnings estimates yet.

Q: What other industries do you like?

A: One area I'm warming to is agriculture. I own food-processing companies, such as Archer-Daniels-Midland and Corn Products International, and tractor producers Deere and CNH.

Q: What's happening on the farm?

A: The farmer, after a number of years of being on his back, is now doing reasonably well. On the face of the economy weakening, agriculture is an area that's on its own cycle, and I think things are improving.



Where low insurance rates and exceptional service come together.

With the American Express Property Casualty companies, you can save up to 20% on your insurance premiums and get superior service, too. We offer a full range of insurance products, including auto, home and umbrella policies. We'll help you choose the coverage, deductibles, and payment terms to meet your needs. And with 24-hour service by phone or over the Web, we're always available to provide rate quotes, answer questions or assist with claims. Protect your assets with insurance from the American Express Property Casualty companies. We help you do more.

line trading advice & planning insurance 1-800-842-3344 americanexpress.com



Property/casualty insurance is underwritten by AMEX Assurance Company or IDS Property Casualty Insurance Company, both in Green Bay, Wisconsin. American Express Financial Advisors Inc. Member NASD and SIPC. American Express Company is separate from American Express Financial Advisors Inc. and is not a broker-dealer. ©2000 American Express Financial Corporation. All rights reserved.

JUST WHO ARE THE PIGGIES HERE?



BY ROBERT BARKER

Meat-packing giant IBP is up for grabs, and the low bidder includes its CEO and other insiders. Shareholders had better watch their toes

Valuing IBP

\$28 —

J.P. MORGAN'S
CASH FLOW
ANALYSIS OF
IBP'S VALUE

MANAGEMENT
GROUP'S
TAKEOVER BID
\$22.25

\$20 —

DATA: COMPANY REPORTS

With such flashy New Economy deals as the merger of America Online and Time Warner going on, why are a bunch of smart business people jockeying for control of America's leading killer of cattle? Two irresistible four-letter words: cash flow.

I'm talking about the wrangling over IBP, which from its Dakota Dunes (S.D.) home is as far from the New Economy as smoke signals are from broadband. Just the same, as the nation's No. 1 packer of beef and No. 2 packer of pork, IBP expects this year to see \$16.6 billion in revenue and more than \$700 million in "EBITDA," Wall Streetese for cash earnings before interest, taxes, depreciation, and amortization. That, along with its depressed stock, has drawn not one but three bidders.

The first—a group including Credit Suisse, IBP CEO Robert Peterson, and other top IBP managers—bid \$22.25 a share in cash. The second, offering stock it values at \$25 a share, is Smithfield Foods, IBP's leading rival in pork. Finally, No. 1 chicken producer Tyson Foods made a mixed, cash-and-stock bid it says is worth \$26 a share. Who will win is unknowable: While IBP's board accepted the Credit Suisse management bid, it left itself room to weigh the others. Meanwhile, IBP offers a dismaying look at how outside investors can get threatened when insiders offer to buy them out.

Here's how I know: On Nov. 28, IBP filed a proxy statement describing the proposed Credit Suisse deal. It runs to 137 pages, but the heart of the problem can be found on just four pages in the middle, under the title "Certain Financial Projections." There lie two tables full of numbers that imply very different values for IBP.

GRAVY. The first table holds sales and profit forecasts that IBP gave to J.P. Morgan. A special committee of five IBP directors—those not joining in the Credit Suisse-led bid, and so the only ones without a conflict of interest—hired Morgan to help put a price on IBP. In other words, the first table shows how the people charged with selling IBP view the future. Below that table is a second, created by Credit Suisse. It, too, is based on forecasts made by IBP, but it represents the future according to the buyers. Its revenue and EBITDA projections vary a bit here and there. What's crucially different are its figures for capital spending. They're a lot lower, especially early on. Next year, for example, the Credit Suisse

table lists capital spending of \$350 million. Morgan's lists \$500 million. Next year 2005, Credit Suisse budgets total capital at \$1.4 billion; Morgan at \$1.85 billion.

Why does this matter? Because capital eating into what the Street calls "free cash flow"—the money left after all is said and done—the final reward for any business' owner, free cash flow was the key factor in Morgan's opinion that IBP is worth anywhere from \$28 a share (chart). Had Morgan used capital spending numbers, its forecasts of cash flow would've been higher, implying a higher value for IBP—something sellers usually get right? Instead, the sellers depict a less valuable company than do the buyers. It's as if you were to sell your car by advertising that it ne-



just a brake job, but a transmission overhaul.

Is your head reeling? Remember, Morgan's forecasts from IBP. At the same time, Morgan's proxy says of Credit Suisse's numbers, "The management agreed with these projections. A copy was provided to the special committee of the board." How could IBP agree with two different plans for capital spending, a variable entirely in its control? A spokesman could give no explanation for the conflict. Nor is IBP's committee of directors talking. But if you ask IBP's managers played a numbers game, to get away with IBP on the cheap.

As you might expect, such big investors as Brandes Investment Partners, which runs \$1 billion in assets including 9.1% of IBP, are keeping quiet. Brandes plans to vote against the Credit Suisse deal, while hoping a sweet deal wins out. Even if only by smoke signals, independent directors can't escape this mess. They had better get shareholders a higher

BusinessWeek online

For barker.online, go to www.businessweek.com/ibp or AOL keyword: BW Daily

QUESTIONS? COMMENTS? E-mail barkerportfolio@businessweek.com or fax (321) 728-1711

**WE DIDN'T
WRITE THE BOOK
ON THE
NEW ECONOMY.
JUST
THE TRAINING
MANUAL.**



SmartForce™ e-Learning. It's not just the training manual for the new economy, it's the catalyst for getting there. That's because SmartForce e-Learning gives your people the skills they need to succeed in this new, Internet-driven world. A world that demands a total solution for enterprise e-Learning. Just ask Unisys, PricewaterhouseCoopers or CSC, who already use our platform to create smarter, more e-savvy work forces. Better yet, see for yourself how the world's #1 e-Learning company can help transform your business to e-Business. SmartForce e-Learning. The new economy best seller.

Go to www.smartforce.com/neweconomy or call 1-888-395-0014

SmartForce™
The e-Learning Company

00:20

00:30

00:40

00:50

00:51

00:52

00:53

00:54

ChangePoint is a registered trademark of ChangePoint Corporation.

**In IT services, managing people
and projects can seem impossible.**

Nothing's impossible.

Not just project management, but a true enterprise solution. From initial demand
final invoicing. Finally, IT departments and consulting firms can streamline se
delivery. And better deliver on time and budget. Welcome to the only end-to
business process automation software for IT services. Find it at www.changepoint.com

When is your point of change?

Changepoint

PUMMELED NOVELLUS



NE G. MARCIAL

makers' woes
Novellus
but not out.
for dynamo
ellation set
the party?
AN clicks
electronics
abroad

Chipmakers had no place to hide when the market perceived that capital equipment spending had tightened, sharply hitting computer sales. Their shares got slammed. One that was pummeled: Novellus Systems (NVLS), a maker of equipment for producing semiconductors. Its stock took a dive, from 62½ in early September to 26 in November, before inching up to 30 on Dec. 6. Analysts scaled back their earnings estimates after Novellus confirmed that Korea's Hyundai had delayed orders. "Orders for semi equipment could be flat for the next few months, given global uncertainties and slowing growth in semiconductor markets," warns Susan Crossley at First Security Van Kasper.

But not everyone ran for the exits. "I have not seen this stock selling this cheap," says money manager Graham Tanaka. "While the industry is slowing down, Novellus is seeing a surge in orders and market share on the strength of its new products," says Tanaka. These products take advantage of two industry changes: a switch to copper-based manufacturing, which bolsters chip performance, and a conversion to larger, 12-in. wafers, doubling the output of chipmaking machines.

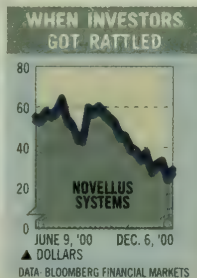
In all, Novellus "is at the forefront of new technology that packs more power into chips," says Tanaka. Orders should pick up by mid-2001, says Tanaka, whose Tanaka Growth Fund racked up a 20.85% yearly growth since its start on Dec. 29, 1998, through Nov. 30.

He figures that with Novellus' earnings and growth potential, the stock could hit 78 in a year and 97 in two. The stock is trading at 12 times Tanaka's 2000 earnings estimate of \$2.34 a share, 10 times his 2001 estimate of \$3, and 8 times his 2002's \$3.75. The stock, he says, deserves the market's price-earnings ratio of 26.

CONSTELLATION'S STAR MAY BE RISING



In case you've been too distracted to notice, shares of alcoholic beverage companies have been enjoying a good time, while the market has been tanking. That's because the spirits tend to be defensive plays—they do better when times are hard. Shares of brewers Anheuser-Busch and Adolph Coors and of winemaker Robert Mondavi have been hitting highs, trading at price-earnings ratios of 18 to 28 times their estimated 2001 earnings.



But one stock still to join the party is Constellation Brands (STZ), the second-largest wine-maker (behind Gallo Winery), second-largest importer of beer (behind Heineken), and the fourth-largest supplier of distilled spirits. For a company that has annual earnings growth of 30% for the past two years—and is on track for 20% growth this year—the stock, now at 48, "is just too cheap," says Gary Steiner, an analyst at investment firm Awad & Associates. It is selling at 9 times his estimated 2001 earnings of \$5.15 a share and 11 times his 2000 estimate of \$4.35. Among the brand names supplied by Constellation (formerly Canandaigua Brands) are No. 1 beer import Corona Extra and St. Pauli Girl, Simi Valley wine, and Black Velvet whiskey.

What's keeping the stock down? "The Street likes pure plays, but Constellation is a diversified alcoholic beverage producer that investors perceive as complex and confusing," Steiner says. And Constellation is also identified with cheap wine, which accounts for 17% of earnings. "The low-end wine market is the least attractive business among its stable of assets," he adds.

But at its currently depressed price, the stock is a compelling buy, given the company's favorable growth outlook, says Steiner, who says the stock deserves a p-e of 13, or 75 a share.

INTERTAN IS FIRMLY PLUGGED IN

Guess what? This retailer sells only consumer electronics items, and it's doing brisk business at its 1,127 stores—with computers in particular going at a strong pace. The company is Intertan (ITN), and its ace: It sells mainly the products of RadioShack and Tandy Electronics in Canada and Australia, but the stock trades on the Big Board. "There has been no sign of retail weakness in either Canada or Australia," says Dennis Telzrow, a retailing analyst at securities firm Hoak Breedlove Wesneski, who rates the stock, now at 9½, a "strong buy." Banc of America Securities analyst Douglas Gordon says Intertan "doesn't expect sales and earnings momentum to slow anytime soon." He sees earnings of 96¢ a share in fiscal 2001 ending June 30, and \$1.15 in 2002, up from 2000's 79¢.

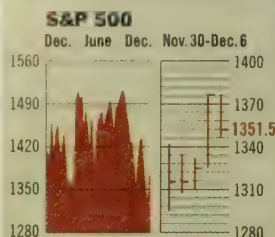
One possibility: Intertan, which Tandy spun off in 1986, is growing so nicely that Tandy, now called RadioShack, is said to be thinking of buying it back. The stock, says one investor, is worth 23 in a buyout. RadioShack declined comment.



BusinessWeek online

Watch for Gene Marcial's Inside Wall Street Online column every Tuesday afternoon at www.businessweek.com/today.htm

STOCKS



COMMENTARY

Another week, another squashed rally. Hints of lower interest rates from Fed Chairman Alan Greenspan sparked a 10.5% historical one-day gain in Nasdaq on Tuesday, but earnings woes quickly came back to haunt. Bank of America and Apple Computer's warnings stymied the market's enthusiasm: the Nasdaq ended up 3.3%, and the Dow and the S&P 500 were essentially flat.

Data: Bloomberg Financial Markets
Bridge Information Systems, Inc.

U.S. MARKETS

	Dec. 6	Week	Year to date	Last 12 months
S&P 500	1351.5	0.7	-8.0	-5.1
Dow Jones Industrials	10,665.1	0.3	-7.2	-5.0
Nasdaq Composite	2796.5	3.3	-31.3	-21.1
S&P MidCap 400	501.8	2.4	12.9	16.8
S&P SmallCap 600	205.3	2.6	3.8	9.8
Wilshire 5000	12,398.5	1.5	-10.2	-6.2

SECTORS

			% change	
Business Week 50*	1056.9	1.2	-18.8	-12.2
Business Week Info Tech 100**	720.1	9.0	NA	NA
S&P/BARRA Growth	747.8	1.0	-15.7	-12.3
S&P/BARRA Value	615.6	0.4	0.8	2.8
S&P Energy	878.2	-2.8	5.2	4.1
S&P Financials	155.3	2.3	16.7	15.0
S&P REIT	84.7	3.0	15.1	18.5
S&P Transportation	686.6	-1.3	15.0	12.9
S&P Utilities	320.9	-1.5	41.2	42.5
GSTI Internet	234.6	9.7	-67.1	-63.7
PSE Technology	885.3	5.0	-8.9	6.4

*Mar. 19, 1999=1000 **Feb. 7, 2000=1000

BEST-PERFORMING GROUPS

Pollution Control	20.8	Defense Electronics	142.0
Gold Mining	18.6	HMOs	69.5
Savings & Loans	13.4	Pollution Control	65.4
Genl. Merchandise Chains	12.6	Homebuilding	65.1
Building Materials	12.5	Savings & Loans	62.6

EQUITY FUND CATEGORIES

4-week total return	%	52-week total return	%
Leaders		Leaders	
Precious Metals	5.4	Health	63.7
Real Estate	3.5	Natural Resources	27.0
Financial	0.3	Real Estate	26.5
Mid-cap Value	-0.2	Financial	20.1
Laggards		Laggards	
Technology	-12.7	Japan	-29.4
Japan	-11.1	Diversified Pacific/Asia	-24.7
Small-cap Growth	-10.6	Pacific/Asia ex-Japan	-21.7
Communications	-10.4	Diversified Emerging Mkts.	-21.6

EQUITY FUNDS

4-week total return	%	52-week total return	%
Leaders		Leaders	
CGM Focus	24.5	Schroder Cap. Micro Cap	141.5
ProFunds UltraShort OTC	17.5	Dresdner RCM Biotech. N	137.5
AXP Precious Metals A	9.6	Munder Fram. Hlthcare. B	124.3
Rydex Precious Metals	9.5	Dresdner RCM Glob. Health	100.5
Laggards		Laggards	
Frontier Equity	-31.3	Warburg Pinc. Jap. Sm. Co.	-57.6
TCW Galileo Sm. Cap Gr. I	-30.1	Credit Suisse Inst. Jap. Gr.	-54.2
TCW Galileo Aggr. Gr. Eq.	-28.4	Warburg Pincus Japan Gr.	-53.6
ProFunds UltraOTC Inv.	-27.9	Matthews Korea I	-47.9

Data: Standard & Poor's

THE WEEK AHEAD

RETAIL SALES Wednesday, Dec. 13, 8:30 a.m. EST ► Retail sales likely grew 0.2% in November, says the median forecast of economists surveyed by Standard & Poor's MMS, a unit of The McGraw-Hill Companies. In October, sales edged up 0.1%. Excluding cars, store buying likely rose 0.3% last month, after a 0.4% gain.

PRODUCER PRICE INDEX Thursday, Dec. 14, 8:30 a.m. EST ► Producer prices of finished goods likely rose 0.2% in November. Core prices, which exclude food and

energy, grew 0.1%. In October, all prices rose 0.4%, while core prices fell 0.1%.

BUSINESS INVENTORIES Thursday, Dec. 14, 8:30 a.m. EST ► The S&P MMS survey forecasts that business inventories probably grew 0.2% in October.

CURRENT ACCOUNT BALANCE Thursday, May 1, 10 a.m. EST ► The U.S. current account deficit probably widened to about \$115 billion in the third quarter from \$106.1 billion in the second.

GLOBAL MARKETS

	Dec. 6	Week
S&P Euro Plus (U.S. Dollar)	1387.9	4.2
London (FT-SE 100)	6273.3	1.8
Paris (CAC 40)	5985.2	-1.2
Frankfurt (DAX)	6622.3	0.4
Tokyo (NIKKEI 225)	14,889.4	2.6
Hong Kong (Hang Seng)	15,099.0	6.6
Toronto (TSE 300)	9230.6	4.6
Mexico City (IPC)	5787.4	-2.5

FUNDAMENTALS

	Dec. 5	Week
S&P 500 Dividend Yield	1.16%	
S&P 500 P/E Ratio (Trailing 12 mos.)	26.7	
S&P 500 P/E Ratio (Next 12 mos.)*	21.8	
First Call Earnings Revision*	-1.72%	

*First Call Corp.

TECHNICAL INDICATORS

	Dec. 5	Week
S&P 500 200-day average	1437.7	14
Stocks above 200-day average	52.0%	
Options: Put/call ratio	0.72	
Insiders: Vickers Sell/buy ratio	1.59	

WORST-PERFORMING GROUPS

	Last month %		Last month %
Metal & Glass Containers	-27.7	Metal & Glass	
Semiconductors	-24.3	Long-Dist. Tele	
Money Center Banks	-19.4	Office Equip. &	
Oil & Gas Drilling	-19.2	Photography/I	
Office Equip. & Supplies	-19.2	Furnishings &	

INTEREST RATES

KEY RATES

	Dec. 6	Week
MONEY MARKET FUNDS	6.15%	6.1
90-DAY TREASURY BILLS	6.07	6.2
1-YEAR TREASURY BILLS	5.72	5.9
10-YEAR TREASURY NOTES	5.32	5.5
30-YEAR TREASURY BONDS	5.52	5.6
30-YEAR FIXED MORTGAGE†	7.55	7.6

†BankQuote, Inc.

BLOOMBERG MUNI YIELD EQUIVALENT

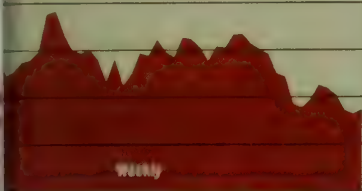
Taxable equivalent yields on AAA-rated, tax-exempt bonds, assuming a 31% federal tax rate.

	10-yr. bond
GENERAL OBLIGATIONS	4.66%
TAXABLE EQUIVALENT	6.75
INSURED REVENUE BONDS	4.84
TAXABLE EQUIVALENT	7.01

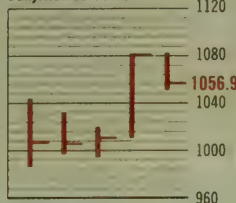
BUSINESS WEEK FIFTY

June

Dec.



Daily: Nov. 30-Dec. 6



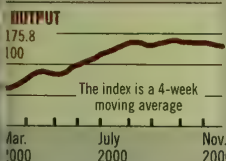
at least it's up. The BW 50 earned 1.2%, with more tech and telecom gainers than losers. PC ed 43.0% after reporting weak sales, while Intel lost 25.7%. It wasn't quite enough to off- nce's 52.8% gain and EMC's 23.0% gain, two companies duking it out in the data storage 32.0%, and Qualcomm, up 20.3%, were among the most heavily traded stocks this week.

COMPANY PERFORMANCE

% change		Rank	Company	% change	
Week	Since 3/1/00			Week	Since 3/1/00
-12.9	-37.6	26	Intel	-25.7	-45.2
4.2	-20.5	27	Tribune	1.2	-0.2
-0.5	-21.9	28	Xilinx	-7.0	-46.4
32.0	-15.6	29	Enron	2.4	4.3
23.0	52.5	30	Lexmark International	-8.1	-62.6
12.3	-73.0	31	Omnicom Group	10.1	-5.4
6.8	-7.7	32	America Online	2.9	-21.7
4.8	-43.5	33	Guidant	-0.6	-21.4
-4.7	-76.6	34	MBNA	-4.3	50.5
6.5	-6.6	35	Pfizer	-4.9	36.1
11.0	-9.6	36	Soletron	-9.0	-15.3
-1.3	-48.7	37	Gateway	-43.0	-75.9
1.1	-5.8	38	Wells Fargo	3.3	39.8
12.7	-19.0	39	General Dynamics	-7.7	63.3
-17.5	-58.2	40	Texas Instruments	18.6	-43.7
18.8	25.5	41	Capital One Financial	3.4	54.7
52.8	-19.6	42	General Electric	8.6	23.2
1.3	11.8	43	Kansas City Southern Industries	1.5	85.1
-3.1	1.4	44	Wal-Mart Stores	5.7	11.9
-1.3	-66.3	45	Paccar	-0.9	4.5
-5.5	-56.1	46	PE Biosystems Group	0.0	-17.9
5.5	55.4	47	Merck	-5.6	49.3
2.6	-58.9	48	Adobe Systems	4.5	33.9
-3.4	-47.6	49	Reliant Energy	-4.7	86.2
20.3	-28.5	50	Citigroup	0.6	28.5

PRODUCTION INDEX

Change from last week: -0.2%
Change from last year: 11.4%



edged lower for the latest week. of the four-week moving average, to 176.1 from a revised 174.8. On ed basis, auto and truck produc- but automakers have announced : production into the first quarter. -oil refining, and steel output also d rail-freight traffic declined in the

he index components is at www.business-week.com.
Index Copyright 2000 by The McGraw-Hill

ONLINE RESOURCES

BW50 Track the index and the companies in it all day long. Plus: our exclusive Info Tech 100 index.

S&P PERSONAL WEALTH Real-time market coverage, industry analysis, and personalized retirement advice.

MUTUAL FUNDS Search for funds, view BW ratings, and read Q&A's with fund managers.

COLUMNS Hot stocks, takeover plays, and the latest strategies for managing your money.

BusinessWeek online

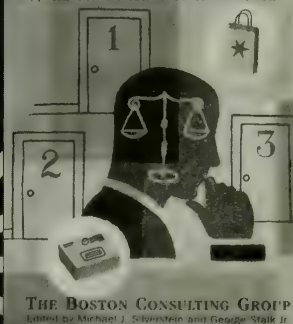
For more investment data and the components of the production index, visit www.businessweek.com.

WHO SAID THE SUPPLY CHAIN HAS TO SLOW YOU DOWN?

Rethink your
basic assumptions
about business.

BREAKING COMPROMISES

Opportunities for Action in Consumer Markets



More breakthrough thinking from
THE BOSTON CONSULTING GROUP
www.bcg.com/breakingcompromises

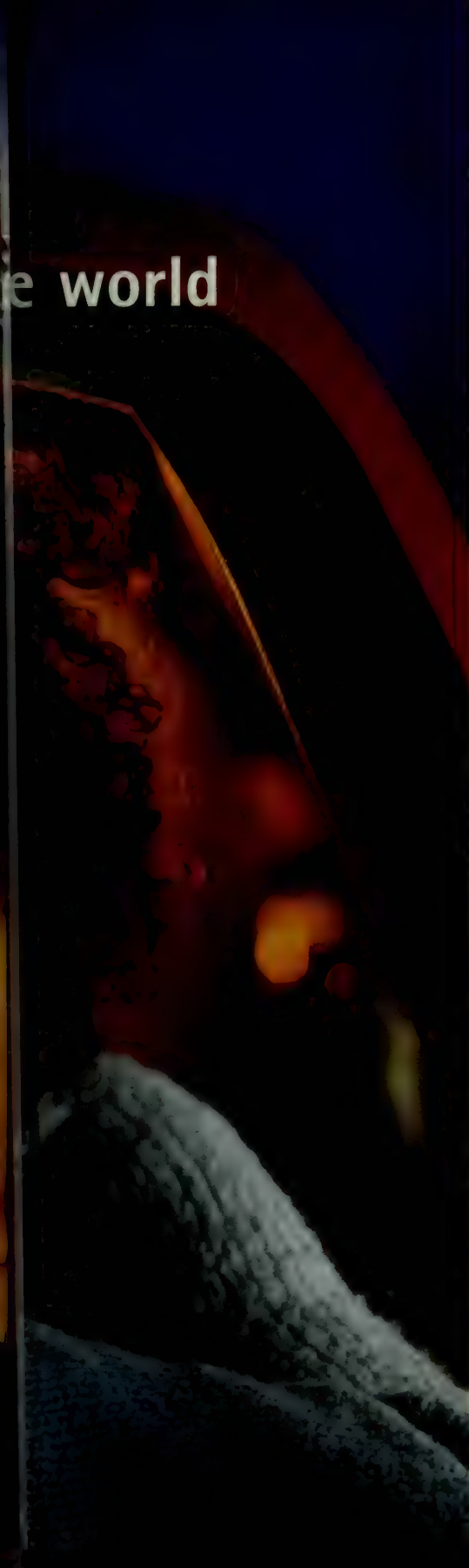
WILEY

Available at bookstores or online retailers

delivers

Nokia broadband technology change





e world

Rewrite the rules

Nokia delivers broadband @ the speed of demand.

Nokia makes the hardware that delivers broadband faster than ever. With Nokia's field-proven, next generation DSL and innovative wireless broadband systems, our customers get the scalability and flexibility they need to deploy broadband on demand. And when they add wireless LAN capability using one of our Nokia Home Gateway products, they'll really deliver customer satisfaction. With over 200 million loyal customers, Nokia has learned something about how to deliver. And isn't delivery what broadband's all about these days?

Visit us at www.nokia.com and start rewriting the rules your way.

NOKIA
CONNECTING PEOPLE

Index to Companies

This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

A

ABN Amro 194
ACE (ACL) 240
Adolph Coors (RKY) 245
Advanced Manufacturing Research 60
Aetna (AET) 240
Amazon.com (AMZN) 198, 208
American Express 224
America Online (AOL) 28, 76, 160, 164, 198, 234, 242
Analogue Devices 32
Anheuser-Busch (BUD) 245
Apple Computer (AAPL) 54
Archer Daniels Midland (ADM) 240
Ariba (ARBA) 60
A.T. Kearney (EDS) 206
Aurora Capital Group 44
AutoPacific 69
Aveda 224
Avon Products (AVP) 164
Awad & Associates 245

B

Banc of America Securities (BAC) 220, 245
Barclays Global Investors 189
BEA Systems 54
Beech-Nut Nutrition 160
Bloomberg 170, 194
Bloomingdale's (FD) 198
Blue Cross & Blue Shield of Massachusetts 206
BMW 76
Boeing (BA) 32
BP Amoco (BPA) 160
Brandes Investment Partners 242
Brightmail 234
Brown Brothers Harriman 66

C

Canon (CAJ) 32
Car Lab 69
CenterPoint Ventures 214
CGUAX 237
Challenger Gray & Christmas 220
Chase Manhattan (CMB) 44, 164

China Netcom 190
Circuit City (CC) 54
Cisco Systems (CSCO) 54, 60, 62
Citigroup (C) 32, 164, 237
CNA (CNA) 240
CNH Global (CNH) 240
Comcast (CMCSK) 170
Comdex 190
Commerce One (CMRC) 60
Compaq Computer (CPQ) 28
Computer Sciences (CSC) 206, 214
Cone 164
Constellation Brands (STXZ) 245
Convergent Technology 60
Corn Products International (CPO) 240
Corning (GCW) 32
Credit Suisse First Boston (CSGKY) 44, 72, 242

D

DaimlerChrysler (DCX) 12, 76, 94, 192, 220
Dana 220
Deere (DE) 240
Delphi Automotive Systems (DPH) 94, 220
Digital River 54
Dovebid 60
Dow Jones (DJ) 189
drkoop.com (KOOP) 214

E

E & J Gallo Winery 245
Eco Associates 214
Electronic Arts 76
Electronic Data Systems (EDS) 206
EMMAX 237
Emmis Communications (EMMS) 16, 170
Enron (ENE) 44
eToys (ETYS) 198, 208
Everest Re (RE) 240

F

Faber Castell 76
Federated Department Stores (FD) 198
Federated Emerging Markets Fund 237

Federated Latin American Growth Fund (LAMAX) 237
Ferris Research 234
Fiat (FIA) 192
Fidelity Investments 194
Fingerhut (FD) 198
Firestone 32
First Call 54, 66, 170
First American Financial 54
First Union (FTU) 54
Flextronics International (FLEX) 60
Ford (F) 32, 54, 69, 76, 94, 164, 220
Fox Entertainment (FOX) 170
FreeDrive 206
Frito-Lay (PEP) 68
FTSE International 189

G

Gap (GPS) 72, 98
GartnerGroup 206
Gateway (GTW) 28, 54
General Electric (GE) 54, 62, 198
General Motors (GM) 62, 69, 94, 206, 220
Gerber Products 160
Giga Information Group 54
Goodyear (GT) 32

H

Health Net 240
Heineken 245
Hewlett-Packard (HWP) 12, 54, 164, 190
Hilton Hotels (HLT) 16
H.J. Heinz (HNZ) 160
Hoak Breedlove Wesneski 245
Honda (HMC) 76, 192, 220
Honeywell International (HON) 32
Hyundai 245

I

IBM (IBM) 14, 76, 153, 190, 206
IBP (IBP) 242
Informix (IFMX) 60
Inktomi (INKT) 68
Intel (INTC) 28, 32, 54, 76
International Data 54

InterTAN (ITN) 245
Italjet 76
iVillage.com (IVIL) 172

J

Johnson & Johnson (JNJ) 164
Jones (Edward) 66
J. P. Morgan (JPM) 242
Jupiter Media Metrix (JMXI) 172

K

Kmart (KM) 98
Knoll 224
Kraft Foods (MO) 32

L

Lazard Frères 72
Leeds Equity Partners 40
Lehman Brothers (LEH) 206
LensCrafters 164
Leonard Green & Partners 214
Liberty Newport Global Utilities Fund 237
Loews (LTR) 240
LSI Logic (LSI) 54
Lucent Technologies (LU) 54

M

Macy's (FD) 198
Mail.com 214
MarchFirst (MRCH) 62
Marmon Group 32
Marriott International (MAR) 16
McCann-Erickson Worldwide 172
McGraw-Hill (MHP) 37, 60, 170, 220, 246
Merrill Lynch (MER) 54, 60, 170, 172, 194, 206
Metricom 76
Microsoft (MSFT) 28, 54, 62, 190, 234
Milnot Holding 160
Mitsubishi Motors 192
Mondavi (Robert) (MOND) 245
Morgan Stanley Dean Witter (MWD) 189, 206
Motorola (MOT) 32

N

Napster 76
Navistar International 220
NBC (GE) 198

NEC (NIPNY) 32
Nestlé 54
Netscape (AOL) 28
News Corp. (NWS) 170
Nike (NKE) 208
Nikon 76
Nintendo 202
Nippon Telegraph & Telephone (NTT) 189
Nissan (NSANY) 192
Novell (NOVL) 54
Novellus Systems (NVLS) 245

O

Oracle (ORCL) 60
Osborne 60

P

PaineWebber (PWJ) 44
PepsiCo (PEP) 68
Perot Systems (PER) 206
Petstore.com 60
PlanetOut 172
Playboy Enterprises 16
PricewaterhouseCoopers Money Tree 214
Principal Financial Group 224
Prion Developmental Laboratories 157
ProBusiness (PRBZ) 60
Productopia.com 60

Q

Quaker Oats (OAT) 68
Qwest Communications (Q) 164

R

RadioShack (RDH) 245
Recruiterlink.com 14
Renault 192
Reuters Group (RTRSY) 194

S

Safeway (SWY) 32
Salomon Smith Barney (C) 66, 160, 189
Seagram (VO) 221
Sears (S) 98
Sega Enterprises (SEGN) 202
Shanghai Intranet Systems 190
Siebel Systems (SEBL) 60
Smithfield Foods (SFD) 242
Sollectron (SLR) 60
Sony (SNE) 202

Standard & Poor 37, 246
Starwood Hotels Resorts (HOT)
Strong Capital Management
Sun Microsystems (SUNW) 32, 19
Sybase (SYBS)

T

Taco Bell 32
Talbots (TLB) 98
Tandy Electronics
Tene Healthcare 240
Terra Lycos (TRL)
TheStreet.com (C) 172
3Com (COMS) 54
3M (MMM) 76
Time Warner (TV) 170, 242
Toyota (TM) 32, 220
Triton Media 17
TurboLinux 190

U

UBS Warburg 11
United Airlines
Universal McCa
US West (Q) 164

V

Viacom (VIA) 17
Visteon (VC) 94
Vivendi (V) 221
Volkswagen (VL)

W

Wal-Mart Stores 72, 98, 198, 214
Walt Disney (DIS)
Welch Foods 16
Western Digital

X

Xerox (XRX) 32
Xilinx (XLNX) 54
XL Capital (XL)
Xpedior (XPDR)

Y

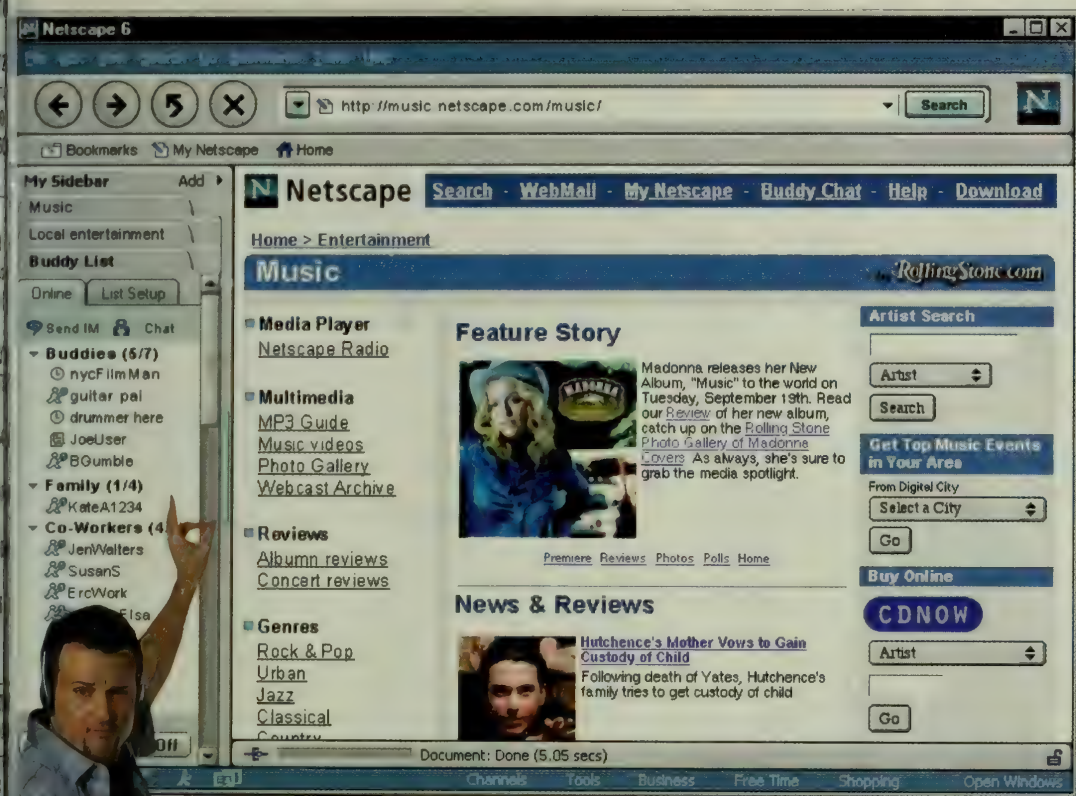
Yahoo! (YHOO)

Z

Zagat 76
Zenith Media 17
ZoneTrader 60

Business Week (ISSN 0007-7135) published weekly, except for one week in January, August, by The McGraw-Hill Companies, Inc. Executive, Editorial, Circulation, and Advertising: 1221 Avenue of the Americas, New York, N.Y. 10020, U.S. subscriber rate \$54.95/year; \$69/year. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 430, Hightstown, NJ 08520.

Personalize your Internet with Netscape®



Michael Cunningham is a software developer and a real music lover.

He'll find Netscape an ideal way to be more productive online because he can personalize the Internet for the way he works. With new Netscape 6, Michael can keep all of his most important information at his fingertips for fast and easy access. He can stay in touch with coworkers through his buddy list and listen to Netscape Radio during the day for inspiration. At Netscape.com, he can quickly find news and information to help him keep up with what's happening in his field. Other features like search, email and a personalized home page can help Michael streamline his work tasks (so he has more time for concerts). But Netscape is not just for software developers. Try Netscape today and see what it's like to experience the Internet your way.

Visit Netscape.com today. It's free.



Netscape

The power of the Internet made simple

HOW TO DEAL WITH THE TECH SLUMP

What is the right policy mix to combat a high-tech, New Economy downturn? This is perhaps the most important question facing the country in the months ahead. If the new Administration does not provide a sensible fiscal foundation for the Federal Reserve's actions on interest rates, the soft landing everyone hopes for could turn very hard, and soon.

Getting the mix right may be trickier than anyone thinks. For starters, this downturn is different from most others. We are living through an unusual tech-driven business cycle. On the upside, enormous capital expenditures on information technologies by business, not traditional consumer spending, boosted productivity growth, causing the economy to flourish for most of the '90s. Now, on the downside of the cycle, a sharp dropoff in high-tech spending is weakening the economy a lot faster than anyone anticipated. The job ahead is to stop the drop in capital spending.

The political situation makes this difficult. Fiscal policy was seriously politicized during the Presidential election. In the runup, Congress threw off restraint and went on a pork barrel binge. During the election, there were further promises of huge income tax cuts and big spending programs. Given the large budget surplus and congressional elections in 2002, there is a good chance that Congress and the next Administration will pass new spending programs and a large cut in marginal tax rates. Politicians will argue that this is just traditional medicine for a recession.

SPEED UP DEPRECIATION

But fiscal policies that promote consumption are not what is needed to reboot New Economy growth. We would all like a cut in our marginal tax rates, yet tax cuts should be directed at spurring high-tech investment, not consumption. A program much like the one President Kennedy used to boost investment in the early 1960s is demanded.

Policy should be directly focused on incentives to stimulate capital spending. There are several ways this can be done, including the Investment Tax Credit Kennedy employed. A simpler method would be to just cut the time for depreciating IT capital goods. Computers are now depreciated over five years, a ridiculously long period of time given the rate of change and improvement. Accelerating the depreciation period for capital spending directly stimulates the engine of New Economy expansion.

If there's a hard landing and recession threatens, Congress could go further and allow corporations to quickly write off their capital equipment in the year they buy it, rather than depreciate it over many years. Expensing new equipment could cost the Treasury serious tax revenue initially, but the budget has never been in a better condition to withstand the loss. And expensing has the added benefit of simplifying the tax code and doing away with egregious corporate tax shelters.

Washington also has the power to speed up the broadband rollout to consumers. A broadband digital divide has opened between the office and the home. While most people have fast access to the Net at work, only 9% of wired homes have a broadband connection. This is due in large part to Baby Bells' continued monopoly control of the "last mile" connection to homes and apartments. They have dragged their feet in implementing their own broadband and used the delay to slow down independent competitors. The enormous consumer demand for fast DSL lines is not being met. Regulators should do more to muscle the Bells to open their markets. An expansion of DSL phone lines would push cable companies to hurry their rollout of broadband cable modems.

LOWER RATES

In the end, the job of guiding the New Economy through sustained growth falls to the Fed. In no case should Washington hamstring the Fed's room for maneuver. Massive cuts or public spending programs locked in for a long time would put monetary policy in a straitjacket. Lower rates are central to keeping the capital markets open, especially to the telecom companies who play a key role in the New Economy. With their \$100 billion-plus capital budgets, they are the biggest buyers of high-tech equipment. Lower rates are crucial, as well, to stabilize equity markets and reviving venture capital, both vital to financing new high-tech startups.

Fed Chairman Alan Greenspan in a major speech last week appeared to lay the foundation for a more expansive monetary policy by publicly stating that the economy had slowed significantly. He cautioned that in a time of rapid growth, a continued slide in stock prices could cause excessive softening in household and business spending. He went on to warn banks not to tighten credit too much. Greenspan's standards, the speech was remarkable for its clarity and specificity.

Greenspan wants to start loosening monetary policy. Time is critical. The New Economy is going through a shakeout, consolidating hundreds of small startups and shutting off thousands of business experiments that looked promising at the dawn of the Internet but didn't pan out. The coming change is inevitable, healthy, and predictable. After all, the 200 auto companies at the opening of 20th century cars were the epitome of high tech.

A similar consolidation today is occurring. As Greenspan puts it, "not inconsistent with investment in technology continuing to serve as an engine of productivity growth in the years ahead." But a hard landing to mention a recession, could make that much more difficult. The Fed needs all the leeway it can get to guide the New Economy through this down cycle and restore it to sustained growth. The new Administration and Congress should do their best to them.

could you use an

ally

do you have a

personal trainer

who will be your

watchdog

Your Northwestern Mutual Financial Network Representative can play a valued role in your small business, bringing you the expert guidance and the specialists you need to attract and retain the right talent.

Leo Tucker
Financial Representative



Northwestern Mutual
FINANCIAL NETWORK™



...ative solutions for business, estate, insurance, and personal finance.

Are you there yet?

The Northwestern Mutual Life Insurance Co., Milwaukee, WI

www.northwesternmutual.com



NEW WORLD *NEW SUPPORT*

Prices and fees may apply. Offerings and fees vary by series and model. IBM list price as of 10/03/00 (excluding taxes and shipping of xSeries 200 model 847811X with 1GB memory, 64MB memory and 15.1GB IDE hard drive, not including operating system or other options). Actual reseller price may vary. Prices, specifications and availability are subject to change without notice. Intel is a registered trademark and Celeron is a trademark of Intel Corporation. IBM, the e-business logo and xSeries are trademarks or registered trademarks of International Business Machines Corporation. ©2000 IBM Corp. All rights reserved.

December 25 - JANUARY 1, 2001

3 9042 05166467 7

www.businessweek.com

BusinessWeek

DECEMBER 25, 2000 / JANUARY 1, 2001

A PUBLICATION OF THE MCGRAW-HILL COMPANIES

an Bush
Deal The
Nation?



The
Economic
Agenda

Lessons
from The
Fiasco

Who Won
the New
Economy
Voter

Winning Strategies For A Tougher Market

WHERE TO INVEST

Real Estate

Mutual Funds

Stocks

Bonds

Market Gurus

High Tech

Global Markets

Much More



PLUS: 2001
EARNINGS ESTIMATES

602 1058111600# T

LIBRARY

BURLINGAME PUBLIC LIBRARY
10 PRIMROSE RD
BURLINGAME CA 94010

BURLINGAME

DEC 15 2000

LIBRARY

AOL Keyword: BW

Business-to-business e-commerce isn't just about putting your catalog and prices online. It's become a worldwide electronic watering hole for today's business transactions

YOU'VE SEEN THE NUMBERS:

B2B e-commerce is 5 times greater than consumer Web purchases, and according to Gartner, the forecasts for B2B activity in 2004 are as high as \$7 trillion (it could go higher). Yet B2B e-commerce isn't just about customer payments, partner payments or online inventory queries. As companies transform themselves into e-businesses, they're beginning to manage procurement, supply chains and partner networks online.

The results are staggering: costs are slashed; geographic boundaries are transcended; efficiencies are dramatically improved; and value is added at every step.

"MY DATABASE WILL CONTACT YOUR DATABASE."

It's clear that there are enormous advantages in using the Internet to deepen and secure relationships with any and all of your customers and suppliers. Advantages like being more accessible, providing better service and locking in key relationships. To do this, you'll need to design a system that is open, so you can easily integrate with any of your partners' applications regardless of their platform. As a result, those businesses that are the most flexible and have the quickest response time will succeed.

JOE BUSINESS, MEET MR. E-MARKETPLACE.

The greatest value opportunity is e-marketplaces. They are the ultimate realization of e-business. Suppliers, buyers and marketmakers are coalescing around these

worldwide trading hubs where hundreds, even thousands, of industry players are gathering to do business. Suppliers are finding customers. Buyers are realizing enormous savings online.

Also consider: 18 months from now, there are expected to be 2 billion wireless devices connected to the Internet. Increasingly, both your customers and employees will require access to the information they need, anytime, anyplace.

MAKING IT HAPPEN.

IBM has learned by doing, and this has helped us deploy open Internet trading platforms that span all 35 of the world's major computing environments. Many are built on powerful IBM WebSphere® software, for massive scalability, speed and reliability.

With application software leaders like i2 and Ariba, IBM has over 6,000 dedicated B2B e-commerce and e-marketplace salespeople. Also, IBM embraces Linux and delivers a comprehensive tool set for development of e-business applications across all servers.

And the 130,000 people of IBM Global Services can provide the strategic insight to help you navigate the complexities of B2B e-commerce as well as provide the infrastructure to host your site.

If you need some help getting started, call a trained e-business specialist at **800.ibm.7080 (ext. b2b)** or visit **ibm.com/b2b**, where you will find tailored e-business solutions and case histories about the companies that have spearheaded the B2B e-commerce revolution.

HERE ARE SOME SAMPLE SOLUTIONS FROM IBM.

Developing your e-commerce strategy	➤	Web Selling Solution Planning Services > A comprehensive planning session led by IBM B2B e-commerce consultants, designed to identify a strategic action plan for a focused e-commerce initiative based on your needs.
Establishing a basic Web presence, so that you can start transacting with customers and partners online	➤	e-commerce Executive Assessment > A business case assessment for small and mid-sized companies, conducted by accredited IBM Business Partners. Includes a strategic proposal, competitive Web site analysis and prototype e-commerce site. IBM Small Business WebConnections® Platinum Package > Start selling and taking orders over the Web. A subscription service including shared Web and e-mail access for up to 100 employees. Starting at \$249 a month.*
Establishing a Web-based network with your partners and suppliers to streamline buying and selling	➤	IBM Start Now for e-commerce > IBM's Start Now solutions combine the software, hardware and services to help you quickly implement e-business solutions that will improve customer service, e-commerce and collaboration. With financing, from \$1,250 per month.*
Trying to extend your reach to customers and suppliers through wireless applications and services	➤	IBM Web Selling and Procurement Service Offerings > Allow you to navigate the complexities of linking customers, vendors and suppliers to your business in order to manage inventory and payments online.
Creating an e-marketplace or a Web-based trading network for all interested buyers and sellers	➤	IBM Wireless Solutions > Services and WebSphere Everyplace Suite software that enable you to extend your e-business applications to wireless devices, with the end-to-end security and scalability that are necessary in the rapidly expanding wireless world. IBM E-Marketplace Solutions > Start with a consulting engagement to help develop your strategy and then add software platform that allows you to rapidly create and deploy an e-marketplace. Seamlessly link buyers and suppliers over the Internet

To find a tailored solution that fits your needs, or for a free B2B e-commerce **white paper** developed for IBM by *Forbes*® Partner Programs, visit **ibm.com/b2b**, or to talk to a trained e-business specialist, call **800.ibm.7080 (ext. b2b)**

@B2B SOLUTIONS

IBM

All numbers reported are from industry and customer sources. *Fee based on a 2-year subscription to basic service for up to 100 PCs and excludes activation fee and phone charges. Requires 2-year subscription. Not combinable with other offers. Valid only in the U.S.A. Success/Lease is offered and administered in the U.S. and Canada by third party providers of business financing approved by IBM Global Financing. amount of monthly lease payments based on particular equipment configurations for credit qualified customers. 36-month financing. All taxes are excluded. Pricing and offers will vary by Canada. IBM, the e-business logo and other marks designated ® or TM are trademarks of International Business Machines Corporation in the United States and/or other countries. Linux is a registered trademark of Linus Torvalds. Other company, product and service names may be trademarks or service marks of others. © 2000 IBM Corp. All rights reserved.

AMMO FOR THE NEW YEAR

It was December, 1972, and Richard Nixon had just defeated George McGovern in a landslide. The Dow Jones Industrial Average had just closed above 1000 for the first time ever—the financial equivalent of running the four-minute mile. In that heady climate, BUSINESS WEEK created its first yearend investment outlook issue.

It turned out to be a rough passage for both Nixon and the investor. But even so, our traditional issue has thrived during the intervening 28 years. Since 1972, we have given investors the ammo they needed to meet the

markets' challenges—from the oil shocks and stagflation of the 1970s to the Reagan-era tax cuts and takeovers of the 1980s. Following the stock market crash of 1987, BUSINESS WEEK argued that the long-term case for stocks remained strong. From "Investing in the New Economy" (1996) to "The Global Slowdown: What It Means to You"

(1997), the investment outlook issue continues to be forward-looking. A year ago, in the midst of the dot-com boom, we made the case that the real story of Internet investing would be how traditional companies would use technology and the Web to increase their efficiency and transform their businesses. This year, we focus on "Winning Strategies for a Tougher Market."

NEW VIGOR. We start by looking at the overall economic framework, including a survey of the nation's leading business economists. Their consensus forecast for 2000 failed to show how strong growth would be—and it also underestimated inflation. But we're happy to report that BUSINESS WEEK's own prediction, prepared by Business Outlook columnists James C. Cooper and Kathleen Madigan, ranked No. 5 out of the 50 economists surveyed.

For years, Wall Street market strategists have underestimated the bull market's vigor. Last December was an exception, as the market gurus surveyed by BUSINESS WEEK turned out to be far too optimistic for 2000. Nevertheless, they're

forecasting an up market this year, too. But right or wrong, their views on asset allocation, together with their favorite stock sectors and stocks, provide investors with perspective from the Street.

Individual investors, as tracked since 1996 by the BUSINESS WEEK/Harris investor poll, have tended to be more favorable in their outlook than the professional market forecasters. Cumulatively, the poll provides valuable background on how that sentiment has changed. This year, for example, investors are more pessimistic about the market than they have been in five years. But they continue to be upbeat about their own abil-

ity to beat the market. Good luck, folks.

BW's annual In-



ONWARD AND UPWARD: Forecasting since 1972

vestment Scoreboard of 900 companies wraps up the issue, providing a wealth of information for the individual investor. Readers can analyze companies historically and evaluate their prospects several different ways, and it's a great starting point for further research.

"Where to Invest" is a collaborative effort of two dozen reporters and editors drawn from our finance, investor, and economics departments and using the resources of our vast bureau system around the world. Chief Economist William Wolman leads our team, along with Senior Editors Jeffrey M. Laderman, John Templeman, and Seymour Zucker.

This special double issue is our way of wishing you a happy and healthy New Year—and a prosperous one, too.

Stephen B. Stegall

Editor-in-Chief

A photograph of a man with dark hair, wearing a dark sweater over a white collared shirt, sitting at a desk. He is looking towards the right with a slight smile, his hand resting on his chin. His other hand is on a computer mouse. A keyboard and a pen are also visible on the desk. The background is a blurred indoor setting with a plant. The text "See yourself succeeding" is overlaid in a large, white, sans-serif font across the middle of the image.

See yourself succeeding



Mary Rowan
Fidelity Investments
Brokerage
Representative

September 14, 2000
9:20 AM

Fidelity Rep: So, why do you want to take money out of your account?

Investor: Well, actually...I'm ready to trade online.

Fidelity Rep: Great. We can do that.

Investor: Wait a minute. Fidelity? Trading stocks?

Fidelity Rep: Yeah, we call it **Powerstreet**™. Just click on **Fidelity.com** and you're there.

Investor: But Fidelity? That's managing mutual funds. I had no idea I could trade.

Fidelity Rep: Sure—trade, manage, research—you name it. All with the service ranked highest in investor satisfaction with online trading services by J.D. Power and Associates.

Investor: Sounds like what I've been looking for.

Fidelity Rep: Oh and Mr. Roberts...

Investor: Yeah?

Fidelity Rep: When you're ready to try wireless trading... you just let us know.



1-800-FIDELITY Fidelity.com

Availability and response time may be subject to market conditions.

Investment results may vary. Research services are available to Fidelity customers. J.D. Power and Associates 2000 Online Trading Customer Satisfaction Study based on responses from 2,709 investors who utilized an online service within the past 6 months. www.jdpower.com. J.D. Power and Associates is an independent company and is not affiliated with Fidelity. Fidelity Brokerage Services, Member NYSE, SIPC.

114252

MAP.



Need directions? Well, get on the Superhighway with the revolutionary Ericsson R380 WORLD, featuring the Mobile Internet. Yes, it's a smartphone. A completely new breed that works in over 120 countries, it has WAP Mobile Internet Services, e-mail, and more.

WAP.



izer and even handwriting recognition. And to use them, all you do is tap the touchscreen
ne stylus. Hey, even the R380 WORLD itself is easy to navigate. www.ericsson.com

ERICSSON 

RUNNING WITH THE BULLS IN PAMPLONA

KAYAKING CLASS V RAPIDS

**CROSS-POLLINATING TRADING AND WEB EXPERTISE
TO FACILITATE AN ONLINE PORTAL
ENABLING CUSTOMERS TO MAKE REAL-TIME ENERGY TRANSACTIONS
IN RESPONSE TO MARKET CONDITIONS**

{ hey, whatever turns you on }

At Dynegy, what gets us going is turning the complexities of the energy marketplace into upside for our clients. In fact, we're now online with *Dynegydirect*, an invaluable e-tool for just that purpose, enabling clients to monitor and act instantaneously on market activity, potentially saving them millions in energy costs. Our business is delivering energy and broadband opportunities to our clients. We do it with unmatched market savvy. A work ethic second to none. A passion for original thinking. And we do it with passion. In just 15 years, Dynegy (NYSE: DYN) has become a company with revenues topping \$22 billion and we're now included on the S&P 500. If that's enough to get your adrenaline going, visit us at www.dynegy.com. And come run with the bulls.

www.dynegy.com 877-4-DYNEGY

© 2001 Dynegy Corporation. All rights reserved. Dynegy and the Dynegy logo are trademarks of Dynegy Corporation.



DYNEGY





BusinessWeek

DECEMBER 25, 2000 / JANUARY 1, 2001

CONCILIATOR IN CHIEF?

George W. Bush prevailed. Can he heal a nation divided? page 40



OLDS ECONOMY

For GM, retiring the lackluster brand may be too little, too late page 57



POLL PILOT

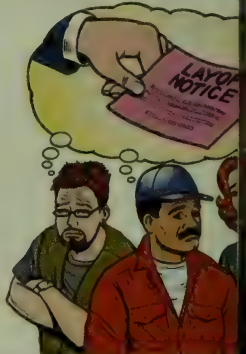
The New Economy Voters were critical this election. Who are they? page 50

LIFE LESSONS

Lorna Wendt's site is asking couples all the right questions page 177

MORE PINK SLIP

With layoffs rising, job market may let a bit page 54



Government

40 HANDICAPPING PRESIDENT BUSH

With scant political capital, he may end up being merely a custodial chief executive

42 WITH GOP ALLIES LIKE THESE...

Bush will have his hands full dealing with the right

45 COMMENTARY: ELECTION LAW

It's going to take more than new voting machines to fix the system

46 WHAT WASHINGTON MAY DELIVER

Bush will have to scale back his tax cut and limit Social Security reform

48 COMMENTARY: LESSONS LEARNED

The country can't afford another election like Fiasco 2000

50 THE NEW ECONOMY VOTER

Bush wooed the high-tech crowd—and it gave him his edge

News: Analysis & Commentary

54 PINK SLIP BLUES

The job market is still tight. But new layoffs are giving bosses more clout

56 CHRYSLER: SUPPLIER SQUEEZE

CEO Zetsche wants price cuts. Vendors are balking

57 COMMENTARY: GM

Oldsmobile is far from the auto maker's only problem

58 MORE PAIN FOR PC MAKERS

Shoppers see no pressing need to upgrade, and there are unsold computers far as the eye can see

59 COMMENTARY: BASEBALL

The Rodriguez contract widens the destructive gap between the have teams and the have-nots

60 IN BUSINESS THIS WEEK

International Business

61 INTERNATIONAL OUTLOOK

Israel's special election: A last-ditch effort by Ehud Barak to save the peace process

Economic Analysis

34 ECONOMIC VIEWPOINT

Kuttner: To preserve the boom, Washington has to spend money

36 ECONOMIC TRENDS

Unemployment and inflation, immigration and entrepreneurship, home sales and household

37 BUSINESS OUTLOOK

No doubt about it: The economy is slowing

BusinessWeek Investor

177 TODDI GUTNER: HERS

Is your marriage an equal partnership? Click on Lorna Wendt's Web site to find

180 THE BARKER PORTFOLIO

This service has a low price, but it still isn't worth it

187 INSIDE WALL STREET

Features

1 EDITOR'S MEMO

14 UP FRONT

20 READERS REPORT

26 BUSINESS WEEK BEST-SELLING

30 BOOKS

Le Carré: *The Constant*

32 TECHNOLOGY & YOU

What further wonders will the new millennium bring forth?

188 FIGURES OF THE WEEK

192 INDEX TO COMPANIES

BusinessWeek online

www.businessweek.com
America Online Keyword: BW



Where To Invest

ACTION

SHORT BETS IN TOUGHER TIMES

Stocks will actually improve in 2001—but you have to know where to look

NEW WORK

SLOWDOWN A SLUMP?

Economists are worried about slowing stocks, a credit crunch, and a swooning dollar

CASTING 'ON THE MONEY'

Investment strategist Tim McGee's outlook for 2001 was accurate

IDEAS FOR STOCKS

MARKET, RETRO STYLE

As interest rates ease, Old Economy plays are showing upside

EXPERTS ARE UPBEAT

Investment figure 2001 will be a brighter year for stocks

CASTERS' TRIPLE CROWN

McGee & Voyles: Their predictions for 2000 were right on the mark

BUSINESS WEEK/HARRIS POLL

Investment bull slows its charge, as fewer investors opt for buying stocks

80 TECH: WHERE'S THE BOTTOM?

Nobody knows. So pros are stocking up on solid heavyweights

84 THESE OLDIES ARE GOODIES

Some traditional companies really swing with an Internet beat

86 CAN BIOTECH KEEP ROLLING?

The shares look to be good defensive plays

90 FROM MUNDANE TO SEXY

As tech "growth" stocks plummet, some industrials look hot

94 REITS: STILL A SOLID DEFENSE

But don't expect returns as rich as last year's

96 FINANCE STOCKS: DANGER AHEAD

Even an interest-rate cut can't save this group from sluggish earnings

98 SOME IGNORED DOT-COM GEMS

Amid the tech wreckage lie jewels that will shine again

102 EUROPE: AFTER THE BUBBLE

Some sectors could do well in a downturn

104 ASIA: STEEL YOUR NERVES

The bears reign, but you can find a few bargains

106 LATIN AMERICA: DEBT DOUBTS

An Argentine default could hurt all of the region's stocks

108 GLORY DAYS FOR THE SHORTS

Short sellers are ahead of the game for the first time since 1994

112 TURKEY TROT 2000

Many pros made money, but many more lost it—big-time

114 THE PRO PERSPECTIVE

Fund managers tell what they'll be buying in the year ahead—and why

122 STOCKS' PUZZLING PREMIUM

Some question why their returns should be richer than bonds

THE INVESTMENT SPECTRUM

124 FUNDS: THE YEAR THE MUSIC DIED

They're stalled by higher rates, slower growth, and the technology bust

128 BONDS: LOOKING UP

They could be a great bet—but not just any bonds

132 ART: A BLUE PERIOD FOR BUYERS

Peak prices have many collectors biding their time

THE INVESTMENT SCOREBOARD

136 STOCKS: IT'S BACK TO BASICS

BUSINESS WEEK's Scoreboard gives you the data you need to make the right portfolio decisions

Updated every business day at **www.businessweek.com**



Winner of the 2000 National Magazine Award for General Excellence in New Media

VIDEO VIEWS

Original streaming video featuring industry experts and BW editors

■ **COBOL LIVES!** Vivek Wadhwa of Relativity Technologies talks about the huge market in converting old languages to the Web



■ **TURNAROUND:** Clear winners must emerge in info tech before the market can rebound, says BW Chief Economist Bill Wolman



TOOLS

■ **CAPITAL-GAINS CALCULATOR:** Here's how to figure if you should hold, or sell and reinvest



■ **MBA SEARCH:** Which is the right business school for you and your needs?



■ **SALARY SURVEYS:** How much money should you be paying your staff?



■ **YOUR PORTFOLIO:** Check on the health of your investments



INTERACTIVE FORUMS

■ Join other readers in ongoing discussions on business schools, info tech, assistive technology, investing, and more—or start your own

Track the daily performance of the Info Tech 100 index



Find quick links to everything on this page at the Dec. 25, 2000/Jan. 1, 2001, issue table of contents online, or go directly to www.businessweek.com/2000/00_52/online.htm

Broken Promise

Special Report: Deregulated power is still a crazy patchwork of ineffective rules. Doing better will require painful changes in energy markets and policies nationwide



DAILY BRIEFING

Business and investing news, commentary, and analysis

www.businessweek.com/bw

NEWS: For the first time, labor is targeting Wal-Mart Stores with a nationwide recruiting drive
STREET WISE: Why Apple is losing its appeal again



INVESTING

Investing insights powered by S&P Personal Wealth

www.businessweek.com/in

ANALYSIS: Will investors end up footing the bill for the stock market's transition from fractions to decimals?

NEWS: Comparing trading costs on the Big Board and Nasdaq

SMALL BUSINESS

A resource for entrepreneurs

frontier.businessweek.com

FINANCE: Small-business owners have one eye on their debt load and the other on increasingly cautious consumers



TECHNOLOGY

State-of-the-art coverage of info tech

www.businessweek.com/tech

ANALYSIS: Three Chicago pros show why prices for some hot items drop as demand peaks. That could be bad news for Net auctioneers



B-SCHOOLS

Business Week's exclusive rankings and profiles

www.businessweek.com/bs

MBA JOURNALS: In this new series, six second-year writers report on what they learned during their summer internships

GLOBAL BUSINESS

In-depth coverage of Asia, Europe, and Latin America

www.businessweek.com/global

MOVEABLE FEAST: The overstock of champagne from last year's fizzled Millennium festivities means great bargains. Here's a guide

CAREERS

Advice and tools for upper-management job seekers

www.businessweek.com/careers

STAFF & BENEFITS: At 2000's holiday parties in Silicon Valley and Alley, they won't be partying like it's 1999



Market summaries?
Account balances?
Trades?



It's your call.

So easy to use, so much access—so what is it? An Internet-ready phone with Schwab PocketBroker™ service.



Schwab
PocketBroker™

What can you do with it? Even when you are on the move, you can manage your accounts, get market updates, make trades and more with the power of Schwab. And you can do it all via your Internet-ready cell phone.

And as you'd expect from Schwab, PocketBroker is also available from your choice of Palm™ IIIxe or Palm Vx handhelds. And the RIM Wireless Handheld.™

With Schwab's PocketBroker you get a whole new level of convenience and control. After all, if you're a well-connected investor, you can be a smarter one.

If you already have an Internet-ready phone, you can find us on your phone's web menu or at pb.schwab.com.*

**OPEN AN ACCOUNT:
GET AN INTERNET-READY
PHONE.**

Open a Schwab account online with a minimum of \$10,000 and get your choice of an Internet-ready phone, compliments of Schwab.

Just log on to schwabwelcome.com.

Or call 1-800-3-SCHWAB or visit a Schwab branch near you.

schwabwelcome.com

where every investor is always welcome™

Charles Schwab

creating a world of smarter investors™

*Customers are subject to service levels, privacy, security, fees and usage policies of their wireless service provider.

Offer valid for new Schwab or SchwabOne accounts opened online and funded between 10/16/00 and 2/15/01. Offer does not include retirement and Schwab Institutional accounts. If you work at Schwab, a wireless equipment or service provider, another financial institution, broker-dealer, news or financial information media company, you are also not eligible for this offer. Offer is valid until 2/15/01, unless terminated earlier by Schwab. Terms and conditions apply. Please consult Schwab for details. Web phones are manufactured and supplied and wireless service is provided by independent third parties that are not affiliated with Schwab. Selection of web phones may also be limited due to market availability or compatibility requirements of the wireless service providers. PocketBroker Service, including real-time quotes, news and trading features may be delayed, limited or unavailable due to limits of wireless coverage and during periods of peak demand, market volatility, system upgrades or maintenance. Palm is a trademark of Palm, Inc. or its subsidiaries and Research In Motion (RIM) and the RIM Wireless Handheld family are trademarks of Research In Motion Limited, independent companies not affiliated with Schwab. Domestic US customers only. Limit one per customer. Offers must be redeemed no later than 6/30/01. Deposits must be new to Schwab, margin loans and deposits or transfers between Schwab accounts do not qualify. Exceptions may apply. ©2000 Charles Schwab & Co., Inc. All rights reserved. Member SIPC/NYSE (1000-6567)

A dense, chaotic flock of various ducks and geese in flight against a white background. The birds are in various poses, with wings spread, creating a sense of movement and complexity. The colors of the birds range from dark browns and greys to bright reds, oranges, and greens.

Now there's a better way to manage
your customer-employee-supplier-partner-
intra-extra-Inter-cross-platform-global-
way-too-complex-digital-economy net.



It's one Net. Take off.

You can't reach new heights in today's eBusiness world unless you get all your ducks in a row. You need integrated networks that let your employees, partners, suppliers and customers work together. And all their different operating systems, intranets, extranets and the Internet work as one Net. Securely and reliably. That's the strength of Novell's Net services software. It lets existing technology work together. And gives you the power to change your eBusiness as fast as the Net economy. So take off at www.novell.com

Novell.
the power to chaNge[®]

Up Front

EDITED BY SHERIDAN T. PRASSO

PAY CHECK

HIT 'EM UP FOR A BIGGER RAISE, ALAN

ALAN GREENSPAN IS GETTING a raise. Yet while an 11% hike, to \$157,000, sounds good, his salary is paltry compared with heads of the 12 regional Feds and other central bankers around the world.

UNDERPAID

Many of his counterparts make double: Eddie George of the Bank of England gets \$345,000; Wim Duisenberg of the European Central Bank, \$340,000; Masaru



Hayami, Bank of Japan, \$345,000. Even Hong Kong, with an economy 2% the size of the U.S. economy, pays its Financial Secretary \$315,000.

Because Congress sets his salary, it's reluctant to pay big bucks. Regional Fed banks aren't government agencies, so can pay more. After 13 years of presiding over a \$10 trillion economy, it's ironic. "Greenspan's policies have created so much wealth for so many, yet he only gets a small slice," says Carl Tannenbaum of LaSalle Bank/ABN Amro. "[But] if we gave him his market value, could we afford it?" *Laura Cohn*

TRADE WINDS

A SWEATSHOP CALLED THE WTO

IT REGULATES TRADE ALL over the world. It's a lightning rod for antiglobalization. But the World Trade Organization in Geneva has only 534 employees—a mere fraction of the 9,000 at U.N. headquarters.

the organization is asking its 140 member governments for more money. Director General Mike Moore wants an extra \$3.7 million next year, up from his current \$74 million budget. That would add 13 lawyers and economists—still not enough to deal with China, which has a trillion-dollar economy and a weak legal system. Members were to ratify the increase Dec. 15.

"We're this little organization that is considered a giant responsible for everything bad in the whole wide world," says WTO spokesman Keith Rockwell.

With 12 countries from Albania to Panama having signed on in the last few years, there's been far more to do. The WTO's predecessor, GATT, judged 300 cases in half a century of existence; in just six years, the WTO has heard 214. When China adds to the workload, employees may just join anti-WTO demonstrations themselves. *William Echikson*

ADDED LOAD: China

And they're about to get swamped: China is expected to join the WTO in 2001, and many fear the caseload of disputes it may prompt will overwhelm the WTO's staff. So

TALK SHOW "We reverse the judgment of the Supreme Court of Florida ordering a recount to proceed"

—from the U.S. Supreme Court's majority decision



TECH SLUMP

HAVE PINK SLIP, WILL PARTY

'TIS THE SEASON TO BE merry—unless you're a casualty of the dot-com reality check this year. But that's not deterring the nearly 2,000 laid-off dot-comers in New York's Silicon Alley.

They're throwing "pink slip" parties. They gather at a hip spot in Manhattan, Rebar, on the last Wednesday of the month to swap career advice, commiserate—and mingle with recruiters, who must bring three jobs to be let in. "People like to trade horror stories. It makes them feel a little bet-

ter," says Allison Hemming, 32, who left the parties in after getting her own pink slip. The cocktail party tells it all: never work a 29-year-old at seethes Mark G. 30, whose travels gecko.com, in August. G. grumble that the ees left with a

severance packages

worker bees got nothing other lesson? "Going public not a business plan," says cruiser Alle Cole, 28. Companies simply didn't beyond the IPO."

The idea is spreading fast as a computer More than 7,000 dot-coms have been laid off nationwide according to outplacement firm Challenger, Gray Christmas. So Hemming helping launch similar sites in Seattle, Las Vegas, and Francisco. "It's almost a of honor these days," says. New York's next every mingle will be on Dec There's a prize for the tale of woe: free job-search services. *Marcia Stein*

THE LIST VIVE LA (E-MAIL) DIFFERENCE

Surveys of Internet users 18 and over show men and women shop online in almost equal numbers. Book purchases are the same across gender lines, but men buy more computer items while women buy more clothing and health products.*



CDs	21%
COMPUTER SOFTWARE	17
CLOTHING	13
VIDEOS	10
PET SUPPLIES	6

*Survey of 1,632 women and 1,761 men who said they made such purchases in the previous 90 days
DATA: GREENFIELD ONLINE



Keep pace.



Find peace.



Hear about the all-new Mercury Mountaineer.

Whether you're charging hard or just recharging — the completely redesigned 2002 Mercury Mountaineer adapts to fit your needs. With innovative features like a standard third-row seat that folds flat and available power adjustable foot pedals. The 2002 Mercury Mountaineer premieres spring 2001. But you can get a closer look now by visiting the Web site or calling 888 748-8805.

For more information, visit www.2002mountaineer.com/b



Mercury
LIVE LIFE
IN YOUR
OWN LANE

2002 Mercury Mountaineer available spring 2001.

Up Front

PRODUCT PEEK

GUIDING SCOOTERS TO A SOFT LANDING

SHINY NEW SCOOTERS ARE all the rage as Christmas gifts. Problem is, they're dangerous. According to the U.S. Consumer Product Safety Commission, emergency rooms have treated 30,000 scooter injuries since the

15 WHEELS: *The Scooter Roller*

craze took hold earlier this year. But mechanical engineering grad Dani Freeman, 23, has invented a gadget aimed at making them safer. His Scooter Roller is now on sale nationwide at gizmo retailer Brookstone.



Its 15 wheels clip on underneath the chassis and keep it from catching on the bumps and dips on sidewalks that occasionally send riders flying. Freeman was inspired by his own spills that left him bruised and musing about how to improve the design.

At \$25 apiece, Brookstone expects to sell up to 40,000 Scooter Rollers before Christmas, says the chain's CEO, Michael Anthony. While top-selling manufacturer Razor advocates kneepads and a helmet for safety, kids find such gear uncool.

But if the new wheels pass the coolness test, Freeman may have a hot seller, too.

Ronald Grover

WIRED LIFE

DOES IT DISPENSE TOILET PAPER?

OUT SHOPPING ON MARKET Street, State Street, or Madison Avenue when nature calls? It's www.besttoilets.com to the rescue.

The site, which rates bathrooms in 12 cities for cleanliness and design, can be downloaded onto your Palm or Handspring before leaving home. "Toilets are a need-to-know item," says David Vogue of Queens, N.Y., who runs the site as a hobby.

It takes a revved-up machine: Only the more recent Palm V, with at least 3.0 memory, and the Handspring Platinum have the YadaYada browser necessary to translate HTML-based Web sites. Click "Wireless Web Guide,"

then "Cool Sites." For an earlier Palm, download bookmark software at www.avantgo.com. For the truly wireless, Palm VII links straight to the Web site as long as YadaYada is your Internet service provider. But can it guide you to relief via GPS? Maybe next year.

Joan Oleck



HOT TOYS FOR THE HOLIDAYS

Can't get hold of a PlayStation 2 to put under the Christmas tree this year? Few parents can. Here are the top five toys flying off the shelves at selected U.S. retailers so far this holiday season.*

eToys

TEKNO ROBOTIC PUPPY/Manley Toys \$34.99
TOP IT!/Parker Bros. \$14.99
RAZOR SCOOTER \$99.99
CHUCK, MY TALKIN' FIRE TRUCK Hasbro \$24.99
STEEL SAFE/Schylling \$16.99



Toys 'R' Us

RAZOR SCOOTER \$99.99
TEKNO ROBOTIC PUPPY \$39.99
PLAYSTATION 2 \$299.99 and PLAYSTATION 1/Sony \$99.99
LEAPPAD PRESCHOOL ELECTRONIC BOOK/Leapfrog \$49.99
BARBIE AIRPLANE/Mattel \$49.99

Kmart

MATCHBOX, HOT-WHEELS VEHICLES 59¢ to 99¢
TEKNO ROBOTIC PUPPY \$44.99
BARBIE CASH REGISTER \$29.77
POO-CHI INTERACTIVE PUPPY/7 Electronics \$24.99
SKEETER SCOOTER/Kmart \$34.99

* Prices can vary, due to sales promotion and geography

DRAWN & QUARTERED



SENIOR SURFERS

DESIGNING WOMEN, MEET GOLDEN GIRLS

DON'T EVEN THINK ABOUT buying your mother an ugly cardigan or a hot-water bottle this year.

She might hit you with the chic silver-tipped walking stick (\$185) she just bought for herself at goldviolin.com.

Web surfers over age 65 are forecast to increase 368% in the next five years, from last year's 3.7 million, according to Jupiter Research. So Gold Violin has enlisted fashion grande dame Pauline Trigère to design such acces-



E-DESIGNER: *Trigère*

92. There's no reason she says, that seniors can't be fashionable, too. "When I go to the theater concert and see the other people are carrying what pretty dress...," Trigère says with a sigh. "I think canes should be redesigned up." Take away the spring chickens. Joan Oleck

FOOTNOTES Estimate of U.S. shoppers who will buy gifts online this holiday: **35 million**. Online shoppers last year: **20 million**.



Marvell Technology Group Ltd.

has agreed to acquire

Galileo Technology Ltd.

Pending



EXODUS

has agreed to acquire

**Global Crossing's
GlobalCenter Inc.**

Pending



CORNING

has agreed to acquire

**Pirelli S.p.A.'s stake in
Optical Technologies**

Pending



**COBALT
NETWORKS**

has agreed to be acquired by

Sun Microsystems, Inc.

Pending



Inktomi

has acquired

FastForward Networks

October 2000



**ONI
Systems**

\$230,000,000
Initial Public Offering
June 2000

\$300,000,000
Convertible Subordinated Notes
October 2000

\$596,000,000
Common Stock
October 2000

\$1,200,000,000



**ANALOG
DEVICES**

Convertible Subordinated
Notes
September 2000



NUANCE

\$87,975,000
Initial Public Offering
April 2000

\$363,000,000
Common Stock
September 2000

\$264,500,000



**CoSine
COMMUNICATIONS**

Initial Public Offering
September 2000

BOOKHAM

£219,000,000
Initial Public Offering
April 2000

£478,045,000
Ordinary Shares
September 2000



Active

has been acquired by

webMethods, Inc.

August 2000

\$73,600,000



MICROTUNE

Initial Public Offering
August 2000

\$172,500,000



BLUE MARTINI

Initial Public Offering
July 2000

\$56,350,000



webex

Initial Public Offering
July 2000



**Infineon
technologies**

€6,071,625,884
Initial Public Offering
March 2000

€2,500,000,000
Exchangeable Offering
July 2000

\$170,100,000



**ArrowPoint
COMMUNICATIONS**

Initial Public Offering
March 2000

has been acquired by
Cisco Systems, Inc.
June 2000

To build a network of excellence, speak with someone who's already logged on.

Relationships — they give you access to information and people critical to success in the new economy. Opportunities unfold when technology clients call on Goldman Sachs. By tapping into our global network, clients leverage insight, professional experience and executional expertise. So wherever your company may be in the business life cycle, log on with Goldman Sachs.



UNRELENTING THINKING



the self-help book for the mobile workforce

Introducing VirtualTech™, the most advanced e-support tool for people on the go.

Only Toshiba offers VirtualTech, now preloaded on the Satellite® 2800 Series, which empowers you to resolve system issues on the fly. Upgrade to Premium VirtualTech and you've got access to software-related questions for over 150 of the most popular third-party applications. All right there at your fingertips. Work

the way you want by choosing between 24/7 self-help, online interactive support (with less than 30-minute response time) or complete technical assistance through our call center. And with Intel® Celeron™ processors up to 650MHz, you can rest assured that you get answers fast and efficiently.



- Includes integrated Ethernet and V.90 56K¹ modem ports for hassle-free Internet and LAN connectivity.
- On-the-road presentations couldn't be sweeter with this impressive multimedia package. Includes built-in booming subwoofer sound system, built-in DVD and an eye-grabbing 13.3" diagonal TFT active-matrix display.
- Affordable, packed with performance, and capable of tackling anything that comes your way. That makes this business solution a great value for any size business.

**Ask about our 0% EasyLease™ financing available through January 31, 2001.
To buy direct call 1-800-TOSHIBA or visit shoptoshiba.com.**

choose freedom™
TOSHIBA

Includes Microsoft® Windows® Millennium Edition—the home version of the world's favorite software.

Toshiba America Information Systems, Inc. All rights reserved. Satellite is a registered trademark, and choose freedom, EasyLease and VirtualTech are trademarks of Toshiba America Information Systems, Inc. The Intel Inside logo are registered trademarks and Celeron is a trademark of Intel Corporation. Microsoft and Windows are registered trademarks of Microsoft Corporation. All specifications and availability are subject to change. Toshiba reserves the right to withdraw or change the VirtualTech offers without notice. ¹Due to FCC limitations, speeds of 53Kbps are the maximum permissible transmission rates during download. Actual data transmission speeds will vary depending on line conditions. ²GB means 1 billion bytes.

THANKS FROM THE FBI

Gary Weiss has done our nation an invaluable service by reporting the manipulation of the stock market by elements of organized crime. By outlining specific stocks and stock brokerage firms that were controlled by organized crime, he opened the door for FBI investigations in Florida and in New York, and for that we owe him a tremendous debt of gratitude.

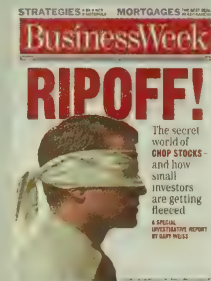
The excellent investigative reporting that was carried out by Mr. Weiss provided the impetus for an in-depth probe of the illegal activities of La Cosa Nostra Captain Philip Abramo and other organized-crime figures. Our investigations led to the indictments and subsequent guilty pleas of

Abramo and his associates on a variety of federal charges, from racketeering and mail fraud to money laundering. The role Mr. Weiss played in the success we achieved in these investigations is immeasurable and I want you to know how much my colleagues and I appreciate his diligent efforts.

Please convey to Mr. Weiss our congratulations on job well done.

Louis J. Freed
Director, FBI
Justice Dept.
Washington

Dec. 16, 1996



Dec. 15, 1997

CAMPAIGN AD SPENDING? IT'S PEANUTS

"The candidate as a campaign spectator" (News: Analysis & Commentary, Dec. 4) laments the \$3 billion spent on a lost campaign. You call it "staggering," but is it? Politicos spend just over \$10 per U.S. citizen for the privilege of the winners extracting \$5,000 from each of us per year—or \$20,000 in taxes over a four-year cycle.

Compare that with Procter & Gamble Co., say, which spends 8% of sales on

advertising—or \$400 for each \$5,000 we spend on Pampers, Pert, and Pringles. It would seem we spend too little on political ads, and we are better informed on potato chips than on candidates.

Bernard B. Lakewood, C.

MEMO TO SCHWAB: DON'T TALK DOWN TO WOMEN

Charles Schwab Co. may aim to woo its brokers and women in sync ("Brokers are from Mars, women are from

BusinessWeek
Assistant Managing Editors:

Chief of Correspondents: James E. Ellis
Senior Editors: Bob Arnold (New Media), Rick Green (Frontier), Kathy Rebello, Jane A. Sasseen, Ciro Scotti, John Templeman, Lee

Editorial Page Editor: Bruce Nussbaum
Senior Writers: Catherine Ernst, Robert Barker, Aaron Bernstein,

Anthony Bianco, John A. Byrne, Peter Elstrom, Gene G. Marcial, OHS Port, Paul Raeburn, Gary Weiss

Economics: James C. Cooper (S. Economist/Bus. Outlook ed.), Kathleen Madigan, Michael J. Mandel (Economics ed.), Peter Coy, Charles J. Whalen, Gene Koretz (Trends ed.), Christopher Farrell (Contributing ed.)

International: Patricia Kranz (European, Latin American Editions ed.), Michael S. Serrill (Sr. ed.); Pete Engardio, (Sr. news eds.); Rose Brady (Sr. writer); Sheridan Prasso (Asia), Cristina Lindblad (Latin America), Julia Lichtblau (Int'l. finance)

Associate Editors: Dan Beucke, Diane Brady, Eric Schunk, Mike France, Todd Gutner, Steve Hamm, Ira Sager, Eric Dinkine, Fred

Picture Editor: Lawrence Lippmann
Managing Art Director: Jay Petrov

Senior Art Director: Steven Taylor
International Art Director: Christine Silver

Department Editors: Books: Hardy Green. Computers: David Rocks. The Corporation: Nanette Byrnes, John Koppisch. E-Business: Timothy J. Mullaney. Finance & Banking: Emily Thornton, Debra Sparks, Heather Timmons. Frontier: Larry Kantor, Robin D. Schatz. Industrial Management: Adam Aston. Internet: Spencer E. Ante. Management: Louis Lavelle. Markets & Investments: Mara DeLoach. Media: Tom Iwry. News: John Protos. People: Susan Berfield. Personal Finance: Susan Scherrek. Anne Terjesen. Science: Ellen Licking. Scoreboards: Frederick F. Jespersen. Technology Strategies: Marcia Stepanek. Telecommunications: Steve Rosenbush. Up Front: Robert McNatt. Working Life: Michelle Conlin

Contributing Editor: Mark Hyman (Sports business)
Staff Editors: Dennis K. Berman, Lewis Brahman, Jeanette Brown, Heather Green, Jennifer Merritt, Joan Oleck, Kimberly Wersul

Copy Editors: Prudence Crowther, Harry Maurer, Marc Miller (Deputy chiefs), Jim Taibi (Asst. chief), Tim Belknap, Aleta Davies, Jack Robbins, Doug Royalty (Sr.), Giles Blunt, Joy Katz, Barry Maggs, Anne Newman, David Pengilly, Malka Percal, Monica Roman, Lourdes Valeriano

Researchers: Maria Chapin, Gail Fowler, Aida Rosario
Production Copy Editors: Lawrence Dark (Chief), Céline Keating, Robert J. Rosenberg (Deputy chiefs), Aletha Black, Sarah B. Davis, Hallberg Hallundsson, Robert S. Norman, David Purcell, Victoria Rubin

ART: Don Bessey, Alice Chang, Gay Falkenstein (Assoc. dirs.), Jaime Elais, Edith Gutierrez, Peter Marshall, Ron Pymman (Asst.), Graphics & New Media: Arthur Eves (Creative dir.), Joan Danaher (Graphics dir.), Rob Doyle (Deputy graphics dir.), Jaime Beauchamp: Laurel Daunis Allen, Alan Baseden, Joe Calvello, Matthew Kopit, Alberto Mena, Ray Vella (Illustrators); Eric Hoffmann. Imaging: James Leone (Mgr.), Alan Bornzer (Asst.), Rich Michel, Leo Nietzer, Joseph Rhames

PHOTO EDITORS: Scott Mlyn (Deputy); Ronnie Weil (Sr.); Cynthia Carr Alonso; Bettina Baudon; Paula Gillen, Kathleen Moore, Anne Murray, Andrew Popper (Assoc.), Sarah Greenberg (Assoc. Asst.), M. Margarita Erida (Traffic mgr.), Lucy Conticello, Mindy Katzman (Researchers); Burke Hughes (Researcher/Librarian)

EDITORIAL OPERATIONS: Susan Fingerhut (Director), Ken Lockwood (Mgr.), Karen Butcher, Francisco Cardoza, Thomas R. Dowd, Stephen R. Lebron, Jody A. LoGrasso, Kim Maenak, Jose L. Martin, Peter K. Nieceberg, Jane M. Perkins, Laura Reissman, Karen Turok, Ilse V. Walton (Edit map mgr.), Barbara Wilhelm, Mark Lang

EDITORIAL TECHNOLOGY: Thomas L. Morgan (Director), Christopher Amado, David Bandler, Y. Steve Ben-Ari, Amanda Chan, Lawrence Crowe, Beth Higgins, James Kutz, Neil MacLeod, Mike Marubito, Steven McCarthy, Juan Navarro, Juan Rodriguez, Marta Skrelja, Craig Struigs, Mauro Vaisman, Julian Wong

BUSINESS WEEK ONLINE: Michael Mercurio (Managing ed.), A. Peter Clem, John A. Dierdorf, John Johnsrud, Heather Barry, Stefani Eads, Sam Jaffe, B. Kite, Jessica Loudon, Joseph Wandel, Tynh Ng, Patricia O'Connell, Margaret Popper, Alex Salkever, Mica Schneider, Amy Stone, Kathy Vukosavl

CORRESPONDENTS: Atlanta: Dean Foust (Mgr.), Charles Haddad, Aixa Pascual. Boston: William C. Symonds (Mgr.), Norm Alster, Rochelle Sharpe, Geoffrey Smith. Chicago: Joseph Weber (Mgr.), Michael Arndt, Robert Berner, Roger O. Crockett, Julie Forster, Pallavi Gogoi, Darnell Little, Connecticut: Pamela L. Moore. Dallas: Wendy Zellner (Mgr.), Stephanie Anderson Forest, Lon Hawkins (Austin). Detroit: Kathleen Kevin (Mgr.), Jeff Green, John Muller, Richard Wolf. Los Angeles: Ronald Grover (Mgr.), Larry Armstrong, Christopher Palmer (Sr. correspondents), Steven V. Bruff, Arlene Weintraub. Philadelphia: Amy Barrett (Mgr.), Silicon Valley: Linda Hmelstein (Mgr.), Peter Burrows, Cliff Edwards, Ben Elgin, Jay Greene (Seattle), Joan O.C. Hamilton, Robert D. Hof (Sr. correspondent), Jim Kerstetter, Louise Lee, Andy Reinhardt, John Shinal. Washington: John Carey, Paula Dwyer (News eds.), Howard Gleckman, Mike McNamee (Sr. correspondents), Rich Miller (Sr. writer), Amy Borus, Dan Carney, Laura Cohn, Stan Cocker, Richard L. Lee, Anne Marie, Paul Magnusson, Nicole St. Pierre, Christopher H. Schmitt, Stephen H. Wildstrom (Tech. & You), Loraine Woellet, Catherine Yang, Douglas Hatbrecht (Online: Sr. News ed.), Beth Belton (Online: News ed.). Beijing: Dexter Roberts (Mgr.), Bombay: Manjeet Kipalani (Mgr.). Brussels: William Echikson. Frankfurt: Jack Ewing (Mgr.), David Fairblair, Christine Tierney. Hong Kong: Mark L. Clifford (Mgr.), Frederik Balfour, Bruce Einhorn. London: Stanley Reed (Mgr.), Kerry Capelli, Michael D. Gen Smith (Mgr.). Moscow: Paul Starobin (Mgr.). Paris: John R. Baker (Mgr.), Stephen Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

EDITORIAL SERVICES: Broadcasting: Ray Hoffman. Business Manager: Barbara Boynton. Communications: Robert Pondiscio (Director), Christine Fountaine, Andrew Palladino, Nancy Sheed. Information Services: Jamie B. Russell (Director), John R. Stapp, Robert Baker, Catherine Matick, Rene Gai Edmondson (Mgr.). Seoul: Moon Ilhwan. Singapore: Michael Sharf (Mgr.). Tokyo: Brian Brenner (Mgr.), Robert Neff (Contrib. ed.), Ken Belson,

PRESIDENT & PUBLISHER: William P. Kupper Jr.
SR. VP, OPERATIONS: Gary B. Hopkins
SR. VP, ASSOCIATE PUBLISHER: Constance E. Bennett
SR. VP, MARKETING & BUSINESS DEVELOPMENT: Keith L. Fox
SR. VP, BUSINESS WEEK ONLINE: Gregory J. Zorthian
VP, CONSUMER MARKETING/CIRCULATION: Thomas Masterson
VP, U.S. ADVERTISING SALES DIRECTOR: Joanne K. Bradford
VP, STRATEGIC PLANNING: Kimberly Greer
VP, CONTROLLER: Kevin P. Pascale

Business Week
A Division of The McGraw-Hill Companies

DECEMBER 25, 2000 (ISSN 0007-7135) *** 3713
Published weekly, except for two weeks in January and one in August, by The McGraw-Hill Companies, Inc. Founder: James H. McGraw (1860-1948).
Executive, Editorial, Circulation, and Advertising Offices: The McGraw-Hill Companies Building, 1221 Avenue of the Americas, New York, N.Y. 10020. Telephone: 212 512-2000. Telex: Domestic 127009, Int'l. 2360127099. U.S. subscription rate: \$49.95 per year; \$29.95 for students; \$9.95 for single copies; \$3.95 for back issues; \$5. Write for rates in other countries. Subscriber Service: 1-800-451-1900. TDD: 1-800-451-1570.
Postmaster: Send address changes to BUSINESS WEEK, P.O. Box 510, Hightstown, N.J. 08520. Periodicals postage paid at New York, N.Y., and at additional mailing offices. Postage paid at Montreal, P.Q. Canada Post.
International Publications Mail Product Sales Agreement No. 246541

VPs, SALES: Karen Christiansen (Southeast reg.), Robert H. Kelly (N. reg.), Gary London (Midwest region), Michael Dance (Western reg.)
VP, MANAGING DIRECTOR: Alan Lammim (Asia), Paul Maraviglia (U.S.)
VP, TECHNOLOGY/NEW MEDIA: Christopher C. Rousseau
VP, ADVERTISING BUSINESS & PRODUCTION: Linda F. Carv
VP, ACCOUNT DEVELOPMENT & RESEARCH: Charlene Trent
VP, STRATEGIC PROGRAMS: Jim Richardson
VP, SALES DEVELOPMENT: Kim Styler

Registered for GST as The McGraw-Hill Companies, Inc. GST #R123456789. Copyright © 2000 by The McGraw-Hill Companies, Inc. All rights reserved. Registered in U.S. Patent Office. Privacy Statement: See back matter.
House, Maidenhead, Berks, England. Telephone 01628 23431; Telex: 924611.

Officers of The McGraw-Hill Companies, Inc.: Harold W. McGraw III, President, and Chief Executive Officer; Kenneth M. Vittor, Executive President and General Counsel; Robert J. Ralston, Executive Vice President and Chief Financial Officer; Frank D. Pangloss, Senior Vice President, IT Operations.
PHOTOCOPY PERMISSION: Where necessary, permission is granted for the photocopying of this journal for personal or internal reference use without express permission of The McGraw-Hill Companies, Inc. (provided that payment of the fee of \$1.00 per copy is made to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, to photocopy and then for the flat fee of \$1.00 per copy, or one-time fee of \$10.00 per copy for those who wish to photocopy more than 100 copies).
PRINTED IN THE U.S.A.

us," Finance, Dec. 4), but in adopting the "designed for women and taught women" marketing approach, Schwab idly infantilizes women. At the same time, Schwab's women-only approach is insult to its own male brokers. It implies that they are unable to communicate effectively with women.

If Schwab truly intends "to seize a new opportunity" to garner new clients, the firm would be well-advised to train all brokers—men and women—to deal sensitively, relevantly, and without jargon with men and women alike. Individuals, neither crippled nor enabled by their gender. The concept of all groups with plenty of time for men "to get to know each other...in a language that's appealing to them" is the mark of a kindergarten.

Barbara Witte
Berkeley, Calif.

ITING BROADBAND

Broadband has come down with its high foot, and DSL [digital subscriber line] has developed a very painful condition ("Broadband's slow march can't go on," Editorial, Dec 4). At least that's the case in my neighborhood. I bought my trendy, in-town residence several years ago. Since then, I've been frustrated with these marvels of technology, but they haven't arrived.

I'm ready for something. My dial-up service never exceeds 26.4 kilobits per second. Honestly, I had to check my PC to make sure someone hadn't replaced my modem with an old can and piece of string. A large former Bell, whose skyscraper is visible from my drive, tells me this is not their problem. Maybe if I want to upgrade to DSL...

Well, yes, I'd like to try that. But I want to keep my service with a certain large Internet provider. Hmmmm, I want to give me DSL, too, but the mentioned phone company tells me it's not available at my address. Another huge company that bought the local cable company is teasing me with cable modems. I'm gonna hold my breath, because all of these feet are going to stink.

Kris Roth
Atlanta

POLOGIES R. SEUSS NEEDED

"Weird names and ham" (e.biz, Nov. 2000) informed in a refreshing way. Having raised seven children on Dr. Seuss books, Dr. Spock, I spent scores of hours reading the Seuss books and know how difficult and almost impossible it is to imitate his way with words. It may

seem simple, but it is not. Joan O'C. Hamilton did a remarkable job transferring her research to a form fitting the absurd names taken by the dot-coms. Thanks for a delightful piece.

Beverly Webster
Bakersfield, Calif.

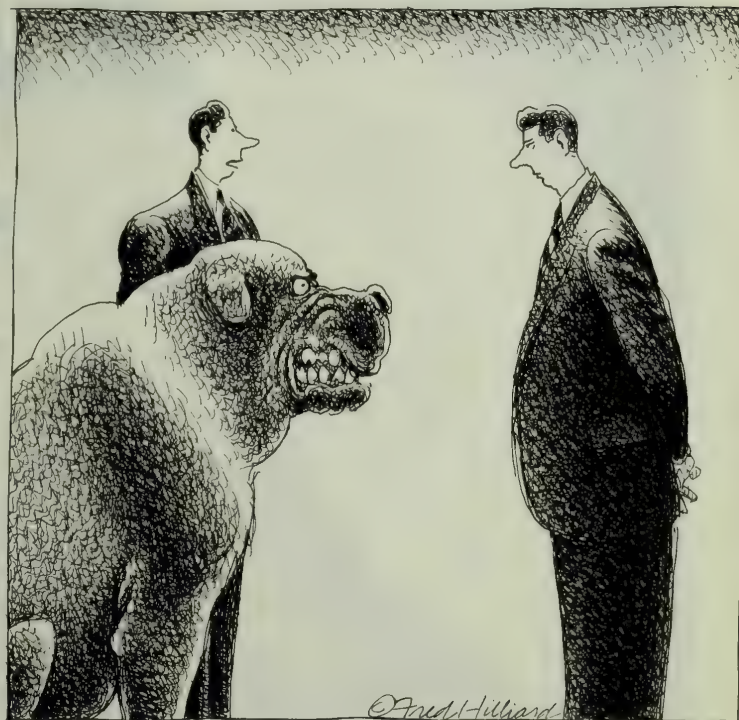
ROOSTER.COM DOES A LITTLE CROWING

Rooster.com is on a fast track to offer a full-service electronic marketplace for

agriculture ("Let's keep this exchange to ourselves," News: Analysis & Commentary, Dec. 4). Since our launch last May, Rooster.com has made tremendous strides to create a Web site for farmers to sell crops and buy supplies online.

There are clear differences between exchanges such as Orbitz and Rooster.com. Most important, Orbitz is attempting to create industry standards for the exchange of products and information in the travel sector. Rooster.com, by comparison, is building an exchange

©2000 The Williams Companies, Inc.



"He absolutely hates stories about anachronistic networks, Ray. Try changing the subject to Williams Communications. He likes happy endings."

We're network top dog. Williams is local-to-global connectivity over the most-sophisticated next-generation network around. What's more, our big-time communications solutions always guarantee happy end-to-endings for your business.

Williams
COMMUNICATIONS.

1-800-WILLIAMS • WWW.WILLIAMSCOMMUNICATIONS.COM • NYSE: WMB & WCG

THE THOUGHTFUL PURSUIT OF YOUR GOALS

THE DUKE MBA - GLOBAL EXECUTIVE

You have goals for yourself and your career. The Fuqua School of Business understands that. So we've created **The Duke MBA - Global Executive** for people like you who aspire to be thoughtful business leaders on a global scale. Join us and a world-class group of peers at Fuqua to advance to the next step in successfully reaching your goals.

The Duke MBA - Global Executive is a 19-month degree program for mid-to senior-level managers with at least 10 years of professional experience and current global responsibilities. The Global Executive program combines the traditional classroom atmosphere with distance learning using state-of-the-art Internet-based technology.



- Earn an MBA from a top-tier business school without interrupting your career.
- Live and work around the world while obtaining an MBA.
- Take what you learn in the classroom and immediately apply it on the job.
- Establish a worldwide network of fellow global managers.
- Master the use of technology and Duke's team-based learning model for competitive advantage in the global economy.

To learn more about how **The Duke MBA - Global Executive** can work for you or your company, contact us today:

Tel U.S. 919.660.7804

Fax 919.660.8044

E-mail globalexec@fuqua.duke.edu

www.business.duke.edu



We Educate Thoughtful Business Leaders Worldwide

Readers Report

platform based on existing industry standards. Rooster.com had its own and information site operating for 30 days of announcing the competition. Rooster.com will have a functional capability in two months. Our mission is to be the premier Internet agricultural site; we're well on our way.

Director of Brand Marketing
Rooster.com
Bloomington, IN

LINES OF CREDIT: THE GUN AT A BANK'S HEAD

I have always felt it was crazy for banks to offer lines of credit. And now, with a "credit squeeze" (Finance, Dec. 1999), it confirms this. As you show, a line of credit in effect means: "We will give you this line. You won't need to pay for it as long as everything is going well. But if you get into trouble, we can't get money anywhere else, so we will give you credit." That is, we have the line and will only use it if you have no way to pay us back.

It is quite an obligation for the fee of 0.25% to 2% per year the bank earns for having this potential bullet in its head. No wonder so many bankers declare bankruptcy.

Paul S. N
Newark, NJ

BusinessWeek online

The full text of Business Week, the Business Week Daily Briefing, and five years of BW archives are available on the World Wide Web at:

www.businessweek.com

and on America Online at Keyword: BW.

HOW TO REACH BUSINESS WEEK

LETTERS FOR READERS REPORT

All letters must include an address and daytime and evening phone numbers. We reserve the right to edit letters for clarity and space and to use them in our electronic and print editions.

Mail: Business Week, 1221 Avenue of the Americas, 43rd floor, New York, NY 10020

Fax: (212) 512-6458

Internet: bwreader@businessweek.com

America Online: readersbw

SUBSCRIBER SERVICES

For individual subscriptions, corporate subscriptions, renewals, changes or problems, and single copies: Phone: (800) 635-1200 or (609) 426-7500

Fax: (609) 426-7623

Internet: bwcustsv@businessweek.com

Library fee-based services: (212) 512-6704

REPRINTS AND COPYRIGHT PERMISSIONS

For custom reprints (minimum order of 1,000) call: (212) 512-3148

Fax: (212) 512-2337

Internet: www.businessweek.com/reprints/

For permission contact:

Phone: (212) 512-4801

Fax: (212) 512-4938

Some people just seem to know how to travel.

Are you one of them?



Wouldn't it be nice to belong to an alliance that recognizes your status on eight of the world's finest airlines? Our alliance does just that, along with giving you access to more lounges. Smoother transfers. More ways to earn and redeem frequent flyer miles. And over a quarter of a million people to help every step of the way. Welcome to **oneworld**™.



revolves around you.

American Airlines

Aer Lingus

BRITISH AIRWAYS

CATHAY PACIFIC

FINNAIR

IBERIA

LANCHILE

QANTAS

For specific information on the benefits available to you, contact any oneworld alliance airline. Lounge access is for premium cabin and selected top-tier frequent flyer customers. All oneworld benefits are only available to passengers on scheduled flights that are both operated and marketed by a oneworld member airline. (Marketed means there must be a oneworld member airline flight number on your ticket.) American Airlines, Aer Lingus, British Airways, Cathay Pacific, Finnair, Iberia, LanChile and Qantas are all trademarks of their respective companies.

www.oneworldalliance.com

THE BUSINESS WEEK BEST-SELLER LIST

HARDCOVER BUSINESS BOOKS

- 1 WHO MOVED MY CHEESE?** by Spencer Johnson, M.D. (Putnam • \$19.95) *Learning to accept change.*
- 2 FIRST, BREAK ALL THE RULES** by Marcus Buckingham and Curt Coffman (Simon & Schuster • \$26) *A Gallup investigation into managerial success.*
- 3 WHEN GENIUS FAILED** by Roger Lowenstein (Random House • \$26.95) *Inside hedge fund Long-Term Capital Management.*
- 4 THE ART OF POSSIBILITY** by Rosamund Stone Zander and Benjamin Zander (Harvard Business School • \$22.50) *Realizing opportunity, by a family therapist and the conductor of the Boston Philharmonic Orchestra.*
- 5 FISH!** by Stephen C. Lundin, PhD, Harry Paul, and John Christensen (Hyperion • \$19.95) *Motivating employees the Pike Place Fish Market way.*
- 6 LEADING THE REVOLUTION** by Gary Hamel (Harvard Business School • \$29.95) *A manifesto for radical innovators.*
- 7 THE TIPPING POINT** by Malcolm Gladwell (Little, Brown • \$24.95) *Discovering what turns an idea into a hot trend.*
- 8 GUNG HO!** by Ken Blanchard and Sheldon Bowles (Morrow • \$20) *How Walton Works No. 2 fired up its employees.*
- 9 THE POWER OF GOLD** by Peter L. Bernstein (Wiley • \$27.95) *The shiny stuff and its place in civilization.*
- 10 THE 21 IRREFUTABLE LAWS OF LEADERSHIP** by John C. Maxwell (Thomas Nelson • \$17.99) *A minister's codification.*
- 11 MAESTRO** by Bob Woodward (Simon & Schuster • \$25) *An inside look at Fed chief Greenspan's reign since 1987.*
- 12 SPIN SELLING** by Neil Rackham (McGraw-Hill • \$24.95) *Getting the most out of corporate sales calls.*
- 13 HOW TO BECOME A RAINMAKER** by Jeffrey J. Fox (Hyperion • \$16.95) *Instruction for the would-be super-salesperson.*
- 14 RAVING FANS** by Ken Blanchard and Sheldon Bowles (Morrow • \$20) *Turning customers into your biggest boosters.*
- 15 ELIZABETH I, CEO** by Alan Axelrod (Prentice Hall Press • \$23) *Lessons in leadership that are 400 years old, gleaned from the queen's successful reign.*

PAPERBACK BUSINESS BOOKS

- 1 RICH DAD, POOR DAD** by Robert T. Kiyosaki, with Sharon L. Lechter, CPA (Warner • \$15.95) *Teach your kids the rule money that the rich play by.*
- 2 THE 7 HABITS OF HIGHLY EFFECTIVE PEOPLE** by Stephen R. Covey (Fireside • \$14) *Habitually popular.*
- 3 THE ONE MINUTE MANAGER** by Kenneth Blanchard, Ph.D. and Spencer Johnson, M.D. (Berkley • \$12.95) *Three management techniques, conveyed in brief story form.*
- 4 WHAT COLOR IS YOUR PARACHUTE?** by Richard Nelson Bolles (Ten Speed Press • \$16.95) *The enduring job-search bible.*
- 5 THE CASHFLOW QUADRANT** by Robert T. Kiyosaki, with Sharon L. Lechter, CPA (Warner • \$17.95) *Moving beyond job security to financial independence.*
- 6 RICH DAD'S GUIDE TO INVESTING** by Robert T. Kiyosaki with Sharon L. Lechter, CPA (Warner • \$19.95) *Choosing to be rich, not merely comfortable.*
- 7 THE INNOVATOR'S DILEMMA** by Clayton M. Christensen (HarperBusiness • \$16) *New technologies' disruptive effect.*
- 8 GETTING TO YES** by Roger Fisher, William Ury, and Bruce Patton (Penguin • \$12.95) *A Harvard team's step-by-step guide to conflict resolution.*
- 9 BUILT TO LAST** by James C. Collins and Jerry I. Porras (HarperBusiness • \$16) *How 3M, Wal-Mart, Procter & Gamble, and others became standouts.*
- 10 THE MILLIONAIRE NEXT DOOR** by Thomas J. Stanley, Ph.D. and William D. Danko, Ph.D. (Pocket Books • \$14) *The signs of the wealthy among us.*
- 11 THE 48 LAWS OF POWER** by Robert Greene (Penguin • \$15) *Thoughts of Machiavelli and other power brokers distilled.*
- 12 J. K. LASSER'S YOUR INCOME TAX 2001** by the J. K. Lasser Institute (Wiley • \$15.95) *On your mark, get ready...*
- 13 THE LEXUS AND THE OLIVE TREE** by Thomas L. Friedman (Anchor Books • \$15) *Globalization and its discontents.*
- 14 1001 WAYS TO REWARD EMPLOYEES** by Bob Nelson (Workman • \$10.95) *Give them a champagne brunch, a casual dress day—or plain old cash.*
- 15 THE RICHEST MAN IN BABYLON** by George S. Clason (Farrar, Straus & Giroux • \$6.99) *Parables for prosperity.*

BUSINESS WEEK's Best-Seller List is based on a survey of chain and independent booksellers that carry a broad selection of books on economic management, sales and marketing, small business, investing, personal finance, and careers. Well over 1,000 retail outlets nationwide are represented. Current rankings are based on a weighted analysis of unit sales in November.

Reviews and more are available on AOL (Keyword: BW) or www.businessweek.com

HOT TYPE

WITH ITS UNREALISTIC CHARACTERS, CANNED dialogue, predictable plot, and tidy, mawkishly romantic ending, *Fish!*, No. 5 on this month's hardcover list, is pretty hard to swallow. Mary Jane, the heroine of this fable, is a recent widow with two children and a mountain of debt from her husband's unexpected demise. At work, she gets promoted to manage a department whose attitude problems are so severe that it has become known as the "toxic energy dump." How will she ever turn it around? Then she pays a visit to the fish market down the street, where she meets Lonnie: He'll save the day. Lonnie shows her that the fish market is really a model, productive workplace because everyone there elects to have a sunny attitude. "There is always a choice about

the way you do your work, even if there is not a choice of the work itself," he says. A few epiphanies later, our heroine applied his four-step program and turned her staff's dead attitude around, creating a vibrant, fun-filled, and rewarding workplace. And, oh yes, the effervescent fishmonger prop

In addition to its Pollyannaish attitude, *Fish!* is throughout, assuming that blue-collar workers are inferior to these fish guys could do what they have done, the sky the limit for us," says one office worker. Should this fish story be a sequel, let's hope its characters get their comeuppance as they learn their next lesson—the dangerous effects of arrogance.

BY KARIN PEKARI

Keep it complex, stupid.

Reducing complexity is sometimes useful, although it often has a cost attached. But you can turn complexity to your advantage.

This particularly holds true in business, government and technology.

ThinkTools supports your innate capabilities to deal with complexity and knowledge.

www.thinktools.com



ThinkTools

A black and white photograph showing the front of two classic cars. On the left is a dark-colored car, possibly a Chevrolet Camaro, with its hood open. The front grille features the letters 'SS' in a light color. On the right is a red car, also with its hood open, showing the engine compartment. Both cars are parked in front of a dark, vertical structure that looks like a building or a large container. The lighting is dramatic, with strong highlights on the cars' bodies and the engine parts, and deep shadows in the background and under the hoods.

NEW SERVERS

[@server]

For the next generation of e-business.

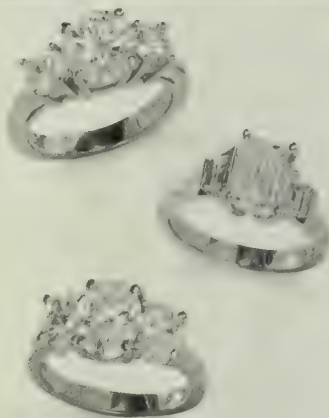
New technologies like second-generation copper chips make new IBM servers the most powerful family of servers on earth. IBM engineers and scientists perfected the

copper chip. The result was the fastest server on earth, built to drive e-business to new levels! Now, IBM has added new silicon-on-insulator (SOI) technology to a new generation of copper chips. The result is another 30% speed gain. Coming soon is new Low-k manufacturing (improving chip performance while lowering power consumption) and Memory eXpansion Technology (which doubles the capacity of standard memory). IBM innovation is turning science into products that give businesses an edge. Look for more innovation and more edge in every new IBM server. For details, go to ibm.com/eserver/copper

the new IBM @server pSeries 680 with copper and SOI technology, the most powerful UNIX® server for e-business²

IBM

Certified Diamonds Below Wholesale



Guaranteed!

Laboratory Graded
and Certified

◆
\$35 Million Inventory

◆
Plus...FREE
14K Gold Mounting!

sapeck.com



S.A. Peck & Co.

Diamond Importers and
Fine Jewelry Manufacturers
Since 1921

**55 E. Washington St.
5th Floor
Chicago, IL 60602**

1.800.922.0090

312.977.0300

Books

THE CONSTANT GARDENER

By John Le Carré
Scribner • 492pp • \$28

LE CARRÉ TAKES ON A NEW EVIL EMPIRE

For this reviewer's money, John Le Carré's masterpiece, the novel that towers above his other 17, is now a decade-and-a-half behind him. When he published *A Perfect Spy* in 1986, the English master of cold war espionage gave us as fine a balance of plot and character as he's ever likely to achieve. Magnus Pym, the wayward spook whose rise and fall Le Carré charts from childhood to his final demise, is an original. And as dedicated Le Carré readers know, Pym's story reflected the author's relationship with his own father. This was a story from the heart, not the headlines. Almost from the beginning, it was clear that Le Carré had produced that rare thing—a genre novel that transcends its genre, becoming something close to great literature.

Is this to say that Le Carré has been hiking downhill ever since? Let's say instead that since *A Perfect Spy*, he has chosen to write from the solid middle of his considerable talent, as opposed to its forward edge. And let's say, too, that his new novel, *The Constant Gardener*, ranks with *The Russia House* (1989) as the best he has produced since hitting his peak. If this new book is craft rather than art, it is craft of the very highest caliber. It is no mean feat to entertain while also making a reader think. Yet Le Carré pulls this off admirably, weaving together several themes—corporate power, underdevelopment, globalization—that will resonate with a wide audience.

The Constant Gardener revolves around a drug, a diplomat, and a murder. Dypraxa is a new cure for tuberculosis, developed by a Swiss pharmaceutical company that is testing it—unscrupulously, and at great human cost—among Kenyan villagers and slum-dwellers in preparation for its debut in the U.S. and other developed nations. Tessa Quayle, a diplomatic wife, attor-

ney, and idealist, discovers the coercion and malevolence at the heart of this scheme, only to get her throat cut in the bush north of Nairobi when she threatens to expose the whole mess. The novel unfolds as Tessa's band follows her path into the dark recesses of corporate greed, Foreign Office duplicity, and medical science in service of profit.

"Tuberculosis is megabucks," Le Carré writes in describing the violent things from the boardroom in England.

"Any day now the nations will be facing a global pandemic, and Dypraxa will become a multibillion-dollar industry that all good shareholders dream of."

The Constant Gardener is plot-heavy in the classic Le Carré mold. It is an unabashedly political novel. And the "pharmaceutical" drug giants, called, are merely the specific of numerous targets on Le Carré's list. In these corporations take rap for obeisance to profit god, the "self-perpetuating cycle of corruption and poverty, the inhumanity of self-styled humanitarians who are ripping off the poor nations," and much more. You could legitimately call Le Carré's true subject here the whole of the post-cold-war world—globalism, in a word. "Better be inside the system and fighting it outside the system, howling at it," one of Tessa's admirers, recalling most basic belief. And you sense Le Carré shares it—along with the assumption that "the system" is fundamentally in need of a fight.

Beneath the politics, however, find the conflict between individual and their institutional identities that runs through more or less all of Le Carré's novels. Justin Quayle, diplomat and widower, is the constant denier referred to in Le Carré's. He's complacent in his dedication to



of the British Foreign Office. But Justin jettisons his Etonian manners in order to pursue his late wife's cause, joins Le Carré's other renegades in it against their circumstances. At the end, then, *The Constant Gardener* is a testament to the human capacity for transformation. Through Justin, the political questions are elevated to questions of loyalty, integrity, and personal sovereignty in a world that rewards betrayal, ve-

Le Carré's true target here is the whole post-cold-war corporate world order in a word, globalism

ty, and the abdication of moral responsibility.

is a heavy load for a story spun around a drug company that cheats. In there are moments in *The Constant Gardener* when many readers wonder whether Le Carré will fully succeed in retooling the fictional machinery he developed in all much-admired tales of cold war espionage. Those novels seemed suited to a black hats/white hats universe, but the notion comes across as a touch stilted here.

Moreover, Le Carré's characters, precisely drawn, are essentially flat figures: deceitful diplomats, oily corporate executives, a droopy-eyed woman off in the shadows, a mad scientist for Tessa, she never quite touches the ground. Beautiful, brilliant, rich, impossibly pure of heart, she might as well have angel's wings.

As it said, I could hardly bear to put *Constant Gardener* down. One does not walk into Le Carré's plots, and one I found especially provocative. The re-opening, to say the least, to find the elitist of Le Carré's intelligence and the writing so bluntly about the questions facing our globalized world.

From this perspective, I applaud *Constant Gardener* without reservation. We are all Justin Quayle, Le Carré seems to suggest. We are each faced in moral dilemmas—our age demands to have more than its share—we have a duty to resolve them, even if we accept that responsibility

BY PATRICK SMITH

Smith was a correspondent abroad for many years, chiefly for the International Herald Tribune.

RESPONSIVENESS IN A DISCOUNT BROKER. IMAGINE.

Reliable trading. Responsive customer service. At T. Rowe Price Brokerage, we stand behind our technology with highly knowledgeable professionals ready to assist you. So if truly helpful service is your idea of a responsive discount broker, contact us today. And discover how we can make real service a reality for you.

1-800-541-5324

www.troweprice.com/brokerage

T.RowePrice
BROKERAGE

*\$19.95 per stock trade for up to 1,000 shares plus an additional two cents for each share over 1,000. Call or visit our Web site for a commission schedule for rates on representative-assisted and other non-Internet trades. T. Rowe Price Brokerage is a division of T. Rowe Price Investment Services, Inc. Member NASD/SIPC.

BROK057406

KNOWLEDGE • SERVICE • ONLINE TRADES FROM \$19.95*

Rid your home of varmints and pests once and for all, with...

Rodelsonix IX
only \$69^{95*}

*But read this ad for an even better deal!

Mice, rats, roaches, bats, fleas, spiders and other pests and varmints make life miserable at home or at the plant. Old-fashioned traps and poisons get rid of them—but only temporarily. Rodelsonix IX

delivers a tremendous blast of ultrasound—inadmissible to you and your pets—that totally disrupts the nervous systems of these critters. They'll leave your home within just a few weeks—and they'll never return. Rodelsonix IX is an industrial-type unit, designed and engineered to be effective in restaurants, factories and food-processing plants. It protects up to 10,000 sq. ft. (70,000 cu. ft.). It has six variable pitch and "loudness" settings. You can even use it outdoors to keep larger pests, such as raccoons or rabbits at bay.

*And here is the "even better deal": Buy two Rodelsonix IX for \$139.90 and we'll send you a third one, with our compliments—absolutely FREE!

You may order by toll-free phone, by mail, or by fax and pay by check or Visa/MasterCard. Please give order number #1007F876. Add \$4.95 for one or \$9.90 for three ship./ins. and sales tax for CA delivery. You have 30-day refund and one-year warranty. We do not refund postage. For customer service or wholesale information, please call (415) 643-2810.



•Rodelsonix IX is an industrial-type unit, the most powerful you can get. It's a humane, clean, and effective system to get rid of your pests—once and for all.

since 1967

haverhills®

2360 Third St., San Francisco, CA 94107

Order by toll-free phone: (800) 797-7367 or (fastest!) by fax: (415) 643-2818
Visit our website at www.haverhills.com

BY STEPHEN H. WILDSTROM

tech&you@businessweek.com

WHAT WONDERS WILL 2001 BRING?

In his crystal ball, seer Steve sees less froth and more focus on building good products

Looking backward is humbling for anyone who has risked a prediction, but it puts things in perspective. So as I take a look at the year ahead, I thought I would leaven my predictions with a look at how last year's forecast fared.

I was right that y2K would be no big deal. Even the "minor but annoying" problems that I predicted turned out to be mostly nonexistent.

I was premature in my prediction that simplified Net appliances would make big inroads into the PC market. True, lots of appliances appeared this year, but they ranged in quality from flawed-but-intriguing to awful. The market is starting to get a lot more interesting—with new hardware designs and browsers and other software from Netscape, Microsoft, Opera Software, and Be Inc. With the PC market showing signs of saturation, especially in the U.S., appliances could be a big story of 2001.

MIRED DOWN. I also got ahead of myself in forecasting rapid progress for high-speed Internet access. As I noted a few weeks ago ("Why most of us can't have broadband," Technology & You, Dec. 4), cable and fast phone-line access is mired in technical and financial problems. With new technologies such as two-way satellite, high-speed access will grow, but I would consider it a success if 5 million U.S. households are added by the end of 2001, up from about 3 million now.

My prediction of advances in wireless was a bit closer to the mark. The wireless Web has become widely available on telephones. While tiny displays and the difficulty of entering information make phone handsets pretty dreadful tools for sending and receiving data, experiments with somewhat larger devices, such as Handspring's Palm-based VisorPhone and Microsoft's Stinger concept phone, promise big advances. Meanwhile, Europeans should start seeing medium-speed (around 64 kilobits per second) data service on their wireless phone systems during the year.

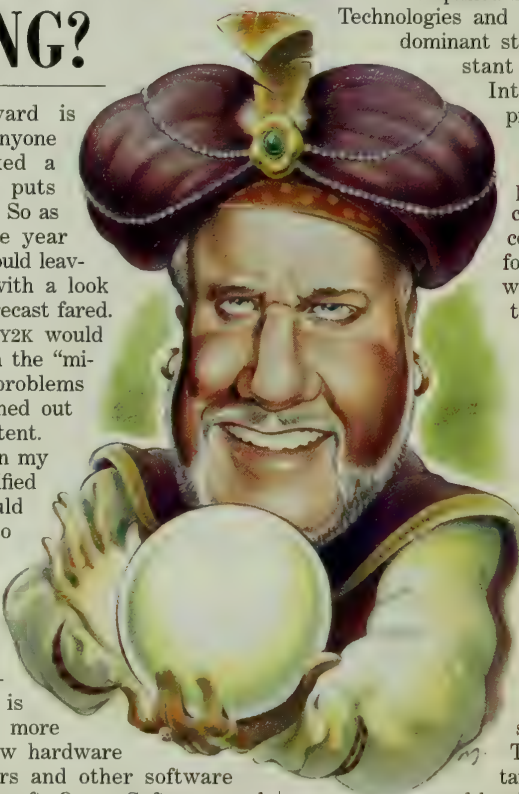
The U.S., however, continues to lag behind. One happy surprise was the explosion of wireless local networks. Companies and schools are installing cheap and flexible wireless technology in offices and classrooms. Laptop makers are replacing PC card add-ons with built-in wireless adapters in new models coming out early in 2001. With simplified base stations from Lucent Technologies and Apple Computer, too, the dominant standard can create a constant home network, though Intel, Proxim, and others are promoters of a rival technology.

Another wireless technology faces a less bright future. Blue Tooth short-range wireless networking, backed by nearly a dozen hardware and software companies, didn't make it out of the lab this year, but it should appear in a variety of products by mid-2001. Back in 1999, I pushed it for every device, from wireless networking to an alternative to a cable when linking a music player to a laptop. My guess is that Blue Tooth will be most important as a way to let laptops and handhelds use wireless pliers as modems, in effect cutting the cord for any mobile device. Right now, the technology is too expensive for anything but laptops and high-end phones, but if chip manufacturers deliver their promise of a dirt-cheap version, Blue Tooth could turn up everywhere.

In PC hardware, the coming year is likely to bring mainly stability. Intel will come out with both power-saving chips for laptops and faster processors, but the extra speed will be of little value to the mass of buyers who already have the performance they need. Both Microsoft and Apple plan to offer major new operating systems, including the long-overdue Mac OS X. Around yearend, a new version of Windows, code-named Whistler, would be the first major offering for home users since Windows 95.

Overall, the industry will see a lot less froth and a lot more focus on building products and services that work and that people will pay for. This will be a painful adjustment for many, but it is a good thing for consumers.

I want to thank my readers for their interest and criticism. A happy and prosperous 2001 to all, and keep that e-mail coming.



BusinessWeek online

FOR A COLLECTION OF PAST COLUMNS and online-only reviews of technology products, go to Technology & You at www.businessweek.com/technology/



**Investors judge a
global oil and gas company on its returns.
So do the locals.**

The medical clinic at our Masila operation in Yemen is open to the community. Every month, we treat an average of 900 local residents. It's one of the many ways we're being responsible. To our values. To our hosts. Even to our stockholders. Because acting responsibly creates stability, which ensures long-term profits.

*Nexen is a super-independent with
core assets and targeted exploration
programs worldwide.*

**NYSE
LISTED
NX**

nexen
energy to outperform
www.nexeninc.com

Canada United States Brazil Yemen Colombia Indonesia Australia Nigeria

BY ROBERT KUTTNER

TO PRESERVE THE BOOM, YOU'VE GOT TO INVEST MONEY



CHOICES:
Programs to
improve
education or
cut airport
congestion
are better
destinations
for the
surplus than
the pockets
of the
superrich

The Republicans cite the softening economy to advance their proposed \$1.3 trillion tax cut. Supposedly, a weak economy would benefit from the economic stimulus. But the plan is likely to be dead on arrival politically—and it isn't smart economics, either.

George W. Bush made a massive tax cut the centerpiece of his campaign, but it aroused little enthusiasm among voters. Unlike the Democrats' stampede to the supply side early in the Reagan Presidency, few Democratic legislators will be intimidated this time, and few will defect. Indeed, in the bitter aftermath of the election, Democrats will fight hard for more modest, targeted tax relief, and will starkly dramatize policy choices.

For instance, by keeping estate-tax revenues rather than returning them, Washington could afford prescription drug coverage. Who is the more plausible constituency for the Democrats: the 30,000 multimillionaires who would benefit from estate-tax relief, or the 30 million older Americans who have trouble affording the medicine that they need? In the same vein, the GOP claimed in the election that the country could afford both a huge tax cut and a Social Security rescue. But when legislators crunch the numbers, the fuzzy math will be all too clear. We can't spend the same money twice.

WHO'S TO BLAME? Also, the GOP's timing is off. For reasons of budgetary sleight of hand, most of the Bush tax cut would take effect several years hence, in the wrong part of the business cycle. If the economy is softening, the culprit is not some fundamental weakness but a risk-averse Federal Reserve. Pursuing the fabled "soft landing," Alan Greenspan has ordered six interest-rate hikes. But what the chairman can take away, the chairman can give back. Lately, Greenspan has been signaling a January rate cut, which would be all the short-term tonic the economy needs.

But what about the long term? The Fed will let the economy grow only so fast, for fear of inflation. Even if a huge tax cut gunned demand, the Fed would limit the stimulative effect. Today the main constraint on growth is neither weak demand nor production bottlenecks, but the Fed's view of tight labor markets.

The Fed now believes that if unemployment goes much below 4%, labor costs begin to outpace productivity growth and inflation looms. At that point, the Fed hits the brakes. Under Greenspan, the Fed has allowed somewhat faster growth because rising productivity thus far has

accommodated rising wages without inflation. But growth is still limited.

In a full-employment economy, what backs higher growth is qualified labor supply. That argues not for spending the surplus on a tax cut, but for education and training outlays to expand the labor pool and improve the quality and productivity of U.S. workers. Today, nearly all the qualified people are working. But millions of others are unqualified for available jobs. Both Gore and Bush claimed to be for better education, but education costs money. Unless you want deficits, you can't spend the same dollars on a tax cut that you spend on smaller classes and improved schools.

This is really a three-way debate. One side, mostly Republican, holds we should "give money back" to the citizenry via a massive tax cut. Although the tax cutters have lately evoked the specter of recession, they should be honest enough to admit they favor tax cuts on principle, whatever the economic weather. A second school wants to pay off the entire national debt, contending that no public works means cheaper capital for private investment and hence higher rates of growth. Centrist Democrats of this persuasion also use their position tactically to head off a GOP tax cut. They do so by defining debt paydown as a necessary condition ("lockbox") to set aside funds to replenish Social Security.

This approach is nimble tactics, but also defensible economics. The implicit premise is that public spending by definition crowds out private investment, and that a marginal dollar of private capital is always more productive than a marginal dollar of public outlay.

But with dot-com lunacy having no scarcity of willing investors and foreign sources of funds, beating down our doors, do we really have a capital shortage—or just a tightfisted Fed? Many more Internet failures do we need? Wouldn't it improve productivity more to invest some of the surplus in relieving airport congestion or improving schools? That certainly beats the proposed Republican destination—the pockets of gazillionaires—and the Gore plan to retire the debt we've usefully carried to finance public works since the days of Alexander Hamilton.

Granted, this third view has been all but drowned out by the debate between tax cutters and debt retimers. But if we want to maintain the current boom in the face of a nervous Fed, the sensible policy is to invest in productivity enhancement.

Robert Kuttner is co-editor of *The American Prospect* and author of *Everything for Sale*.



Have you been very, very, very good?

Whoever said it's better to give than to receive was obviously never on the receiving end of a Mercedes-Benz SL 500. Sleek. Sophisticated. Powerful. What more could you hope for this season? The SL 500



Mercedes-Benz

BY GENE KORETZ

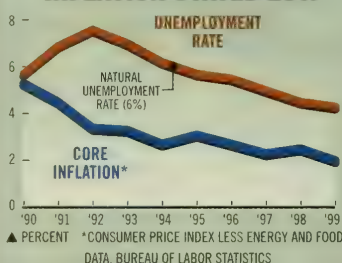
WHY FED POLICY WORKED SO WELL

A study updates the Phillips curve

If Alan Greenspan & Co. deserve any credit for the long expansion of the 1990s, it is for not hitting the monetary brakes when unemployment sank to new lows in the second half of the decade. In so doing, the Federal Reserve ignored orthodox theory, which posited that allowing joblessness to fall below its so-called natural rate would inevitably result in accelerating inflation.

As it happens, inflation—already modest by the mid-1990s—continued to sub-

AFTER JOBLESSNESS SANK, INFLATION STAYED LOW



side, even as unemployment dropped far below its then estimated 6% natural level. And unburdened by a restrictive monetary policy, the economy grew faster than anyone anticipated.

Why didn't inflation take off, as economists expected? Experts have offered many explanations, from the impact of global competition and the strong dollar to the Asian crisis and productivity gains from the new high-tech economy.

But the most intriguing may be one suggested by a recent study by George A. Akerlof of the University of California at Berkeley and William Dickens and George Perry of the Brookings Institution. In the study, the three economists find that unemployment can be reduced below its normal natural rate without sparking a rise in inflation—if the reduction occurs in a climate of already moderate inflation.

To see why, you have to first understand natural rate theory. Most economists once bought the Phillips curve notion that accepting higher inflation would allow you to achieve lower unemployment. But economists Milton Friedman and Edmund Phelps in the

1970s suggested that such gains don't last. Over the long run, they argued, employers and workers seek to maintain their real incomes by adding higher inflation to their wage bargains and prices, causing joblessness to rise again.

Thus, every economy presumably has a natural level of sustainable unemployment below which inflation tends to accelerate. What Akerlof, Dickens, and Perry find, however, is that this level declines when inflation is low and stable. At such times, companies and people tend to ignore past inflation and thus don't fully offset it in wages and prices. As a result, companies hire more people and sell more goods, which means less unemployment and more output.

As evidence, the researchers cite survey data from 1954 to 1999, which show that employees and employers are far more likely to incorporate inflationary expectations into wage and price hikes in periods of high inflation (over 4%) than in low-inflation periods (under 3%). They then use these data to estimate the trade-offs between unemployment and inflation over the postwar period.

The results suggest that the natural rate of unemployment is about 5% when core inflation is running over 6%. But when inflation is in a stable, moderate range of between 2% and 4%, unemployment can be safely kept as low as 4%. At that point, reducing inflation still further would raise unemployment, while pushing unemployment below 4% would boost inflation.

That, so it seems, is the lesson Greenspan's pragmatic Fed learned. When unemployment fell below 5% in the mid-1990s, core inflation was only 3% or so, and the Fed didn't panic. Its calm restraint allowed the New Economy to flower and millions of Americans to join the ranks of the employed.

IMMIGRANTS AND ENTREPRENEURS

Newcomers crowd some natives out

Have the millions of immigrants who have entered the U.S. in recent decades affected the self-employment prospects of native-born Americans? Since studies show that immigrants are more likely to set up their own businesses than natives, you might think so. Yet a 1998 study by Robert Fairlie of the University of California at Santa Cruz and Bruce D. Meyer of Northwestern University found only a negligible impact on black self-employment.

Now the two economists have looked at the effect on the self-employment of whites and other non-black Americans and found it to be substantial. Using 1980 and 1990 census data, they estimate that every 100 self-employed migrants have "displaced" from 35 to 85 self-employed native-born men and 19 self-employed native women.

On a positive note, the authors found no evidence that immigration hurts native reported self-employment earnings. And they note that job displacement appears to have taken the form of persuading natives from starting new businesses rather than forcing them to shut down. That's because overall U.S. entrepreneurship grew rapidly. Despite growing numbers of self-employed migrants, such businesses established by U.S.-born citizens increased by 1.8 million between 1980 and 1990.

CAN HOME PRICES STAY BUOYANT?

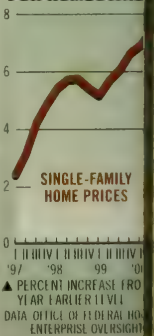
For now, they're bolstering wealth

Stock prices are down, but home prices are still rising. The government reports that home resale prices were up 7.3% last quarter on a year-over-year basis (chart). That's the biggest nominal increase since 1987 and the largest in terms since 1978, says economist Morris of HSBC Securities in New York.

The key question, he notes, is whether a strong property market can buffer the impact of sagging stock prices on household wealth. Although the real estate boom of the 1980s lasted long after the market crashed in October, 1987, points out that real estate accounted for 75% of household wealth in 1987, whereas household equity holdings today actually exceed property holdings.

Thus, wealth is now declining, Morris thinks it won't be long before stock market woes start to undermine property demand and values. Indeed, this is already happening in some markets. Sales and prices of both luxury co-op apartments in Manhattan and high-end homes in Silicon Valley have weakened in recent months.

RICH REWARD FOR HOMEOWNERS



JAMES C. COOPER & KATHLEEN MADIGAN

LOWLY BUT SURELY, THE ECONOMY IS COOLING

Still, labor markets are probably tighter than the Fed wants

U.S. ECONOMY

If you've been spending the better part of a Saturday morning waiting in a checkout line or searching for the elusive set of Powerpuff Girls bedsheets, you may wonder where the economic slowdown is. After all, if consumer demand is easing up, why can't you find a parking space at your local mall?

Although this holiday shopping season is shaping up to be at least moderately successful, make no mistake about it: The latest government data show the U.S. economy is cooling. Retail sales fell in November thanks to weak car sales, and companies continue to issue profit warnings for the fourth quarter and beyond because of slower revenue growth.

JOB GROWTH BEGINS TO SOFTEN



JAN '99 NOV '00
PERCENT CHANGE FROM A YEAR AGO
DATA: LABOR DEPT., BUSINESS WEEK

But that the demand for labor is still growing faster than the supply of available workers. Keep in mind that a slowdown doesn't have to be abrupt, but a soft landing will feel different after a two-year boom. The economy does not appear to be headed for a hard landing. A survey of economists conducted by BUSINESS WEEK finds that forecasters, on average, expect the U.S. economy to grow 3.1% in 2001, and 16 of them expect an outright recession (page 66).

FEED, THE WAGE ACCELERATION,

evident in the November jobs data, indicates that the economy has not cooled enough to make the Federal Reserve rest easy about the inflation outlook. This is especially so given that productivity is expected to grow more slowly in coming quarters and won't be able to offset labor cost increases as much as in the past.

Policy makers will meet on Dec. 19, and they are expected to hold the federal funds rate target at 6.5%. The Fed will very likely shift its view of the near-term risks in the outlook—a change all but announced by Fed Chairman Alan Greenspan in a Dec. 5 speech.

Instead of seeing an economy tilted toward rising inflation, the Fed may say that the economy's risks are now balanced between excessive price pressures and excessively slower growth. That is, while the danger of an overly weak economy has risen, continued tight job markets mean the inflation risk has not diminished.

A soft landing will mean adjustments, though. Auto makers already are cutting production schedules and putting workers on temporary layoffs as the Big Three adapt to an annual rate of vehicle sales in the 16 million-to-16.5 million range instead of the record 18 million earlier in 2000.

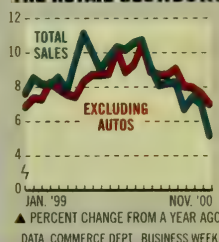
Tech companies, meanwhile, are beginning to accept that

new orders don't always grow at yearly rates of 20% or 30%, as they did in 1999 and early 2000. In fact, tech orders from 1996 to 1998 had increased about 8% to 10% per year, but accelerated sharply in 1999 and early 2000, at least partly reflecting large outlays related to the Y2K phenomenon. It is important to note that orders have not fallen off a cliff; companies, after all, still need to invest in productivity-building equipment.

Consumers are also beginning to show some restraint, especially for big-ticket items. Retail sales dropped 0.4% in November, after no change in October. The weakness was concentrated in vehicle sales, which fell 2.2% in November. Excluding cars, store receipts rose 0.2% on top of a 0.4% advance in October. Sales at furniture stores were strong, reflecting the solid growth in the sales of new homes which need to be furnished.

Because of weak vehicle buying, retail sales in November were up just 5.2% from a year ago, half their yearly pace in early 2000 (chart). Nonauto sales haven't slowed as much, but they are softer than in the first half. How much consumer spending eases up in 2001 may depend on how weak the labor markets become.

AUTOS LEAD THE RETAIL SLOWDOWN



SO FAR, EMPLOYMENT GAINS

are only slowing, not turning negative. True, layoffs are occurring in pockets of manufacturing and the dot-com sector, but elsewhere companies are still hiring. In November, nonfarm jobs grew by 94,000, but a quirky-looking drop of 54,000 government jobs held back the total number. Private payrolls rose by 148,000, not much different from

their 158,000 average for the first 10 months of 2000.

The November jobless rate did inch up to 4% from 3.9%, but the rate has been between 3.9% and 4.1% since October, 1999. Looking ahead, though, job growth is at a pace that, if maintained in 2001, would cause the unemployment rate to edge gradually higher. But job gains would have to slow sharply to loosen labor-market conditions significantly.

The recent rise in initial claims for unemployment benefits, to a four-week average of about 350,000 from about 300,000 during the summer, suggests at least some small degree of slack in the job markets. To put that figure into perspective, during the 1994-95 soft landing, claims averaged between 360,000 and 390,000 for several months. The 1990-91 recession sent claims up to the 500,000 mark.

Before businesses resort to layoffs, they typically cut the hours of their existing employees. And that's happening. In November, the average workweek for production and nonsupervisory workers stood at 34.3 hours, 18 minutes shorter than in April. In the factory sector alone, the workweek has dropped a full hour.

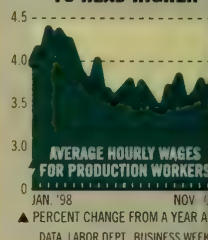
SO FAR, THOUGH, CONSUMERS don't seem too worried about labor market conditions. The latest decline in consumer confidence seems to be driven more by stock-market jitters and uncertainty over the Presidential election than by eroding job worries. In addition, the

percentage of workers in November who are unemployed because they voluntarily left their last job remained well within the high range of the past years. Last, the latest Manpower Inc. survey of hiring intentions shows no diminution of hiring plans in first quarter, compared with a strong fourth quarter.

The still solid demand for labor explains why paychecks continue to increase. The average hourly wage for production workers increased 0.4%, to \$13.94 in November. Pay is rising 4% from the year before, the fastest pace in almost two years (chart). What worries the Fed is that businesses might not be able to count on productivity gains to offset these rising costs. Companies will then face a choice of trying to raise prices while demand is slow or seeing their profit margins—and stock price—erode.

The job market is on track to create about 2 million jobs in 2000, down from the 2.8 million added in 1999. And job growth is likely to be weaker in 2001, that's to be expected in a soft landing. It's another case of growth being relative. The outlook does not call for a flurry of pink slips. Instead, expect companies to hire fewer new workers next year.

PAY GAINS CONTINUE TO HEAD HIGHER



BRITAIN

WHY THE FACTORY GEARS ARE GRINDING

British manufacturers can't seem to get a break. Just as the sterling's recent decline from oppressive levels began to raise hopes for a factory turnaround, worries about a global slowdown in demand are now clouding the outlook. Industrial production fell in October for the second month in a row after growing steadily since March.

Moreover, manufacturers can't count on an easing of monetary policy anytime soon to lift domestic factory orders. While interest rates have peaked, still-strong demand for services and an expected boost from government spending in 2001 will make the Bank of England's Monetary Policy Committee

cautious about rate cuts. As expected, following a slight lowering of its growth and inflation projections for the coming year, the MPC on Dec. 7 left its benchmark interest rate at 6% for the tenth month in a row.

Nevertheless, amid signs of slower consumer spending and diminishing wage pressures, the financial markets are already pricing in a rate cut. The markets are impressed by several indications of slower growth and tame inflation, although none seem conclusive. Most recently, outside of energy and food, retail price inflation remains below the MPC's target of 2.5% (chart). In November, core inflation, less

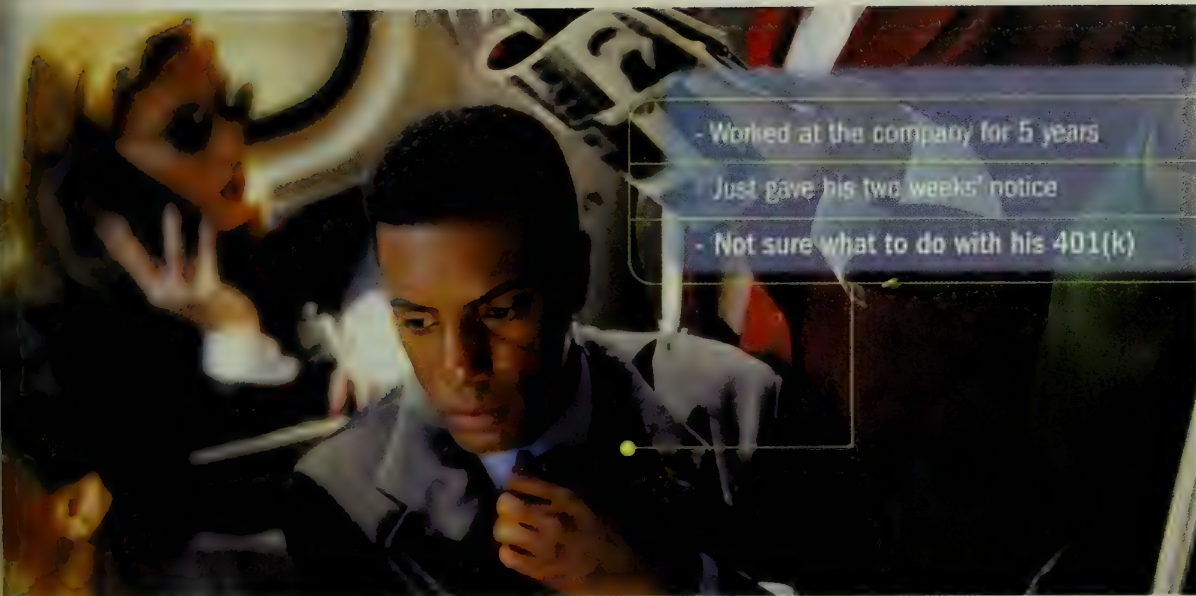
mortgage interest, stood at 2.2%—about where it has been since April, 1999.

Other good signs: House prices, one of the MPC's big inflation concerns, have slowed sharply, from year-to-year growth rate of 16% in January to 7% in November. In addition, wage growth has cooled from nearly 6% earlier this year to about 4%, a pace the MPC is more comfortable with.

Most important, demand appears to be cooling, given that holiday sales are off to an inauspicious start. But consumer spending has sped up in each quarter 2000. The MPC has said that household demand must slow substantially so that the economy can accommodate the upcoming government stimulus. But once again, slower domestic demand will not help struggling manufacturers.

BRITISH CORE INFLATION REMAINS WELL-BEHAVED





It's not just another 401(k) rollover. It's the future of your retirement.

A more complete approach to wealth management

Today, achieving financial security is a two-sided effort: growing your assets, and protecting what you've built. With decades of experience in both asset management and insurance, Prudential is creating new and more powerful ways to grow and protect wealth.

If you're changing jobs, what to do with your 401(k) is a high-stakes decision. Because if you're like a lot of investors, your 401(k) has grown more than you ever imagined. At Prudential, we'll help you roll this important savings over to an IRA—and provide the advice you need to make sound investment choices.

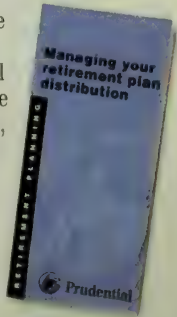
Before you roll it over, think it over. Starting a new job is also a good time to reconsider your overall retirement strategy. Are your goals still the same? Do you need to make adjustments to your plan? Before you roll over your 401(k), a Prudential professional can help you set a course, using diagnostic tools like our asset allocation software.

Access a world of investment choices. Prudential offers a complete spectrum of investment options for your Rollover IRA. Select mutual funds from Prudential, Janus, Fidelity, AIM, Invesco and other top names, plus individual stocks and bonds, CDs, and more. Your Prudential professional can help you diversify your IRA—and readjust as your needs change.

Prudential provides the tools to manage your IRA wisely. Online account access. An online trading option. Asset allocation services. In-depth investment research reports. At Prudential, you'll find whatever you need to make timely, informed decisions for your retirement investments.

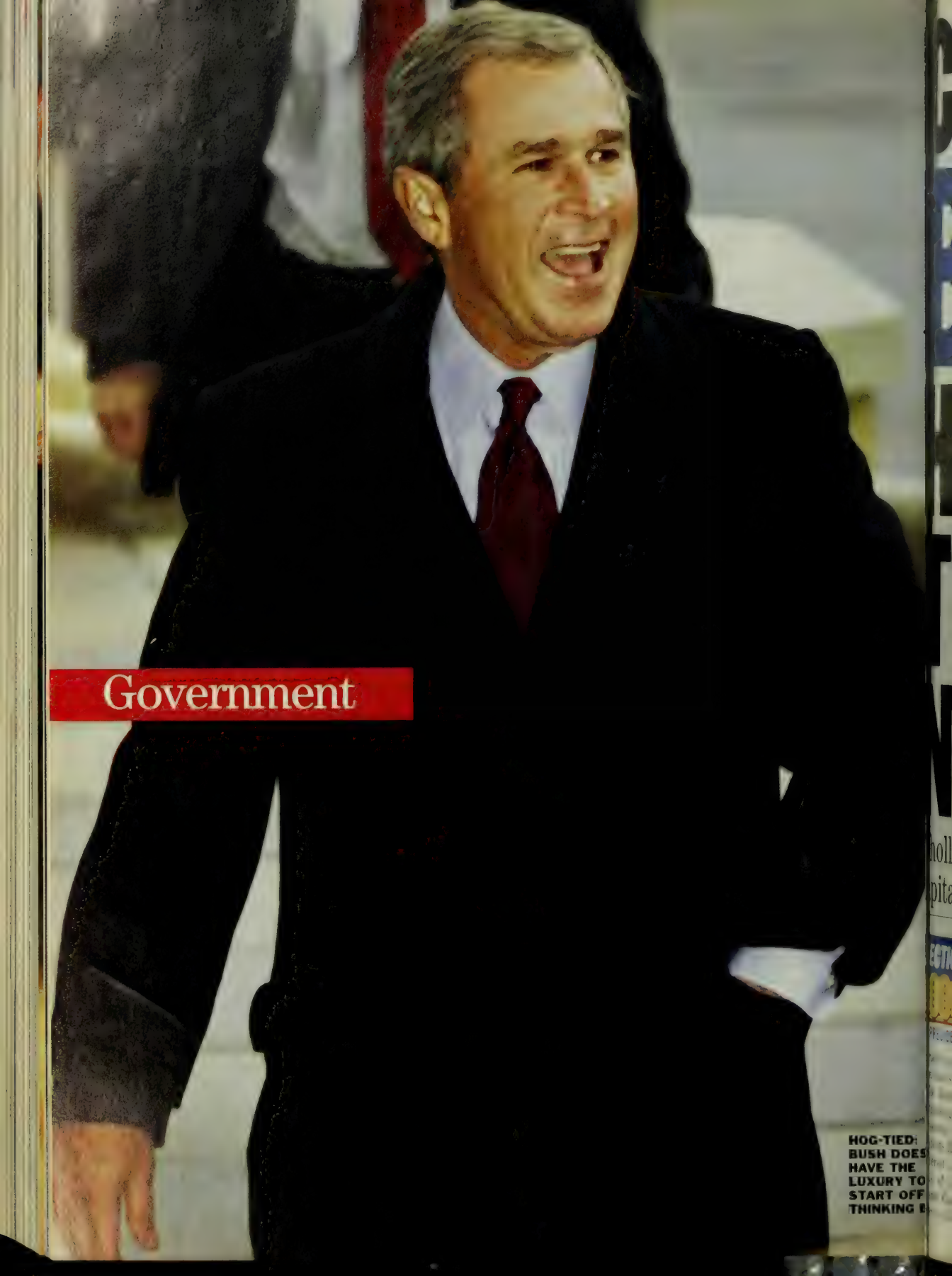
Learn more today. For more smart retirement solutions, call today to find a Prudential professional near you. And be sure to ask for our new guide, *Managing your retirement plan distribution*.

1-800-THE-ROCK
ext. 8504, or visit us at:
prudential.com



Prudential

Products and services are offered through Pruco Securities Corporation, 751 Broad Street, Newark, NJ 07102, and Prudential Securities Incorporated, 199 Water Street, New York, NY 10292 (members SIPC). Prudential companies. For more information about the different mutual funds, including charges and expenses, please contact your Prudential professional for a current prospectus. Read the prospectus carefully before investing or send money. Please consult your tax advisor for advice regarding the type of IRA that's appropriate for your situation. If you have employer stock in your 401(k) plan, you may want to consider other strategies. 1107-A059722



Government

HOG-TIED:
BUSH DOES
HAVE THE
LUXURY TO
START OFF
THINKING B

CAN BUSH HEAL THE NATION?

hollow victory and little political capital could vex consensus-building



When he first began to muse about a run for the White House, George W. Bush knew one thing for certain. He wanted to reduce

destructive political warfare in a Washington that seemed to have lost its sense of formative influences on the Texan. Thinking aren't hard to divine. He was seared by the partisan firestorm ignited over the aborted appointments of Robert H. Bork to the Supreme Court and Texas Senator John Ashcroft to the Defense Dept. Bush was

equally repulsed by Republicans' reaction: the harsh, in-your-face leadership style displayed by former House Speaker Newt Gingrich in the wake of the GOP's 1994 takeover of the House of Representatives.

But little did Bush know that consensus-building would become the central focus of his Presidency—or that his very election was to be a catalyst for national division. After five agonizing weeks of legal wrangling over Florida's electoral votes, a Dec. 12 decision by the U.S. Supreme Court ended the standoff with Democrat Al Gore and vaulted Bush to the Presidency. But the verdict of a deeply divided court, which endorsed the

awarding of Florida's electoral votes to Bush without a full recount of contested ballots, was a bitter conclusion to a polarizing campaign, one that brought the nation to the brink of a Constitutional crisis. On Dec. 13, Gore made it official in a gracious concession speech.

Accepting Gore's concession, Bush promised to pursue a policy of "reconciliation and unity." Now, the emotionally spent and politically wounded GOP "victor" must prepare to govern a riven nation. "The circumstances of this victory are unique," sighs an exhausted Bush political adviser. "All we know now is that we'll have to govern differently than we planned."

By any measure, Bush faces a monumental task: healing a country that is at loggerheads over the role of government, whose citizens are alternately furious or triumphant over the bizarre conclusion to the election, and whose political institutions and legal system emerged from the five-week election ordeal arguably in worse shape than they began it. Both Bush and Gore seemed to shrink in stature as they dueled for public opinion and permitted finagling lawyers to bend at will such core principles as states' rights and equal protection. And nearly every official who went near the election swamp—from Florida's county canvassing boards all the way up to the nine robed justices of the Supreme Court—came away sullied.

BALKANIZATION. Though Bush has proven to be a savvy conciliator as Texas governor, the job he faces now is far more demanding. The Texas legislature has been likened to a giant trough at which powerful committee barons and a relatively weak governor share in a bipartisan feast. The Washington environment Bush is about to enter is far harsher and less susceptible to government-by-backslapping. The narrowness of Bush's electoral margin, his loss of the popular vote, and the partisan divisions in Congress have triggered fears of political balkanization.

The process of knitting Americans back together stands to become the overriding imperative of a Bush Presidency. But even among some of his partisans, there are worries about the Texan's abilities as a master weaver. In the weeks after Nov. 7, Bush often seemed eclipsed by his hired hands—chiefly Vice-President elect Richard B. Cheney and top legal strategist James A. Baker III. "The power of the Presidency is the power to persuade," says James Thurber, an American University political scientist. "Bush has fewer tools than most to persuade."

But that's precisely what Bush aims to do, starting well before Inauguration Day. Aides say he plans an extensive se-

ies of meetings with opposition leaders and has told his headhunters to cast a wider net and put more stress on diversity in the coming Bush Administration. That aside, in public comments from both Austin and Washington, the President-elect aims to make clear that he has absorbed the election's verdict and plans to tread cautiously in office.

That may not be enough, though. An immediate problem for Bush is the Supreme Court's abrupt halt to the election dispute and the hard feelings that have ensued. Rather than soothing ideological passions, as it did during the epochal struggle over civil rights, the High Court highlighted the gulf separating Americans (page 45). By snuffing out Gore's bid without a full recount, the Justices guaranteed that finger-pointing over the election would continue for years to come. "People think you go to the voting booth and your

Government

rating Americans (page 45). By snuffing out Gore's bid without a full recount, the Justices guaranteed that finger-pointing over the election would continue for years to come. "People think you go to the voting booth and your

CHALLENGES FACING BUSH



THE PRESIDENCY The sharply divided election outcome could erode the new President's power and lead to a diminished, largely custodial Presidency. Bush will have to work hard to dispel his image as the "Accidental President" and to maximize what little leverage he has to create an impression of executive vigor.



REPUBLICANS For the first time in 48 years, the GOP controls both the White House and Congress. But because the President-elect's political strength is slight, and the House will be politically weak, Republicans could face a crisis of expectation. They seem to control the levers of power but can't make much headway without cutting deals with Democrats.

vote matters," sighs GOP operative David Carney. "The way this is ending, with some votes not counted, means public cynicism with government will be at an all-time high."

Victory on these terms could quickly turn hollow for the Republicans. That grim reality is already seeping into corporate executive suites. "Bush starts with major handicaps," says Craig L. Fuller, president of the National Association of Chain Drug Stores and a former

chief of staff in Bush père's White House. "The polarization hurts. Transition is delayed. And it will be difficult to make anything big happen."

With such a victory, Bush doesn't have the luxury to start off things big. He's huddling with his advisers, chiefly political guru Karl Rove and other members of his Austin high-command—to craft a Hundred Days plan with a distinct emphasis on the doable. That includes naming conse-

WITH ALLIES LIKE THESE, WHO NEEDS DEMOCRATS?

ELECTION 2000 CONGRESS

To heal a divided nation, George W. Bush is vowing to reach out to Democrats. But the Dems might not be his biggest problem.

Even as the next President plans conciliatory gestures toward his foes, he's having to fend off jabs from his own right wing. Worried that the Texas governor's bipartisan overtures could come at the expense of their conservative agenda, hard-liners are drawing a line in the sand. Give us what we've been waiting for, seems to be the operative message.

REAL HURDLE. Bush isn't overly concerned about the noises coming from conservative advocacy groups. A more serious problem will be handling congressional firebrands, led by House Majority Whip Tom DeLay of Texas, who could irreparably harm Bush's chances to succeed. By pushing a divisive, hard-right agenda, DeLay could "make it extremely difficult to bring people together, despite all this happy talk about bipartisanship," frets a Bush adviser.

Conservatives are counting on DeLay to be the point man for their activist agenda. On the wish list: big supply-side tax cuts, with special breaks for

stay-at-home Moms and religious charities, aggressive action to curb abortion and gay rights, sanctions on nations that persecute religious minorities, and funding for a new anti-missile system.

Given his professed goal of governing across party lines—and to scoring some early victories—those are hardly Bush's first priorities. But standing up to the likes of a DeLay will be a tall order for a governor with precious little experience in the take-no-prisoners warfare of Washington. Nor does it help his standing with the conservative wing that his father, former President George Bush, had strained relations with the right. Now, some Bushophobes are muttering that Bush junior, like his dad, is too willing to compromise. "We're not in favor of being bipartisan; that would be terrible," says Religious Right warrior Phyllis Schlafly. And former GOP Presidential candidate Gary Bauer blasts the "Nervous Nellies" within the Bush camp who shrink at a bold conservative agenda. "It would be silly [of Bush] to moderate his positions," argues Bauer, chairman of the Campaign for Working Families. "The problem with my party is we trim our sails long before we have to."

True believers are also upset over



THE RIGHT'S POINT MAN: A

the prospect that Bush may name many moderates to key Administration posts. Among the early targeted conservative e-mail campaigns: Chief of Staff-designate Andrew H. Card, rumored Cabinet secretaries C. Vann Woodward and Pennsylvania Governor

DEMOCRATS House Democrats have enjoyed some success by enticing Republicans negotiations over popular issues such as HMO patients' rights—and distancing away from compromises at the last minute. But with Bush will meet them halfway, Dems risk being seen as obstructionists if they make some deals.



HYPERPARTISANS With policy coalescing in the center, activists on both the left and right fringes will face reduced clout. That could mean big headaches for Bush, since social conservatives have waited eight years for an agenda of strict abortion restrictions, pro-family tax cuts, and curbs on gay rights—items he can't deliver.

Democrats, such as Texas Representative Charles W. Stenholm, to Cabinet jobs. Bush will also push legislation with a preexisting base of bipartisan support, such as education reform and modest health-care measures. And a series of high-profile speeches by the new President will attempt to drive home the notion that he is to remake his agenda around national healing. "Conservatives have to understand—and I think will understand

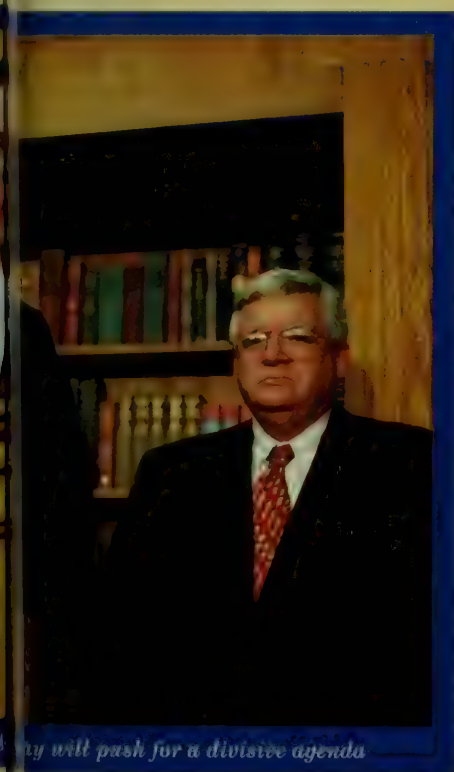
—that the public has spoken and Bush has to govern more in the center," says a top adviser.

Out of the spotlight, Bush has already begun the reconciliation process by reaching out to such centrist Democrats as Louisiana Senator John B. Breaux, whose views on private Social Security accounts he admires. "There has also been outreach coming from the other direction," says a Republican with ties to Austin. "We have been contacted

by a number of top current and former Democratic officials, and the message is encouraging: 'After this is over, we want to sit down and talk.' There will be a whole series of meetings to open lines to the other side."

No one wants to talk more than Bush. He knows the 2000 Presidential race was less a traditional electoral contest than a kind of surreal, bloodless civil war fought out among briefcase-toting lawyers. Now, as the dust begins to settle, the cost of the divisive fight is starting to emerge. While there are few, if any, clear-cut winners, there are truckloads of casualties, from the political system itself to Republican hegemony and confidence in the judiciary. Now that the fighting is subsiding, here's an early dispatch from the front lines:

■ **The Miniature Presidency.** With the country and Congress split down the middle, Bush could be a relatively powerless leader—one who has to content himself with signing a few dog-eared bills left over from the 106th Congress. "He doesn't start with much political



a Bush strategist.

Maybe. But first Bush will throw a bone to the Right by reserving several key jobs for conservatives. Among the most likely: a pro-life, law-and-order Attorney General, a prominent abortion foe such as former Virginia health secretary Kay Cole James at the Health & Human Services Dept., and an enemy of affirmative action as head of the Justice Dept.'s civil-rights division.

Meanwhile, he is drawing up a bipartisan agenda for his first Hundred Days that he hopes will appeal both to the right and the center. Likely proposals include marriage-penalty and inheritance-tax relief, education reforms, an HMO patients' bill of rights, and a prescription drug benefit for seniors. Former GOP House staffer Michael G. Franc, now at the Heritage Foundation, calls these bite-sized proposals "a thousand points of legislative light."

While some on the Right want far more than that, most conservatives seem willing to cut Bush some slack. "A lot of people have to realize that this isn't 1980, and Bush isn't [Ronald] Reagan," says ex-Christian Coalition ex-

ecutive director Ralph Reed, a GOP strategist and close friend. "With a divided nation, he has to govern differently."

The wild card in all this will be DeLay, who argues that the GOP's narrow "sweep" of the 2000 election is a green light for activism. "The conservative base has been waiting for a long time," says Brookings Institution scholar Thomas Mann. "This is time to go full-speed ahead with their agenda." A top DeLay aide says Bush won't let them down. "Bipartisanship doesn't necessitate capitulation," says DeLay spokesman Jonathan M. Baron.

Still, Bush strategists hope to convince DeLay to air grievances in private. "You've got to give him a chance to be a team player," says a Bush adviser. "The first time he [messes with] you, then you've got to whack him." Democrats relish the thought of a Bush-DeLay showdown. "Tom DeLay will insist on 'my way or no way,'" says Representative Nita Lowey (D-N.Y.).

Republicans say that, in the end, DeLay won't give the Democrats the satisfaction of GOP infighting. "Conservatives are going to be pragmatic," says Jeffrey A. Eisenach, president of the Progress & Freedom Foundation. In the first Bush Administration, "pragmatism" was an epithet in conservative circles. In Bush II, however, it offers a weakened President-to-be the possibility of bipartisan success.

By Richard S. Dunham, with Lorraine Woellert and Amy Borrus in Washington D.C.

capital," says Hudson Institute scholar Marshall Wittmann. "There are going to be a lot of modifiers that diminish his Presidency," asserts James Davis, a political scientist at Washington University in St. Louis. "Bush will be known as the Accidental President, the Judicial President—or maybe the Florida President."

If that's the case, corporate chieftains who backed Bush in hopes that he would push a powerful pro-business

Government

agenda must lower their expectations. Many console themselves by noting that, even if the Texan ends up a custodial President, the Federal Reserve remains a rock of stability in uncertain times. "As long as Alan Greenspan is there, policy will be relatively steady," says Kenneth D. Pasternak, CEO of Knight Trading Group Inc., a financial trading firm. But talk of "President Greenspan" just reinforces the thought that Bush's leverage is limited—and makes the Texan look even smaller on the Washington landscape.

■ **Frazzled Republicans.** GOP partisans should be delirious over their capture of the White House. But the huzzahs are muted by realizations that the party's moment in the sun could be fleeting. Bush faces rising odds of a recession on his watch, and the brunt of public anger would initially fall on the GOP lawmakers who already face an uphill climb to retain congressional control in 2002.

The new President's puny power base will also strain the Republican coalition, since the conservative foot soldiers who feel they elected the Texan may see their wish list shredded. Hardliners will view a retreat from a bold social agenda as betrayal, raising the specter of intraparty bloodshed (page 42).

■ **The Not-So-Loyal Opposition.** Though they're cheered by Bush's bind, Hill Democrats are uncertain about how to play a Bush Administration that puts Dems in Cabinet jobs and moves to the center on issues such as a minimum-wage hike, a prescription-drug benefit, and patients'-rights legislation. The danger: They overplay their hand.

For the past two years, the game plan crafted by House Minority Leader



Richard A. Gephardt (D-Mo.) was a variant of the old wallet-on-a-string trick: talk compromise with GOPers while yanking the terms for accord just out of reach. That gave Democrats high-contrast election issues, rather than deals. Now, Hill observers caution, Democrats will have to be wary of obstructionism. Says one GOP lobbyist: "If Gephardt looks like he's just teeing up issues [for 2002] while Bush comes off like a sincere compromiser, the strategy could backfire."



"Bush will be known as the Accidental President...or maybe the Florida President"

■ **The Boardroom Set.** With handicappers predicting a Democratic takeover of Congress in the next by-elections, Republican business leaders predict a narrow six-month window next year for legislative action (page 46). And, as if business didn't have enough to worry about, managers of corporate political action committees are about to discover another downside of political parity: Both parties will now expect massive amounts of campaign cash. The mere threat of a Democratic House takeover this year

pushed business interests to give 40% of their money to Democrats much to the dismay of Republicans.

With Democrats proaching the next election in a stronger position, demands for more corporate backing will soar, even as Republican clamor for aid to help their position. "Business PACs will be under tremendous cross-pressure," predicts Ross Baker, a Rutgers University political scientist. ■ **Men and Women Black.** Although so many Americans applaud the U.S. Supreme Court's ending the electoral deadlock, many others, joined by historians and legal scholars, fear the judiciary's reputation for impartiality has been

hit during the protracted warfare. Its starkly differing dissenting opinions paint a picture of a High Court unable to agree on either a reasonable standard for Florida's recounting or on the consequences of continued delay.

The yawning divide between conservatives and moderates on the court could fan the perception that, shorn of their black robes, jurists are also profoundly partisan. That could "be damaging for the judiciary," frets University of Chicago legal scholar Cass Sunstein. "Around a third of the people in the country think [the Supreme Court] acted in a partisan manner."

Are any winners emerging from the electoral morass? Probably not. But future crisis deftly handled could permit the lightly regarded Bush to grow stature. And if he succeeds in curbing partisan passions in a capital scarred by political mau-mauing, he will have gone a long way to accomplishing his central mission.

At the moment, experts don't see Presidential race settled by a court-ordered karate chop as offering much the way of national uplift. But give Bush this much credit: He is at least the pickle he is in and is determined to transcend the pat predictions of the master. Still, when George Walker Bush puts his hand on the Bible on Jan. 20, he had better pray hard—along with everyone else.

By Lee Walczak, with Lorraine Woellert, Dan Carney, and Howard Gleckman, in Washington, and Ed Thornton in New York

By Mike France

JUSTICE RAN OUT THE CLOCK

**ELECTION
2000
THE JUDICIARY**

Face it. There were no easy answers to the case of Bush vs. Gore. One side was going to win and the other was going to

lose. Whatever the U.S. Supreme Court did was inevitably going to anger millions of Americans.

But does that mean a fair solution was impossible? Or was there a principled compromise that would have struck most people as evenhanded? If you read the High Court's convoluted ruling closely, it appears that a clear majority of the justices believe that a compromise existed. Had there been more time, it seems, Justices Stephen G. Breyer, Ruth Bader Ginsburg, Anthony Kennedy, Sandra Day O'Connor, David Souter, and John Paul Stevens would have supported a hand count of all the disputed Florida ballots based upon a set of well-defined objective standards.

The appeal of this approach is clear. It would have honored the key principle championed by the Democrats: that every vote deserves to be counted. At the same time, it would have respected the Republican's legitimate concerns that ballots were treated identically. It would have been, in fact, just the type of solution that so many Americans were hungering for: one that both sides could accept regardless of the outcome.

FALLING INTO THE FRAY. And yet this is not what we're getting. Fearing there wasn't enough time to develop objective hand-recount standards, longtime swing voters Kennedy and O'Connor joined the conservative trio of William H. Rehnquist, Antonin Scalia, and Clarence Thomas to tilt the election. Pulling the plug on moderate compromise, they decided Americans have to accept a tarnished Florida vote count that nobody believes is accurate—and a

President who may not have won.

Is this really the best the Supreme Court could do? As members of the nation's highest tribunal, the Justices have a responsibility to live up to the gravity of the moment. At a time when the country had degenerated into venomous partisan warfare, many Americans hoped that

York University School of Law. "It hurts the Supreme Court, it hurts the presidency, it hurts democracy."

The most infuriating aspect of the ruling is the court's insistence that there wasn't enough time for a fair hand recount—even though most Justices seemed to think it was the right thing to do. Declaring that Florida's 25 electors had to be chosen by Dec. 12,

the majority argued that a recount could not "be conducted in compliance with the requirements of equal protection" in the two hours that remained before the deadline expired. But this reasoning was based on an unduly literal reading of the Constitution. As Justice Ginsburg noted in her dissent, that deadline has no "ultimate significance."

And even those Judges who took the Dec. 12 deadline seriously could have advertised their equal protection concerns in a way that would have made meeting the deadline possible. The Supreme Court had plenty of time to watch this drama unfold.

Had the Justices genuinely wanted to encourage the creation of an objective standard for reviewing ballots—and had they construed their role in a constructive, problem-solving way—they could have raised this issue in their Dec. 4th opinion.

But they didn't. And now many Americans are left frustrated. The Supreme Court has told us that a hand count with objective standards probably would have been the right way to handle this mess. But the Justices themselves helped to prevent that from happening. That isn't going to sour many Republican victory parties, but it will likely shake up many middle-of-the-road Americans, who were disillusioned with the way both parties acted. Citizens were counting on the Supreme Court to lead the country to the high ground. Instead, the Court dragged us further down.

Associate Editor France writes about legal affairs.



the court would have had the vision to come up with something bigger—a Solomonic compromise, based upon common national principles, that would begin to reunite Republicans and Democrats. Instead, the Justices fell into the unruly fray and wrote an opinion that is fractured, narrow, technical, and, on its face, disingenuous. "It's a strikeout at every level," says Burt Neuborne, director of the Brennan Center for Justice at New



**The High Court wrote
an opinion that's
fractured, narrow,
and disingenuous**

'SAND IN THE GEARS OF GOVERNMENT'

Bush will be hard-pressed to meet more than modest goals

ELECTION 2000 THE AGENDA

After two years of campaigning, a heart-stopping election night photo finish, and a 5-week legal and public-relations battle, George W. Bush is indeed going to be the next President of the U.S. Now all he has to do is try to govern.

With rancorous disputes over Florida votes still echoing, Bush will have to work with a bare five-vote majority in the House and a Senate deadlocked at 50-50. Lawmakers already have their eyes on the 2002 election, and voters

benefit for seniors. And Social Security reform? Don't expect it any time soon.

Bush will want some quick victories to establish credibility in Washington. But much of what he can accomplish in his first six months will be driven by the economy—and by the people he listens to as he starts to make policy decisions. Some Bush aides, including Lawrence Lindsey—expected to be the top White House economic adviser—are extremely bearish, even hinting at the possibility of a full-blown recession. Privately, other Bush advisers are less worried. They see growth slowing, but don't see it turning negative.

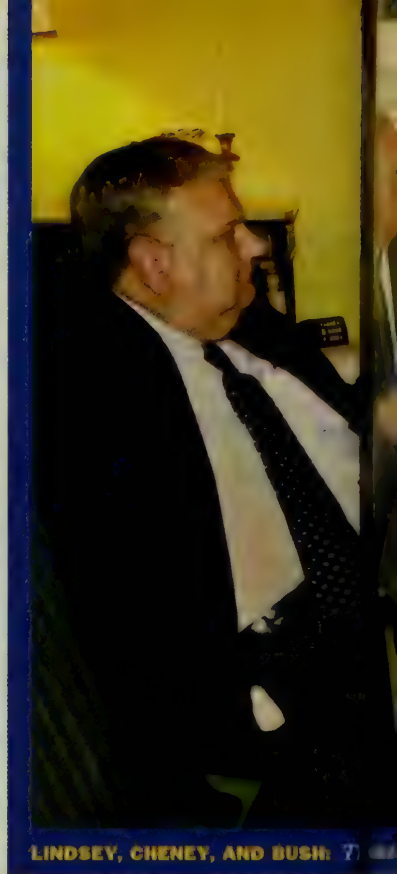
With the Federal Reserve unlikely to let that happen, Bush may have some help. In the face of a sagging economy, Fed chief Alan Greenspan has signaled he's ready to cut rates starting early next year. The central bank wants the overheated economy to slow, but if growth looks like it's settling below 3.5% or so, the Fed will jump in. "The Fed will lower rates in the first quarter of next year," predicts Bear Stearns & Co. chief economist Wayne D. Angell.

"BIG, BIG FIGHT." Unlike in past slowdowns, this time the Fed has plenty of room to run. The national debt should continue to fall from its current level of \$3 trillion. True, federal spending will rise, especially for health care and defense. And a modest tax cut will slow

Government

are deeply divided over what they really want from the Capitol. "It is going to be exactly what the public wants," says Steven E. Schier, a political scientist at Carleton College in Northfield, Minn: "More sand in the gears of government, grinding at a very meager pace."

So what can Bush do in such an environment? To start, he'll have to scale back an already modest agenda. He'll get a tax cut, but not the massive cuts that he proposed during the campaign. He'll have to ditch broad-based reform of Medicare but may be able to persuade Congress to agree to a new drug



LINDSEY, CHENEY, AND BUSH: 7

the recent big increases in federal revenues. But even after a \$750 billion reduction, revenues could still be \$1 billion higher in 2010 than they are now. As long as the economy grows 3% or more for the next decade, non-Social Security surplus over the period should still approach \$2 trillion. ter tax cuts and new spending.

Publicly at least, Bush will continue to push for his tax cut. Indeed, Vice President-elect Richard B. Cheney called it a vital step toward warding off a possible recession.

And with his father's capitulation to his read-my-lips pledge still echoing in the ears of conservatives, Bush probably have to send Congress a proposal for the whole cut. But there's a chance he'll get anything that big. He eventually have to abandon the centerpiece of his plan—a huge rate cut—especially for high-income taxpayers.

"There is going to be a big fight on rate cuts," says Stephen Moore, director of fiscal policy at the Cato Institute, a libertarian think tank in Washington. "It will be the hardest part of the tax package to pass."

Still, Bush can probably get a tax cut of \$500 billion to \$1 billion, including relief from estate tax and marriage penalty. Congress will probably ad-

WHAT WASHINGTON MIGHT DELIVER

FISCAL POLICY Tax cuts may be about half the \$1.6 trillion Bush promised, with relief from the estate tax and the marriage penalty. Caps on individual retirement accounts and 401(k) contributions may be raised.

HEALTH CARE Passage of a patients' bill of rights is likely, and possibly a new Medicare drug benefit for seniors. A sleeper issue: Expanded health coverage for the uninsured.

DEFENSE SPENDING The Pentagon's procurement budget will rise. But the Star Wars anti-missile defense system will be a lot leaner than Bush promised.

MONETARY POLICY Pressure to cut rates will grow as the economy slows. But don't look for the Fed's Greenspan to abort the soft landing too quickly.



BILL OF RIGHTS?



WAR ON STAR WARS?



modest success at most on a tax cut—and probably less on Social Security reform

sure to expand individual retirement accounts and 401(k)s that was widely adopted this year. And lawmakers may try to provide some relief from alternative minimum tax, which is hitting more middle-class taxpayers. "I'll do some very limited and narrowly targeted tax cuts," predicts Representative Jim Kolbe (R-Ariz.), a key moderate.

Limited and narrow success may be a better than Bush will achieve with her central theme of his campaign agenda—Social Security reform. The plan will, as promised, create a new bipartisan commission to develop a replacement plan that would allow workers to opt in to limited private accounts.

TAX RELIEF. But Bush has never said he would pay for such a scheme—which could cost as much as \$2 trillion the next decade. He has only two options: Take the money out of the federal surplus or reduce future Social Security benefits. Many moderate Democrats back private accounts, but the idea generate a firestorm of opposition from labor and party liberals. One line of attack: This year's sagging stock market exemplifies the risks of private accounts. With Congress so badly divided, it's hard to see how Bush will sell fundamental Social Security reform. "When the details come out, it's going to be controversial," says former Con-

gressional Budget Office Director Robert D. Reischauer.

Bush may have better luck with health-care initiatives, although—as with taxes—he'll have to be satisfied with part of a loaf. In the campaign, he proposed gradually turning Medicare over to private insurers, with premiums subsidized by Washington. That has broad bipartisan support in Washington. But as long as the public remains so hostile to HMOs, it's hard to see either Bush or a divided Congress taking on the issue.

Instead, look for Bush to try to build a quick consensus on two more modest but popular health-care initiatives—a patients' bill of rights and a Medicare drug benefit. "I expect something will be done on prescription drugs," says Peter B. Teeley, a lobbyist for biotech giant Amgen Inc. The patients' bill of rights would likely give HMO participants the limited right to sue their insurers. It could cost both insurers and employers some money. But because suits will probably only be allowed after a convoluted appeals process, and because

judgments will be curbed, there will be less to this than meets the eye.

The debate over a new Medicare drug benefit would leave pharmaceutical companies in a quandary. On one hand, such a benefit could lead to narrowing margins as insurers negotiate lower prices. On the other, it could dramatically increase demand for drugs. Teeley, for one, likes the trade-off. "I think it's good for the industry," he says. If Bush and Congress seem to be making progress on health care, watch for a sleeper issue: expanded health coverage for the uninsured, which has the backing of business, labor, and the insurance industry. Such a costly measure could prove a windfall for embattled health insurers.

What other corporate goodies might be in the works? Bush will also push hard for big increases in defense spending, and Congress is likely to give him more money for Pentagon procurement. But the item at the top of his military wish list—the Star Wars anti-missile system—will get a much more skeptical hearing on Capitol Hill. Bush has never said how much he would spend on the project. Moreover, Democrats and even many Republicans are leery of a new Pentagon boondoggle.

Unlike most new Presidents, Bush cannot expect much of a honeymoon. He will have to struggle to win legitimacy for his razor-close election victory. Congress will struggle to get its legislation passed in an atmosphere that

could be even more partisan and hard-fought than in recent years. And both political parties will struggle to position themselves for the 2002 elections. In such an uncertain atmosphere, Bush will be lucky to scrape together a few narrow victories. But as he has just discovered, winning ugly is still better than not winning at all.

By Howard Gleckman, with John Carey and Catherine Yang, in Washington



Allowing
workers to
invest Social
Security money
in private
accounts may
hit a buzz saw

By Paula Dwyer

LESSONS OF THE FIASCO

ELECTION 2000 THE AFTERMATH

Most Americans went to bed on the night of Dec. 12 relieved that the national trauma over who won the Presidential election five weeks earlier had finally ended. The temptation to put the mess behind us and move on is great. But that would be a mistake. Now is the time for the country to step back and take stock of the lessons learned in hopes of preventing a recurrence of the Great Florida Standoff of 2000.

While future Presidential races may never again end in a virtual tie, Florida's electoral lockjaw revealed a dirty little secret: Most state voting laws and

state elections. While the Founding Fathers reserved for the states the power to run elections, it did not say Congress had to remain on the sidelines. Even if it takes an emergency commission of experts, Congress must inform the states what the best voting technology is—whether that's optical scanners, computer touch-screens, the Internet, or some other system.

CARROTS. Congress also can recommend a set of guidelines on how votes are to be counted when an outcome is in doubt. States may want to come up with their own hand-count standards, but Congress should give the states the carrot—matching federal grants—to encourage them to meet at least a minimum national standard. Already, Congress is weighing several measures that would provide incentives to the states. Senators Robert G. Torricelli (D-N.J.) and Mitch McConnell (R-Ky.), for example, would provide \$100 million to states to study ballot-box technology, hire and train pollworkers, and improve voting procedures.

But Congress must act quickly—the country can't afford to wait a year or two. And lawmakers could go further by providing immediate funds to states with financially strapped counties that can't afford to replace ancient punch-card machines. A federal investigation may yet show that a disproportionate number of minority votes in Miami-Dade County were tossed out because of inadequate equipment in poorer precincts. Indeed, the U.S. Supreme Court is almost inviting civil-rights activists to sue states, on equal protection grounds, that fail to update voting

methods. "The country simply can't have another election without technology," declares Torricelli.

In the end, it may not be possible to avoid court entanglements when the outcome of an election is in doubt. By getting rid of obsolete technology and establishing clear guidelines when a vote is a vote, "we can get answers," says Steven E. Levitsky, chairman of Carleton College's political science department.

There are other important lessons beyond voting infrastructure. As we proved that we can withstand a fight such as the protracted one between George W. Bush and Al Gore,

Government

election machinery are badly in need of an overhaul.

On top of creaky machinery, Florida also lacked statewide standards to guide officials in designing and counting ballots. Election officials there have egg on their faces, but the sad truth is that most states wouldn't have performed much better. Experts figure that when most states declare a winner, there's a margin of error of 1% to 2%. Says James Davis, a Washington University political science professor: "We owe Florida our thanks for showing just how approximate our voting system is."

The most important lesson of this election debacle is that every state must modernize its election laws and technology. Corporations "benchmark" by adopting the best practices of the most advanced companies, and there's no reason states shouldn't do the same. Seven states, including Texas, that have explicit hand-count rules could be the model, says Carol A. Laham, a Washington-based election-law specialist. "If we do nothing else but upgrade our election system, all of this will have been worth it," says Larry J. Sabato, director of the University of Virginia Center for Governmental Studies.

That means it's time for Congress to step in. True, a debate already is flaring over whether Congress, under the Constitution, has the power to regulate

WHAT WE LEARNED FROM THE ELECTION MESS

■ State-run election systems are saddled with vague laws that can result in dubious outcomes.

Lesson: Congress must help states come up with election reforms based on best practices. With one state able to throw a national election into doubt, uniform rules must be encouraged.

■ Creaky and complex election machinery varies widely even within a state and can lead to disenfranchisement.

Lesson: By 2002, every state must have modern, technologically advanced equipment that meets a minimum national standard should be in place in every state. And poll places should be staffed with trained workers.

FACE-OFF OUTSIDE THE U.S. S



Besides the bitterness, a crash course in civics

ard M. Nixon cited the "na-rest" in avoiding a recount over the razor-thin results that F. Kennedy in the Oval Office. rs later, we see that such legal are messy affairs but that permanently impair the countock markets didn't crash, and detected little public anxiety. put it all, the public said: "This isis," says Andrew Kohut, dihe Pew Research Center for e & the Press. For the most citizenry saw no great risk in didate winning the Presidency willing to view either outcome ate. "They were more patient politicians," Kohut adds.

was elected by a just over 500 votes in Florida. tes were won by a sand ballots.

Only 52% of those o vote did so, helping about a near-tie. s efforts must be nlike participation, y encouraging Cor-nerica to conduct ie-vote drives.

■ Because Bush and Gore lacked appeal beyond core supporters and failed to captivate undecideds, they split the independent vote.

Lesson: To win a clear mandate, future candidates must galvanize independents, not just divide them. That means running broad, centrist campaigns that avoid narrow interest-group politics.

Most Americans, in fact, took the crash civics lesson in stride. The election became topic No. 1 at every grocery checkout counter and espresso bar. "There is no doubt that the average American knows a great deal more about the Electoral College, the courts, and federalism than they did a month ago," says A. E. "Dick" Howard, a University of Virginia law professor. We learned not only that every vote counts but that they can count in unexpected ways. Individual votes can determine the winner in tight elections, and they can shape other institutions. A vote for one candidate can determine who sits on the Supreme Court, which can decide who a future President will be.

■ By putting ratings before public service and declaring a winner before there was one, the media—especially the electronic media—did the country a disservice.

Lesson: The media must come together and set election-night standards that will not interfere with the democratic process—even if that means delivering results later.

Bush and Gore also learned a harsh lesson from Election 2000: If your campaign message is directed mostly to hardcore supporters, don't be surprised if the rest of the nation tunes out. As political participation has declined, the two major parties have grown dependent on ideologically driven partisans. Especially in the final weeks of the campaign, both candidates felt they had to fire up the base to spur turnout. But little more than half of all registered voters bothered to show up. Says University of Akron political science professor John C. Green: "Both candidates made nods to the center, but they ran more of a base-oriented campaign because they couldn't find issues appealing enough to independents." In the end, they split the independent vote. "You can't just split the independent vote, you have to win it," adds Green.

The media also need to do some soul-searching. On Nov. 7, the networks relied on incomplete exit-polling data to pronounce Gore the winner of Florida's popular vote—only to retract that hours later. Then the nets declared Bush the victor, only to retract that, too. And by projecting results before the polls closed in Florida's Panhandle, they may have discouraged voting.

The ratings-driven media must realize that viewers want correct information—even if it comes a few hours later—not early information that turns out to be wrong and that could affect the outcome of an election. On Dec. 12, more than a few court reporters rushed in front of the cameras, the U.S. Supreme Court's opinion in their shaking hands, without giving themselves a chance to digest what the court had said. "They didn't learn the lesson of election night," says Stephen Gillers, a New York University law professor, "which is to wait and get it right."

There is an important message for President-elect Bush, too. Voters split down the middle among two less-than-

mesmerizing candidates. That should not be interpreted as a symbol of an angry and polarized nation. Says Leon E. Panetta, Clinton's former White House chief of staff: "Don't misread this election by thinking there are deep differences. The American people want leadership from the center."

With Amy Borrus, Howard Gleckman, and Dan Carney in Washington

WHO WON THE NEW ECONOMY VOTER?

More prosperous, tech-savvy independents chose Bush

ELECTION 2000 THE ELECTORATE

Four years ago, Republican Presidential hopeful Bob Dole ignored all talk of a "New Economy" as if it were some passing fad. Not surprisingly, the workers and executives in the burgeoning technology sector voted overwhelmingly for President Bill Clinton and his cyberwhiz running mate, Al Gore.

This year, Texas Governor George W. Bush avoided making the same mistake. He embraced the New Economy, wooed high-tech execs, eagerly endorsed the tech agenda, and campaigned aggressively in the silicon centers that dot the American landscape. On Election Day, aided by a backlash against Gore's populist corporation-bashing, Bush erased the Democratic edge among New Economy voters, reeled in most of the straying Republicans who had voted for Clinton in 1996, and won the support of the majority of independent voters with tech-related jobs.

SWELLING RANKS. While preferences varied by region, New Economy voters arguably helped Bush in the closely contested states of Florida and Colorado. They also contributed to his victories in Georgia, North Carolina, Tennessee, and Virginia. This emerging voting bloc now makes up about one-third of the electorate, according to the Pew Research Center for The People & The Press—and it's likely to grow in coming elections.

Who are the New Economy voters? They work in tech-related jobs in the service sector and tend to be fiscal conservatives who are pro-business, pro-choice, liberal to moderate on social issues, and deeply pro-environment. They

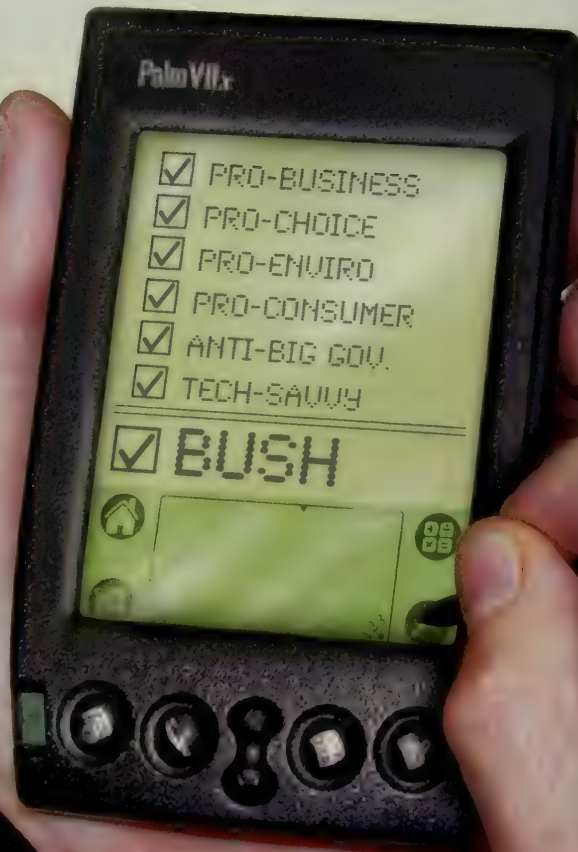
are strong backers of new gun curbs and while suspicious of Big Government, they favor federal regulation of Corporate America that benefits consumers. Most of them tend to be ambivalent about—or hostile to—affirmative action and welfare.

Politically, they are ticket-splitters turned off by extremists in both major

parties. The Pew Center divides them into three distinct subgroups: centrist New Democrats, Moderate Republicans, and New Prosperity Independents.

While these technocentric workers hold similar views, their voting patterns in 2000 often followed party lines. New Democrats favored Gore by more than 8-1, according to post-election Pew interviews, while GOP moderates backed Bush by a similar ratio. Bush made major gains, however, among New Prosperity Independents, who had backed Clinton over Dole by 3% in 1996. This time, the GOP standard-bearer led Clinton among these voters, 2-1.

What has changed? For many New Economy voters, Bush was a more moderate and palatable choice than the anti-Kansas conservative of 1996. Many voters say Gore doesn't share Clinton's business outlook. "Clinton had vision," says Richard W. Lowenthal, 48, a



Most New Economy voters still see the Republicans as

vice-president at Cisco Systems who now advises high-tech startups. He favored positive social change through business success." Lowenthal backed Clinton in 1992 and 1996 but switched to Bush in 2000. Why? "Gore's reform was a long list of things we could spend money on...to win over certain segments of voters."

LOYALTY. Despite GOP gains, New Economy voters remain up for grabs. A BUSINESS WEEK election analysis and interviews with New Economy voters across the country show that their party has cemented loyalty of this growing group of swing voters.

The reason for such divided allegiances? Both parties are out of sync with the old view of New Economy voters. Most see Republicans as right on government spending and inflation—but too far right on social issues such as abortion, gun control, and gay rights. "Republicans like House Majority Whip Tom Latham and [Senate GOP leader] Trent Lott come across as pompous and arrogant," says Mary C. Kovich, a purchasing agent at Computer Sciences Corp. in Farmington Hills, Mich. "If I got rid of guys like them, it might make it easier for me to vote for them." Kovich, an independent, voted for Gore.

But Democrats don't fare any better among the tech set.

While embracing the New Democrats' positions on social tolerance and fiscal responsibility, Info Age workers see many national Democratic positions as too quick to

bash business and too far left on issues such as welfare and minority rights. Democrats "have to watch the Outrageous Left—the real extremists like Jesse Jackson," says Brenda M. Waldron, an administrator at Experior Testing Inc. in Fairfax, Va., which conducts statewide exams. Waldron calls herself a New Democrat but voted for Bush.

Like other voters, the New Economy are susceptible to regional and religious influences. Techies in the Northeast and Midwest were more likely to go for

ern New Economy suburbs proved pivotal in his Pennsylvania and Michigan victories: He carried Philadelphia and historically Republican counties near

Government

Detroit. This meltdown in the Northern suburbs worries GOP officials. "We have to be far more moderate, far more tolerant, and far more inclusive," warns Connecticut Governor John G. Rowland. "If we don't work towards that, worse things are going to happen to us...in '02 and '04."

Indeed, despite Gore's troubles, Democratic strategists think New Economy voters will become an integral part of a winning electoral formula for the 21st century. Their dream: a loyal Democratic core of minorities, union members, and working women, supplemented by New Economy independents. "There's a change in the old New Deal coalition," says G. Terry Madonna, a pollster at Millersville University in Millersville, Pa. "We're seeing an urban-suburban alliance against [Republicans in] rural America."

"PERFECTION." For the time being, Republicans are basking in a Bush victory, aided

by a narrow edge among New Economy voters. GOP strategists predict that after four years of Republican rule, techies will forget about the prosperity of the Clinton era and revert to the historic home of most other well-educated, affluent voters: the Republican Party.

That kind of optimism may be premature, because both parties now see the importance of the New Economy bloc and will shape strategies to snare it. "If someone could meld the best of Republican views and the best of Democratic views, that would be perfection," says moderate Republican Mimi Calfee of Lake Forest, Ill. "I'd like a party that was a moderate party." Of course, that won't happen until Dems and Republicans listen to the electorate and craft a delicate coalition between their hardcore bases and the more pragmatic denizens of New Economy America.

By Richard S. Dunham in Washington, with Ann Therese Palmer in Chicago

DISSECTING THE VOTE

As a group, New Economy voters tend to be:

Pro-business. Moderate to conservative on economic issues.

Liberal to moderate on social issues. Pro-choice.

Pro-environment. Suspicious of Big Government.

They usually: Are highly educated. Have above-average incomes. Are under 50. Tend to live in suburbs or trendy urban areas. Surf the Net. Own stocks or mutual funds.

Here is how key elements of this group voted:

	BUSH	GORE	OTHER*
NEW PROSPERITY INDEPENDENTS	50%	27%	23%
MODERATE REPUBLICANS	80%	10%	10%
NEW DEMOCRATS	10%	82%	8%
INTERNET USERS	49%	47%	4%
COLLEGE/GRADUATE SCHOOL DEGREE	48%	49%	3%
\$75,000 OR MORE INCOME	52%	46%	2%
MODERATES	43%	54%	3%
INDEPENDENTS	49%	43%	8%

*INCLUDES THOSE WHO VOTED FOR OTHER CANDIDATES OR REFUSED TO STATE A PREFERENCE
DATA: THE PEW RESEARCH CENTER FOR THE PEOPLE & THE PRESS, ABC NEWS, THE LOS ANGELES TIMES

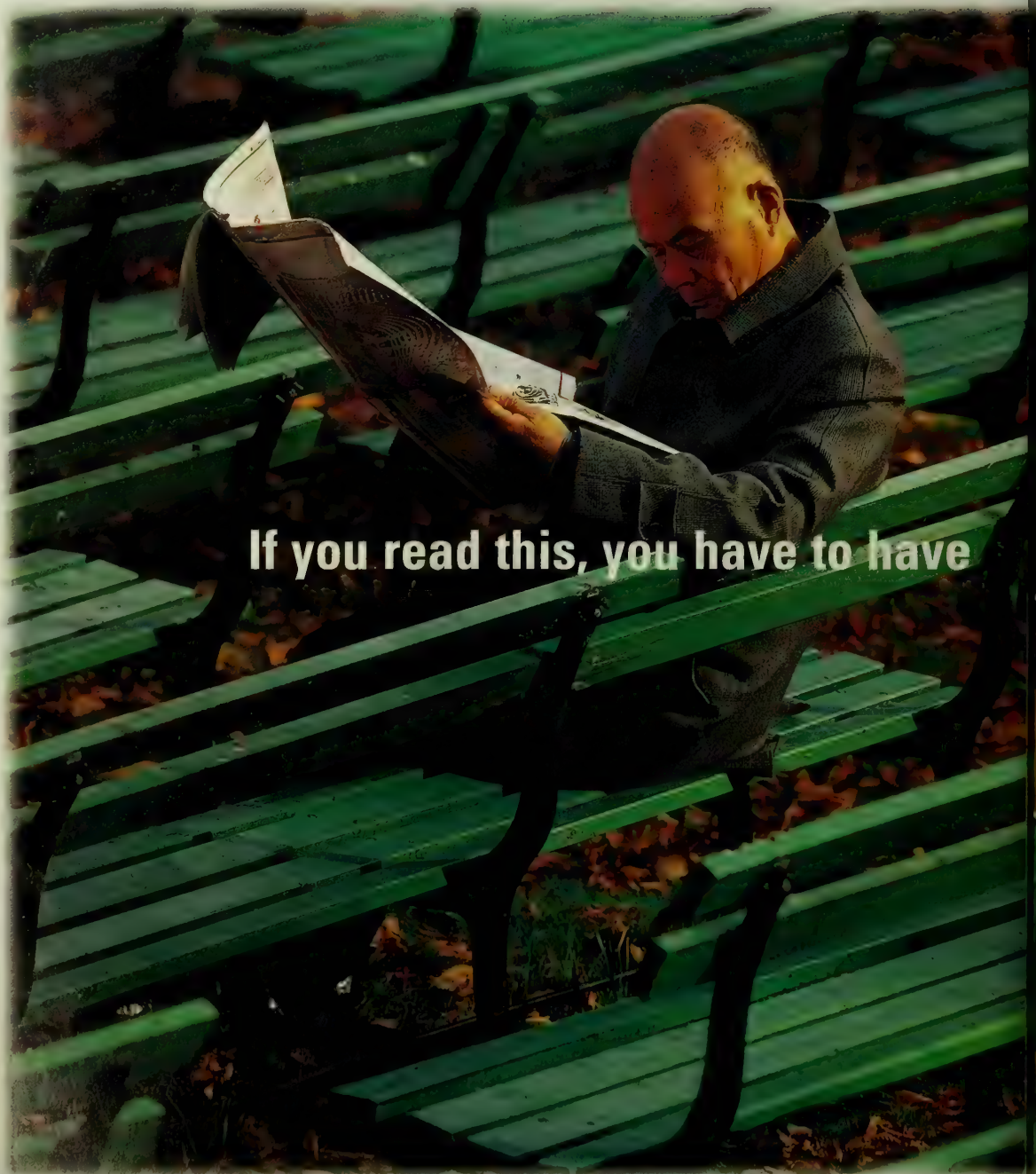
Gore, while their Sunbelt siblings leaned to Bush. According to ABC News exit polls, Gore was the heavy favorite of independents in the tech belt of Connecticut, Massachusetts, and New Hampshire. Bush got the nod in similar parts of North Carolina and Colorado.

What's more, tech workers also divided on the basis of religion, with white Protestants strongly favoring Bush and Catholics and Jews backing Gore by an even wider margin. Michigan pollster Ed Sarpolus says that many New Economy voters in his swing state are the sons and daughters of "Reagan Democrats" who are "living the lives their parents only dreamed of." Independent and largely Catholic, they were turned off by the size of Bush's tax cut and the harsh tone of his Religious Right allies, Sarpolus says. They backed maverick John McCain in the GOP primary, then shifted to Gore.

The Veep's strong showing in North-

the mainstream on abortion, gun control, and gay rights

SIEMENS



If you read this, you have to have

From the giant presses that print the news, to the automation systems that manufacture the paper, Siemens is at the very forefront of manufacturing technology. Whether it's turnkey assembly lines, process controllers, or complete building automation

installations, we provide flexible, creative technology that can reduce production time even as it improves quality and productivity. From stand-alone systems to fully integrated solutions, Siemens has been making news all over the world.

We're Siemens. We can do that.™

this



this



and this.



www.usa.siemens.com

PINK SLIP BLUES

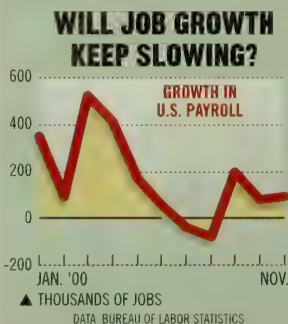
The job market is still tight. But new layoffs are giving bosses more clout

Just six months ago, Relativity Technologies Inc. could barely find employees. The software startup, based in North Carolina's Research Triangle, made half a dozen offers to programmers, only to lose out to a high-flying dot-com lavishing stock options. But now, with so many Internet outfits folding, Relativity Chief Executive Vivek Wadhwa is finding the pickings far better. The company is getting triple the response to its help-wanted ads. "It's night and day," says Wadhwa. "I am getting plenty of good responses, and I don't have to make ridiculous job offers."

As the economy downshifts, some companies are finding themselves in an unaccustomed spot. Instead of having to beg for workers—and give away the store to hire and keep them—once hard-up employers are finding the balance of power shifting back. Talk of recession, plunging profits, the dot-com implosion, and a fresh wave of layoff announcements at some of the nation's biggest employers—General Motors Corp. said on Dec. 12 it was cutting 10,000 U.S. jobs, for example—are combining to make the oh-so-tight job market just a bit looser. "The dynamics have started to move in that direction," says Richard Berner, chief economist at Morgan Stanley Dean Witter.

It doesn't mean the years of tight labor markets have suddenly come to an end. While some of the froth is subsiding among dot-coms and on Wall Street, the overall labor market is likely to remain tight throughout 2001. Unless the economy slows more dramatically than most economists now think—the consensus view foresees growth in gross domestic product of 2.6% or so—unemployment should remain in the 4% range next year. There's still plenty of demand for new workers: In November, 94,000 employees were added to the national payroll. Indeed, even many high-tech companies, such as Microsoft Corp. and Dell Computer Corp., say they plan to keep hiring at a rapid pace.

So while it's becoming easier to snare talent without lavish perks, employers continue to face a scarcity of workers and strong wage growth. "The labor market may have eased, but it's still very tight by any historical standards," says Carl Camden, executive vice-president of operations at temp agency Kelly Services Inc., which places 750,000 employees a year. Adds Bank One chief



economist Diane Swonk: "It would require a recession to fundamentally loosen labor markets, and we are nowhere near that point at this stage of the game." **BONUS BLUES.** No question, though, that the economy has taken a breather in recent months. The additions to the national payroll are way off their high of 527,000 jobs added back in March (chart). There has also been a string of head-

lines about high-profile layoffs that could start to make more employees jittery. Witness Whirlpool's Dec. 13 announcement that it will slash 6,000 jobs due to a steep drop in U.S. appliance sales.

Indeed, it's the industrial heartland that is being hit the hardest. The steel industry has lost 10,000 jobs in the past year as it staggers under a new flood of cheap imports. And while Detroit is nowhere near that badly off, auto sales have started to slow, and inventories are piling up. Besides GM, an-



ists expect white-collar cutbacks at Chrysler. And all three major makers have been extending furloughs or cutting overtime as they work on bulging inventories. Detroit's weakness is spilling over to parts makers and suppliers. Some have reduced shifts from three a day to two, and half-weekend shifts. Others, like Delphi Automotive Systems Corp., have actually cut jobs.

Employees in finance are feeling beleaguered, too. Chase Manhattan Corp. and Credit Suisse First Boston have

announced 5,900 job cuts following acquisitions. Analysts say more than 10,000 new layoffs could come by early next year as investment banks cut back in response to the downturn in the stock and high-yield bond markets. Top analysts and bankers are still going to rake in big bucks next year. But less-stellar performers could face lower bonuses or job losses, says Alan Johnson, president of compensation consulting firm Johnson Associates. "It's the mediocre middle that's going to get squeezed," he says.

The change is most profound among

likely to be next in line to feel the pinch. Many are bracing for a slowdown in the advertising that drives their revenues. That has execs worried about headcounts. NBC froze hiring in October, and News Corp., which owns everything from the Fox TV network to newspapers, just followed suit because of its own increasingly gloomy ad-revenue projections. "It was time to tighten the screws a bit," says President Peter Chernin. After reviewing the costs of its operations, CNN, a unit of Time Warner, is considering layoffs at the network.

MORE CUTS Wall Street is feeling the pinch. "It's the mediocre middle that's going to get squeezed," says one compensation consultant

dot-coms, where labor markets have been the tightest. Hundreds of sites have closed their doors—and freed up workers. "Highly capable and talented people are available who weren't six months ago," says Daniel R. Hesse, CEO of Terabeam, a Seattle telecom company. Employee-hungry firms in New York's Silicon Alley are finding the same sort of easing. Hiring "is much more realistic," says Mark Weiss, CEO of MusicVision, an online music network. Job candidates who months ago would have asked for six-figure salaries, despite the skimpiest of résumés, have toned down their demands.

NEW LOYALTY. Many employees are showing more loyalty, too. Recruiters say staffers are far less keen to job-hop. "Ever since the market went south in April, the executives from the brick-and-mortar world are thinking more carefully about jumping into the clicks-and-mortar world," says David Opton, CEO of ExecuNet, an Internet-based recruiter.

A recent survey of 1,140 tech workers by Aon Consulting Worldwide found that 61% intend to stick with their current employer for several years, and 56% would stay even if offered another position at slightly higher pay—surprising after the prevalent free-agent mentality of recent years.

Media companies are

For media companies, "it's going to be a tough year," predicts UBS Warburg media analyst Christopher Dixon.

Despite the new climate of caution, plenty of companies are still hiring—even in hard-hit high tech. Software giant Microsoft is snapping up dot-com refugees. And Dell Computer says recruiting of highly skilled engineers and other workers hasn't gotten easier. Indeed, Dell has had to increase counteroffers to retain workers, says Christine Peters, Dell's manager of staffing strategy. Adds Steven Fortuna, a first vice-president at Merrill Lynch & Co.: "You have a lot of dot-coms going belly up, but the faster-growing communications companies are absorbing the good talent as fast as it becomes available."

Some economists think the current softening of the labor market presages a much steeper fall-off next year. Robert Z. Aliber, a University of Chicago economist, argues that growth will slow far more sharply than generally believed—largely because business investment is turning south just as parlous stock markets are dissipating consumers' feelings of well-being. He puts the chances of recession by the fourth quarter of 2001 at 60%. "That's likely to translate into greater ease in the labor market," Aliber says.

If he's right, the warning signs starting to appear among dot-coms and elsewhere will spread across the economy. Until that happens, employers will find it a little easier to navigate the tightest labor market in a generation—but jobs will continue to outnumber employees.

By Robert Berner, with Michael Arndt and Ann Therese Palmer, in Chicago, Tom Lowry in New York and bureau reports



CARS

CAN CHRYSLER GET BLOOD FROM A SUPPLIER?

The carmaker wants price cuts—but vendors are balking

From the moment he arrived on Nov. 20th, Chrysler's new CEO, Dieter Zetsche, promised bold moves to turn around the struggling auto unit. Now, the German executive, 47, is showing his hand. He has demanded that, beginning Jan. 1, all 9,000 Chrysler suppliers tear up existing contracts and cut prices by 5%. Then, over the next two years, the vendors will be required to squeeze out an additional 10% by redesigning parts and processes. These cost cuts, totaling some \$6 billion over

want us to tear up our purchase orders and start over," says one angry supply executive. "We have a business to run, too." While, so far, no one is actually threatening to withhold parts, "it's definitely a possibility," says analyst Greg L. Salchow of Detroit brokerage Raymond James & Associates Inc.

The cuts are coming at a particularly bad time for vendors. In the most recent quarter, they averaged profit margins of only 4.8%. "The auto makers already have a lot of these suppliers right

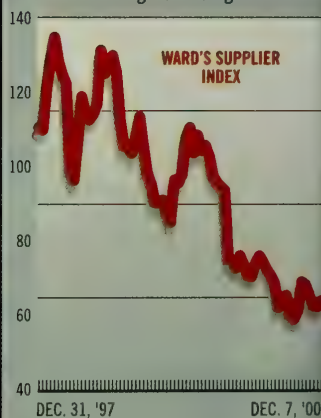
Auto suppliers also have more clout than ever before. Consolidation and globalization have spawned several megasuppliers, including Delphi Automotive Systems, with \$28 billion in revenue, Visteon, with sales of \$19 billion, and Dana Corp., with \$13 billion. Some vendors turn away from Chrysler won't easily find competitors to pick up production.

Indeed, many suppliers believe their expertise can't easily be replaced. In recent years, auto makers have been shifting more of the basic design and engineering work for vehicle components to their suppliers. Currently, 60% of Chrysler's parts are from outsiders.

What's more, if Chrysler pushes too hard, it risks jeopardizing a critical industry advantage. "Chrysler used to be the company that every supplier wanted to work with," because of its cooperative attitude, says Gregory J. Janicki, vice

SUPPLIER SQUEEZE

Auto vendor shares are falling along with margins



DATA: WARD'S AUTOMOTIVE REPORTS



NO PUSHOVER: Megasuppliers like Dana are big enough to resist pressure for cuts

three years, are the "major cornerstone of the turnaround," says Wolfgang Bernhard, Chrysler's new chief operating officer and Zetsche's designated cost-cutter.

TRACK RECORD. If Zetsche and Bernhard think squeezing suppliers is the way out of Chrysler's problems, they'd better think again. Vendors have a track record of fighting cost cuts and their profits are already falling as the industry heads into a downturn. If they get mad enough, they may turn their backs on a company that has historically profited much more from having strong relations with suppliers than any other carmaker.

Already, many suppliers are privately saying there's no way they can—or will—cough up enough price cuts to pay for management's mistakes. "They just

up against the wall," says Joseph Phillippi, an analyst at UBS Warburg.

Chrysler isn't blind to the risks. Its top supplier exec, Thomas Sidlik, acknowledges the cuts are severe. "We didn't say it wouldn't hurt," he says. But considering Chrysler's mounting losses, management think they can at least get agreement on the 5% cuts by Jan. 1. "We need results fast," says Bernhard.

Given the Big Three's recent record on cost concessions from suppliers, Zetsche has his work cut out for him. Ford Motor Co. proposed a 5% cut in 1995. And General Motors Corp. attempted a similar cut in 1998. Each time, vendors pressured the carmakers to back off. Eventually, both Ford and GM were forced to accept smaller cuts.

president of CSM Worldwide Inc., a consulting firm in Northville, Mich. The premise was simple: Find 10% in savings, and you could keep half. Consequently, vendors often came to Chrysler first with new cost-saving technology. Since Zetsche's new program has been sharing of savings, that's likely to end. "If they think we're still going to be bringing them our best technology, they're crazy," says one angry supplier.

Certainly Zetsche needs to find cuts quickly. Without the cuts, Chrysler could face even steeper losses in the first half of 2001. But amidst shrinking market share and swelling vehicle inventories, a supplier revolt is the last thing the carmaker needs.

By Jeff Green in Detroit

By David Welch

GM: 'OUT WITH THE OLDS' IS JUST THE START

Finally, some harsh medicine at General Motors. After years of excusing away its steady market-share decline, GM CEO Richard Wagoner announced on Dec. 12 that the company will ax its limping and stodgy Oldsmobile division. The auto giant will also sack 10% of its salaried workers—6,000 in the U.S. and 1,700 in Europe—and drastically cut production in Europe, where losses have been mounting.

To help him manage those tough issues, Wagoner tapped a high-powered industry veteran. On Dec. 13, he brought in John Devine as vice-chairman and chief financial officer. Well respected in the industry and on Wall Street, Devine had been Ford Motor Co.'s chief financial officer from 1994 to 1999 before leaving to briefly run a venture capital firm. "One of the things we have to do is make our business more even-keeled in the good times and the bad times," Devine says. "That's not easy."

KEPTICAL STREET. Certainly, Wagoner deserves credit for finally pulling the plug on Oldsmobile. There's no good reason why GM took so long to get rid of the ailing division. More important, Wagoner's moves may not go far enough in addressing GM's problems, which include excess capacity and bland offerings elsewhere. Despite the news, Wall Street wasn't buying. GM's shares only nudged up one dollar, to 52.

Truth to tell, the Olds brand should have been retired long ago. It has been slowly dying since the 1980s, when the 103-year-old marque sold more than 1 million vehicles a year. Now it sells fewer than 300,000. The Olds closure combined with the job cuts will incur a one-time charge of some \$2 billion in the fourth quarter. But Wagoner, who became GM's top exec in June after nearly two years as president of the company, is counting on the restructuring to finally help the auto giant get a handle on excessive costs.

Wagoner's strategy is a smart first step. But even by uttering Oldsmobile, GM hasn't addressed the critical problem of excess production.



GLORY DAYS: *The carmaker waited too long to retire a lackluster brand*

That's a key reason why GM's profits are much skimpier than at its smaller rival, Ford. Just to cover costs at its plants and other overhead, GM needs to sell about 5.2 million vehicles a year, says Merrill Lynch & Co. analyst John A. Casesa. With most analysts forecasting GM sales of about 5.3 million vehicles next year, that portends slim profits. "This is a slight step in the right direction," Casesa says. "But unless (the strategy) involves plant closings, it won't do anything to address GM's overcapacity."

Analysts estimate GM has 34% of North American production but just 28% of sales—and last month it fell to less than 26%. So even if its market share climbs back to 30% this year—which

analysts say is unlikely—there's still plenty of room to cut. "More tough moves may be coming," admits one GM executive.

So far, GM hasn't been willing to bite the bullet. To thin inventories, the company is temporarily cutting production by 14% in the first quarter. It will also lay off third shifts at some plants and cut overtime at others, says GM product development chief Tom Davis. But without permanent cuts, GM can only boost profits with strong sales growth. Yet the carmaker has rarely delivered on promises to win over more car buyers.

Certainly, GM is trying. It's overhauling its lineup by adding new entry-level vehicles to lure young buyers that have forsaken its brands. Fresh sport utilities should also help fatten profits. But it still has a long way to go.

Once-strong sellers such as Saturn have lost momentum. And even its premium brands, Cadillac and Buick, have lost out to imported luxury autos.

Wagoner called the decision to drop Oldsmobile "emotional." But GM may be forced to make many more tough decisions before it reverses its slide. At least the auto maker's critics won't have Oldsmobile to kick around anymore.

GM'S TO-DO LIST

Aside from axing Oldsmobile and cutting workers, CEO Wagoner has plenty to do to restore GM's shine:

- ▶ Get production in line with sales, shutting plants if necessary
- ▶ Reduce buyer incentives that are eating into profit margins
- ▶ Push ahead with overhauling remaining brands, especially Cadillac and Saturn
- ▶ Get to market more quickly with hot products in strong segments, such as luxury cars and sport utilities



Welch covers GM from Detroit.



COMPUTERS

ARE PC MAKERS LOOKING AT A PRICE WAR?

With no incentive to trade up, shoppers are content to make do

The sign adorning the personal computer display at a Staples superstore in San Mateo, Calif., says it all: "Caution, falling prices." In recent weeks, Apple, Compaq, Sony, and Hewlett-Packard have all cut prices, offered greater rebates, or given away freebies such as a printer or scanner with every purchase of a desktop and monitor. And at least one major retailer says it will introduce another round of price cuts to the tune of \$100-\$200 on the weekend of Dec. 15 in hopes of clearing inventory buildup.

Clearly, the Staples warning could have been just as easily targeted at the PC makers as consumers. As recently as 1998, price-cutting wreaked havoc on the profits of such companies as Compaq Computer Corp. and IBM Corp. Now, judging by the eleven weeks' worth of inventory sitting on store and factory shelves—roughly twice the industry average expected for this time of year—the latest round could prove even more nasty. "Pricing is going to be pretty soft for the first half" of 2001, warned Compaq CEO Michael D. Capellas, who announced the company would post fourth-quarter sales of around \$11.2 billion, \$1 billion below expectations.

Capellas' pessimism may be a huge understatement. Earlier price wars usually broke out when PC makers overestimated demand for some products, such as sub-\$1,000 PCs two years ago. Now,

however, demand for even the hottest products seems to have dried up overnight. After motoring along at a 30%-plus clip in the first half of the year, analysts now expect fourth-quarter U.S. retail sales to grow just 10%, down from earlier predictions of 21.2%.

Retailers cite lots of temporary reasons, including concern about the stock market and the recent uncertainty over the outcome of the Presidential election. But most observers see a more worrisome trend holding back demand: Without slick new features that encourage PC buyers to trade up, many are simply content to make do with the computers they already own. "The



PRICE-INSENSITIVE

Why Cheaper Prices Won't Greatly Boost PC Sales

- ▶ 61% of U.S. households already own a computer
- ▶ New computers don't offer much improvement for getting online and sending e-mail
- ▶ Consumers are spending more on WebTV, Palm Pilots, and other gear

DATA: PC DATA, BUSINESSWEEK

PC is the TV or refrigerator in the average home right now, where you place it only if broken," says PC Industry analyst Stephen Baker.

Manufacturers should have seen PC blues coming. They've been betting that consumers would rush to replace their PCs in order to take advantage of spending on new chips from Intel.

and Advanced Micro Devices, updated software from Microsoft, or new industrial designs like Apple's eye-catching G4 Cube. But analysts have been going for months that the U.S. retail market was reaching the saturation point, with 61% of American households owning at least one computer.

WHO NEEDS IT? So far, consumers have yawned at the new offerings. Many of their old models can accomplish the main task for which they were purchased—to get online and exchange e-mails, according to industry-tracker Dataquest Inc. Consumers seem more interested in snapping up digital cameras and Palm-like handheld computers as hot new stocking-stuffers. "If you spend \$400 for a PDA, are you going to turn around and spend \$900 on another computer, particularly if you already have one that works just fine?" asks NPD Intellect analyst George Meier.

If lower prices don't light a fire under consumers, even more extraordinary measures may be in order from some PC makers. One retailer is saying another \$200 price cut will come in January. Meanwhile, Sandberg Bernstein analyst Vadim Zelenkov believes retail PC margins, already a razor-thin 5%, will fall to zero next year as manufacturers hold prices down on new models.

In the wait for a better day, many PC makers are hoping that sales to corporations will make up the difference. They may be chasing dreams as well. "The economic slowdown means the corporate spending outlook isn't good either. We will be affected by the general slowness in the consumer, small and medium business, and dot-com markets," Compaq's Capellas told analysts. That's a lot of markets—and more than enough to justify Wall Street's willies.

By Cliff Edwards in San Mateo, Calif.

COMMENTARY

By Jay Weiner

GOOD FOR A-ROD, BAD FOR BASEBALL

George W. Bush had been waiting a whole month for a shaken democracy to elect him President. But on the do-or-die day his lawyers were arguing his case before the divided U.S. Supreme Court, a short-topped named Alex Rodriguez helped a different nine-person team steal the headlines in Texas.

"I think this will be the day an era of national prominence begins for this organization."

No, that was not Tom McLay crowing about victory for Bush and the GOP. It was Rodriguez' agent, Scott Boras, declaring the ascendancy of the Texas Rangers.

Oh, the webs of baseball and politics. The Rangers, remember, are the team that the president-elect once owned. It's also the team that tossed Rodriguez \$252 million—the largest player contract in U.S. sports history. In fact, Dallas leveraged-buyouting Tom Hicks paid more for Rodriguez than he did when he bought the team. The ballpark in Arlington, and 270 acres around the stadium from Bush and partners.

How fitting that the Bush and A-Rod era might begin as one, for it was Bush who set the table where Rodriguez will be eating well for a long time. Dubya's ability to get a publicly funded stadium in Arlington built in the early '90s meant that Hicks saw value in buying the Rangers. Were it not for such cheap hardware, Hicks could not be able to afford the pricey revenue-generating software called A-Rod.

Hicks is now playing with the big boys of sports ownership. But at what price? On paper, it's going to cost him

about \$180 million in today's dollars to cover the 10-year deal. And he might have pushed the sagging national pastime and his friend Bush into a tight corner. The former Rangers owner who helped lay the foundation for A-

Rod's megacontract could turn out to be the President who has to intervene to save baseball from itself (though Bush would probably have a better shot at success than

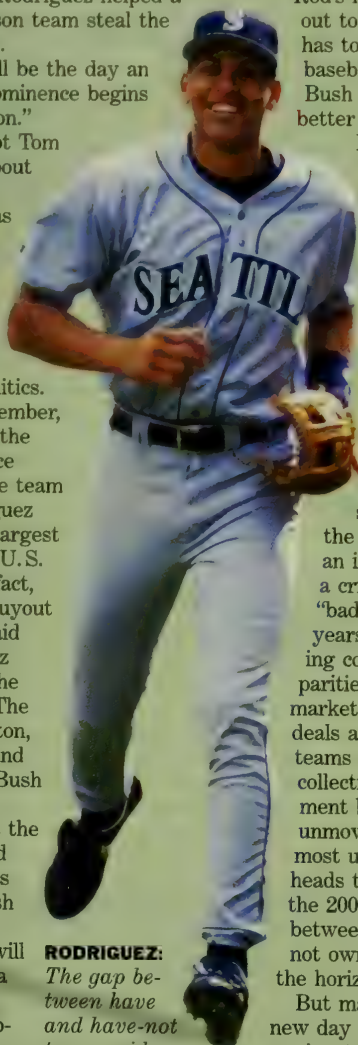
Bill Clinton, who failed to broker a deal during the strike/lockout of '94).

Can we bear the thought of living through baseball's nuclear winter in 2002, when some sort of disruption seems almost inevitable?

Even Sandy Alderson, right-hand man to Major League Baseball Commissioner Bud Selig, says the Rodriguez signing is an indication that "we're in a crisis situation" that's "bad for baseball." For years, there has been building concern about the disparities between big-media-market teams—with fat TV deals and new stadiums—and teams with neither. As the collective bargaining agreement between sports' most unmovable union and sports' most undisciplined owners heads toward expiration after the 2001 season, a civil war between the have and have-not owners appears to be on the horizon.

But maybe not. Might this new day of conciliation and compassionate conservatism extend to baseball? Must owners try to force a salary cap down players' throats? Must players claim the game is healthy while fans in 18 cities rightly shout, "No, it's not"? A nation of baseball lovers awaits some answers. But then, we're getting used to waiting.

Weiner writes about sports from Minneapolis.



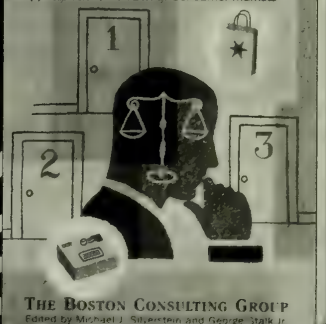
RODRIGUEZ:
The gap between have and have-not teams widens

WHO SET THE TIME LAG BETWEEN DEMAND AND SUPPLY?

Rethink your basic assumptions about business.

BREAKING COMPROMISES

Opportunities for Action in Consumer Markets



More breakthrough thinking from

THE BOSTON CONSULTING GROUP

www.bcg.com/breakingcompromises

 **WILEY**

Available at bookstores or online retailers

EDITED BY MONICA ROMAN

ENRON REWARDS ITS CHANGE AGENT

WHILE PUTTING TO REST THE rumors that he'll be joining a Bush Cabinet, Kenneth L. Lay on Dec. 13 announced his successor as CEO at energy trading giant Enron in Houston. President and COO Jeffrey K. Skilling will take the helm on Feb. 12, while Lay remains as chairman. "The best time for succession is when the successor is ready and when the company is well positioned for the future," said Lay, 58. Skilling, 47, joined Enron in 1990 from McKinsey's energy and chemical consulting practices. He has pushed Enron into online trading of electricity, gas, and other commodities. He has also brought Enron's trading

and risk management skills to new markets, including high-speed communications.

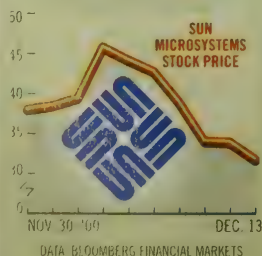
MCDONALD'S SALES ARE COWED

MCDONALD'S LIKES TO BILL itself as the world's biggest burger chain, but beef is one thing that fewer Europeans are eating these days as fears of contracting mad cow disease spread across the Continent. McDonald's reported on Dec. 11 that November sales at its 5,200 outlets in Europe were off 11% from a year earlier, even though the company hasn't been linked to the spread of the illness or to infected meat. Still, analysts at J.P. Morgan and Salomon Smith Barney trimmed their forecasts for McDonald's profits by \$27 million each year for 2000 and 2001.

CLOSING BELL

SUN SET

Add server king Sun Microsystems to the list of tech stocks no longer "priced for perfection." After Bank of America analyst Kurtis King hinted at slowing sales on Dec. 11, Sun was the most heavily traded stock for two days. That continued a skid that knocked 31% off Sun's share price since Dec. 5, to 31%. So is Sun a deal? "In this market, who knows?" asks Salomon Smith Barney analyst John Jones Jr. These days, it seems, everything is priced for imperfection.



AT MICROSOFT, A CONSOLATION PRIZE

AFTER LOSING A SERIES OF legal battles, Microsoft has settled a class action filed by temporary workers eight years ago. The software giant agreed to hand over \$97 million to settle claims that it treated thousands of temps as full-time employees in every regard but compensation. So-called permatemps worked for years at Microsoft but did not participate in the company's employee stock purchase plan in which workers can buy Microsoft stock at a discount. The law firm representing the temps has asked the court to award it \$27 million in fees. If approved, the remaining \$70 million would be split among an estimated 8,000 to 12,000 eligible temporary workers. That comes to an average of \$7,000 per temp, much less than they would have received if they had been allowed to invest in the employee stock plan.

HEADLINER: JOE MANSUETO

TOP OF THE MORNINGSTAR

After a two-year hiatus, Joe Mansueto is back in the top job at Morningstar. "We need a different Internet business plan" that reflects the market, says Mansueto, the 44-year-old founder and majority owner of the Chicago-based fund researcher.

Mansueto, who started Morningstar from his living room in 1984, took time off to think more deeply about his business. He was chairman until Dec. 8, when he replaced Don Phillips, who was demoted from CEO to managing director. Under Phillips, Morningstar strug-

gled to capitalize on the Net revolution and posted a loss last year. This year Morningstar expects revenues of \$69 million.

Although just shy of its \$71 million target, that's up about 26% from \$51 million last year. Mansueto expects double-digit growth in 2001 and hopes to

take a "path to profitability." He plans to slash the spending splurge that came after he sold a 20% stake to Tokyo-based Softbank for \$91 million. Morningstar is expected to move aggressively on the Net with paid investment advice.

By Pallavi Gogoi



AN AD IS A BIT TOO LIVELY FOR THE FDA

THE U.S. FOOD & DRUG Administration has fired yet another salvo in the continuing war over drug ads aimed directly at consumers. The agency ordered Pfizer and Pharmacia to stop running an ad showing arthritis sufferers who are able to frolic in a city park, thanks to the companies' drug, Celebrex. The words and images "collectively suggest that Celebrex is more effective than has been demonstrated by substantial evidence," the agency wrote in a recent letter. The companies have already made changes in the ad and submitted them to the FDA.

NOT SUCH A PRETTY PICTURE AT KODAK

EASTMAN KODAK WARNED again of falling profits and

predicted continued woes in the first half of 2001. On Dec. 12, CEO Daniel Carp said 2001 profits will drop between 2% and 8% from 1999 levels and warned that 2001 first-quarter profits could drop as much as 48%. Carp dismissed critics who say he should jettison AT&T's lead and spin off Kodak's digital business. He blamed the company's problems on the slowing economy and said he plans to continue to build digital technology that expands the imaging market. Kodak's stock rose 4% on the day of the new

ET CETERA ...

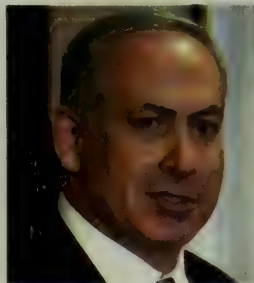
- Citigroup appointed Harlan Biglari to the new post as head of corporate strategy
- Corning will spend \$150 million to expand a Pennsylvania plant and add 1,500 jobs
- Former Prudential Securities CEO Hardwick Simmonds was named Nasdaq's CEO.

EDITED BY ROSE BRADY

ISRAEL: BARAK'S LAST-DITCH BID TO SAVE THE PEACE PROCESS

Israeli Prime Minister Ehud Barak's Dec. 9 decision to resign and call a special election in February has thrown the chaotic Israeli political scene and dying Middle East peace process into even more turmoil. In Israel, the Labor leader's move is largely viewed as a cynical ploy to keep his most vigorous rival, former Likud Prime Minister Benjamin Netanyahu, from running against him. Netanyahu left politics last year, and Israeli law says that only current members of parliament can run in a special election for Prime Minister. Barak's friends, however, portray his move as a last-ditch effort to press the Palestinians into a deal before President Bill Clinton leaves office on Jan. 20. The idea was to give an ultimatum to Yasser Arafat," says Nimrod Novik, an Israeli businessman and former prime ministerial adviser who is close to Barak. The message: "If you want to deal with Netanyahu or Ariel Sharon, then stop the violence."

UP OF FAITH. Israeli officials and intermediaries are shutting back forth to Arafat and his key aides to try to find a basis for new talks. But reviving negotiations after 10 weeks of violence will be next to impossible. Barak will be under pressure not to make concessions that would reward Arafat for the fighting. And it is hard to see how Arafat can agree to new compromises after the violence has left 320 people dead, mostly Palestinians. "The Palestinian public expects gains equal to what they have sacrificed. That plays heavily on [Arafat's] mind," says Khalil Shikaki, director of the Palestinian Center for Policy & Survey Research, a Ramallah-based center. The only hope, he says, is that one or both of the leaders will make a leap of faith, reckoning that failure to reach agreement before Clinton leaves will doom their people to even more violence. Certainly, there's little optimism about



NETANYAHU: *The favorite*



BARAK: *A cynical ploy?*

peace under a Netanyahu government. Talks with the Arabs went into deep freeze in his 1996-99 administration.

Netanyahu is scrambling to find a way to run for the premiership. Public opinion, which favors Netanyahu over Barak by 46% to 27%, may well work in the former leader's favor. Netanyahu stands a good chance of winning leadership of the Likud when he takes on the current leader, former Defense Minister Sharon, in a primary on Dec. 19. Sharon leads Barak by just two percentage points. Netanyahu is also lobbying Knesset members, including old foes, in advance of an expected Dec. 20 vote on two laws that would clear the way for him to challenge Barak.

If Netanyahu gets to run and goes on to win, he will have made a remarkable comeback. But he will then have to face what is likely to be a worsening situation with the Palestinians. The peace process and the institutions it has spawned, such as the Palestinian Authority, have lost credibility in the eyes of Palestinians. There is a danger of government breaking down and competing militia leaders filling the vacuum, making future peace talks all the more difficult.

If violence continues to mount in Israel, how might Netanyahu deal with it? He would likely take an even tougher line than Barak toward the Palestinians, striking back hard against terrorist attacks. Some fear the conflagration could spread to other countries, such as Syria. "The biggest issue is the potential for a large-scale war," says Eliot A. Cohen, an Israel expert at Johns Hopkins' School of Advanced International Studies. So far, the region has escaped that catastrophe, but a major setback may be around the corner.

By Stanley Reed in London, with Neal Sandler in Jerusalem and Stan Crock in Washington

GLOBAL WRAPUP

HASING THAI VOTE CORRUPTION

Election officials in Thailand are already investigating hundreds of complaints of vote buying in parliamentary elections scheduled for Jan. 6. That's in keeping with the country's 1997 constitution, which was aimed at cleaning up the country's notoriously dirty politics. The irony is that the favorite in the election, telecom tycoon Thaksin Shiwatra, 52, is himself in danger of being indicted. The National Counter Corruption Commission is probing him for concealing his holdings in 17 com-

panies worth \$14.9 million in declarations made during a brief stint as deputy prime minister in 1997. Thaksin denies any wrongdoing.

He will probably get a chance to sit in the prime minister's chair in any case. His Thai Rak Thai (Thais Love Thais) party, which he founded two years ago, is leading Prime Minister Chuan Leekpai's Democrats in public opinion polls by a 20-point margin. That's largely because voters are responding favorably to Thaksin's pledge to boost spending to pump up the economy, which is growing at only

4.5% compared with double-digit growth before the 1997 collapse. And Thais are tired of Chuan's focus on fiscal austerity and bank restructuring—requirements of the International Monetary Fund.

Officials say that Thaksin, who made his fortune in mobile phones, is unlikely to be indicted before the elections. But if he is later convicted, he would be barred from holding public office for five years. Thaksin vows to stay involved in his party, even if in the end it's from the sidelines.

By Frederik Balfour in Hong Kong

SAMSUNG DIGIT^{all} everyone's invited™

For over two of the world's six billion people, access to modern health care is just a dream. But with Samsung, a new digital day is dawning. In communications, computing, home entertainment, appliances, and the semiconductors that make them all possible, we're putting innovation and digital technology to work in ways that are making life easier, richer, and more enjoyable. Like empowering advances in telemedicine to help deliver the most advanced medical care available anywhere on the planet. You see, at Samsung, we measure our success by how well we help the world succeed. And that's a reality that'll make tomorrow a healthier place for all.



DIGITAL TV



Photo Yepp
(MP3 Player)



Wireless
Phones



TFT Flat
Screen Monitor

SAMSUNG

ELECTRO

<http://www.samsungelectronics.com>

Where To Invest

Winning Strategies for a Tougher Market

Introduction

The economy is slowing. Tech stocks are in the tank. Profits are harder to come by. Sure, investing is tougher these days. But there are lots of bright spots even in this environment **PAGE 64**

The Framework

Brrr. Suddenly, the economic climate isn't so balmy. And while no one is predicting an outright recession, most forecasters believe the risks to growth are rising **PAGE 66**

Strategies For Stocks

Out with the New Economy and in with the Old? From scary high-tech issues to solid small-caps to tricky global stocks, here's the revised game plan **PAGE 72**

The Investment Spectrum

Hold on to your prospectuses—big-cap growth and tech mutual funds are out, and value funds are in. Meanwhile, bonds could pay off—or blow up in your face—and art is an iffy proposition **PAGE 124**

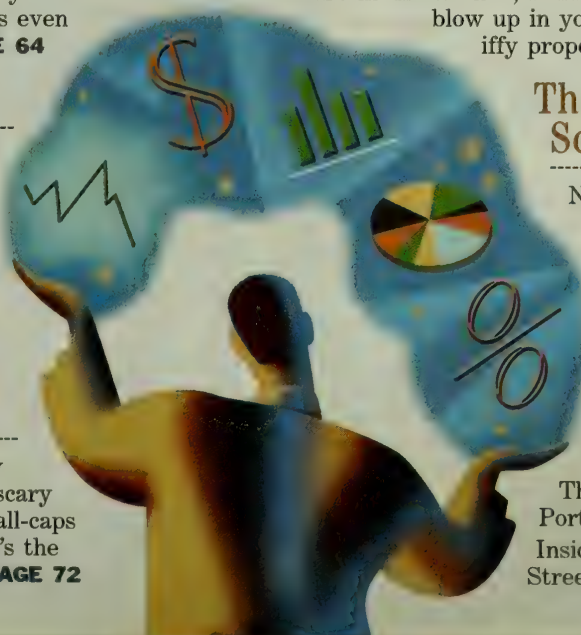
The Investment Scoreboard

Nine hundred companies, 24 industries, and a wealth of data—in other words, just what you need to make wiser choices **PAGE 136**

Plus...

Our two regular features:

The Barker Portfolio **PAGE 180**
Inside Wall Street **PAGE 187**



Smarter Bets For Tougher Times

Markets will actually improve in 2001—but you have to know where to look

Shell-shocked investors can be forgiven for wondering: Where do we go now? The economy's slowing, the political outlook is cloudy, and the bull market that turned the most casual stock-picker into King Midas is gone, gone, gone. Last year's winners are today's biggest losers. Tech stocks? Down 28.5% in 2000. Telecoms? Off 32.8%. The winners of 2000: utilities, health care, and finance. How dull can you get?

Well, take heart. Markets will be looking up in 2001—provided you know where to look for gains. Fortunately, you're holding the road map in your hands. In

BY MIKE McNAMEE

the 70 pages of BUSINESS WEEK's annual Investment Outlook, you'll find overlooked opportunities for investors willing to brave today's challenging markets. We'll steer you toward industries you've ignored—and to bright spots in beaten-down sectors.

No doubt about it: Investing's tougher now than it was two years ago. But the outlook isn't as bleak as 2000's plunging Nasdaq or roller-coaster Dow might make it seem. The U.S. economy is basically healthy: The 54 economists in our annual survey predict 3.1% growth in 2001, a slightly rosier view than BUSINESS WEEK's own daring duo offer (page 66). Nervous investors may fret about doomsday scenarios built around soaring oil prices or a dollar in free fall. But Federal Reserve Chairman Alan Greenspan is standing guard against a downturn. And while President-elect George W. Bush will have to move cautiously in a fractured Washington, investors can look forward to modest tax cuts.

Wall Street's bulls are counting on Fed rate cuts to power a broad rally (page 72). Main Street's investors don't agree: Only 32% of respondents to the annual BW/Harris Poll of Investors think stocks will rise in 2001, the most

bearish result in five years (page 78). Instead, investors are counting on their own skill as stock pickers: 79% say they can beat the market.

Where to look? One strategy with great promise calls for buying nontech growth stocks and stocks in the small- to mid-capitalization range (page 72). Small- and mid-caps have never recovered from the 1998 global crisis—and may be bargains (page 90). Some of the best values, small or large, are in the Old Economy, where deregulation and judicious use of technology are bringing new zip to industrial and service businesses (page 84). For investors looking abroad to diversify, European shares are more likely to rally than those in Asia or Latin America (page 102 to page 106).

Despite the 40% drop from Nasdaq's March peak, you can't write off the tech sector. Software writers and makers of data-storage gear should thrive (page 80). There are even dot-com gems to be found among Web-hosting and Net-security providers (page 98).

If this all sounds too tame, there's still a sector that promises dot-com-style thrills and spills. Biotech shares rise and plunge—but promise huge long-term rewards, with 33 new therapies in clinical trials and the cash to see those products to market (page 86). For the ultimate in white-knuckled investing, you can run with the short sellers, with our list of the stocks that bears love to hate (page 108).

The one thing we learned in 2000 is that there are no guarantees. The "sure bets" of the '90s bull market are the biggest flops of the new millennium. Investing today takes research, insight—and guts. With this guide, BUSINESS WEEK is giving you two out of three. Not a bad start for the year ahead.

What to Watch

Gems can be found in overlooked industries, in small- and mid-cap stocks, and even in the tech rubble

BusinessWeek online

For more investment coverage, and advice from Standard & Poor's, go to www.businessweek.com/investor/



Will the Slowdown Become a Slump?

A "growth recession" might feel like one

BY JAMES C. COOPER
AND
KATHLEEN MADIGAN

Temperance is a painful adjustment after a two-year binge. For the investors, businesses, and households that thought 5% economic growth was just part of the joy of the New Economy, 2001 will usher in a sobering reality.

It's a classic case of the Federal Reserve taking away the punch bowl. The Fed's six hikes in interest rates, totaling 1½ points, have resulted in tighter credit markets, slumping stock prices, and pickier banks, so much so that on Dec. 5, Fed Chairman Alan Greenspan suggested that some easing might be needed. Even so, the more restrictive financial conditions already in place will curb

spending by both consumers and business slowing 2001 economic growth to 3.1%, measured by real gross domestic product.

That's the average projection of 54 of the nation's business economists, as surveyed by BUSINESS WEEK, and it's only a shade above the expectation of the fearless forecasters here at this magazine (table). No one is forecasting an outright recession, although most admit that risks to growth are rising. The chief concerns: broad plunge in stock prices, another jump in prices, a credit crunch, or a swooning dollar.

"We may be at the onset of the first 'growth recession' of the New Economy era," says Jose Liro of Stone & McCarthy Research Associates. That means a period of slower growth at a rate below the economy's long-term trend, causing the unemployment rate to rise. A slowdown is not a slump, but most forecasters agree that people face a tough slog adapting to a period of diminished expectations and increased risk—very different climate compared with the past few years. However, as Liro adds, "coming several years of robust growth, the perception the slowdown will be worse than the reality."

The adjustment by consumers will have a big impact. Pumped up by unprecedented wealth gains, consumer spending has grown at a 5.1% annual rate for the past two years, more than two percentage points faster than aftertax income, and contributed 84% of real GDP growth in 1999 and nearly 90% through the first three quarters of 2000. "With the wealth effect now neutralized, consumer spending is likely to grow



Business Week Economic Forecast Survey For 2001

	PERCENT CHANGE IN REAL GROSS DOMESTIC PRODUCT				REAL GDP	CONSUMER PRICES	FEDERAL FUNDS RATE	10-YR. TREASURY YIELD	JOBLESS RATE
	2001								
	I	II	III	IV					
					PERCENT CHANGE IV Q 2000 TO IV Q 2001		2001 10Q	2001 10Q	2001 10Q
JE RIZZO Maria Fiorini Ramirez	4.5	4.3	4.3	4.3	4.3	2.5	6.50	6.80	3.9
ICHAELIS Weyerhaeuser	4.5	4.5	3.6	3.2	4.0	3.5	7.20	6.10	4.1
JA BRUSCA Ecobest Consulting	3.0	3.7	4.4	4.4	3.9	2.2	7.00	5.80	4.1
LITTMANN Comerica Bank	3.7	3.7	3.9	4.0	3.9	2.1	6.00	5.80	4.2
SWONK Bank One	4.4	3.1	3.7	4.5	3.9	2.6	7.00	6.60	3.8
IMACO IERF / University of Maryland	2.8	3.9	4.1	4.2	3.8	2.1	6.00	5.80	4.3
E. LAUFENBERG American Express	4.5	4.0	3.8	2.7	3.7	3.2	6.50	6.00	4.2
SLIFER Lehman Brothers	3.0	4.0	4.0	4.0	3.7	2.2	6.50	5.85	4.3
ANGELL Bear Stearns	3.0	3.0	4.0	4.5	3.6	1.5	6.00	5.60	4.1
MSKI Moody's Investors Service	3.4	4.0	3.0	3.8	3.6	3.0	6.00	6.00	4.0
DICLEMENTE Salomon Smith Barney	2.5	3.0	4.0	4.5	3.5	2.3	6.00	5.40	4.3
IRL Swiss Re	3.6	3.3	3.4	3.5	3.5	2.1	6.00	6.20	3.8
PIPER LOW First Tennessee Capital Markets	1.6	4.0	4.3	4.3	3.5	3.0	6.00	5.40	4.0
STEINBERG Merrill Lynch	3.0	3.3	3.7	3.8	3.5	1.8	6.00	5.70	4.4
NTINE G. SORAS Andrew, Alexander, Wise	2.9	3.1	3.7	4.1	3.4	2.3	6.38	5.81	4.0
R. ENGLUND Standard & Poor's MMS	4.0	2.2	3.2	4.0	3.3	2.4	6.25	5.60	4.1
JANG Federal Express	3.4	3.0	3.2	3.5	3.3	3.0	6.30	5.90	4.3
MORAN Daiwa Securities America	3.3	3.4	3.1	3.2	3.3	2.3	6.00	5.60	4.7
R. PASLAWSKYJ The CIT Group	3.2	3.0	3.4	3.6	3.3	1.6	5.75	5.50	4.3
RICCHIUTO ABN AMRO	3.1	2.9	3.4	3.7	3.3	1.9	6.00	5.30	4.7
YAMARONE Argus Research Company	3.4	3.2	4.2	2.4	3.3	2.9	6.00	5.65	4.1
PHERDSON High Frequency Economics	4.0	3.0	2.5	3.5	3.2	2.4	6.00	5.50	4.5
BERSON Fannie Mae	3.0	3.1	3.0	3.3	3.1	2.5	6.50	5.74	4.2
J. J. DEKASER National City	3.2	3.2	2.9	3.1	3.1	2.4	6.45	6.18	4.7
JGAN Dresdner Kleinwort Benson	2.3	2.7	3.3	3.9	3.1	2.4	5.75	5.61	4.4
NDI Economy.com	2.8	3.0	3.3	3.5	3.1	2.4	6.00	6.10	4.5
ENEY John Hancock Financial Services	2.7	2.8	3.0	3.3	3.0	2.6	6.50	5.50	4.2
DOOPER & KATHLEEN MADIGAN Business Week	2.7	3.0	3.0	3.2	3.0	2.5	6.50	6.20	4.5
B. HOFFMAN PNC Financial Services	2.5	2.8	3.0	3.7	3.0	2.6	5.90	5.40	4.2
LIRO Stone & McCarthy Research	2.2	3.2	2.3	4.3	3.0	2.7	6.00	5.20	4.8
McGEE Tokai Bank	2.8	3.1	3.0	3.0	3.0	3.0	5.50	6.00	4.4
RR First Union	3.0	2.8	3.2	3.1	3.0	2.7	6.50	5.60	4.2
D. RIPPE Prudential Securities	3.0	3.1	2.9	2.8	3.0	2.8	6.25	5.80	4.3
BLITZER Standard & Poor's	2.4	2.8	3.2	3.4	2.9	1.7	6.00	5.50	4.6
GALLAGHER SG Cowen	3.4	2.9	2.5	2.5	2.9	2.4	5.90	5.40	4.1
LER The Conference Board	5.4	1.8	4.1	0.4	2.9	2.2	7.40	6.10	4.3
P. NIEMIRA Bank of Tokyo-Mitsubishi	2.4	3.1	2.8	3.3	2.9	2.5	6.30	5.50	4.3
ILL Bank of Montreal / Harris Bank	3.0	2.8	2.7	3.2	2.9	2.7	6.50	6.20	4.4
NAI Decision Economics	3.1	2.7	2.5	3.0	2.9	2.5	6.00	4.79	4.7
SS CSFB	2.2	2.3	3.3	3.6	2.9	2.5	5.75	5.40	4.5
W. SYNNOTT U.S. Trust	2.9	2.7	2.7	3.2	2.9	3.0	6.00	6.00	4.4
P. CAREY Credit Lyonnais	2.5	2.7	2.8	3.2	2.8	2.7	6.00	5.50	4.2
H. CHANDROSS HSBC Bank USA	2.1	2.6	3.2	3.5	2.8	2.5	6.00	5.70	4.8
IS Huntington National Bank	2.5	2.5	3.0	3.5	2.8	2.5	6.00	6.23	4.2
ARRIS UBS Warburg	2.0	2.5	3.3	3.3	2.8	2.5	6.00	5.70	4.5
LAND ClearView Economics	2.2	2.4	2.5	4.0	2.8	2.4	5.64	5.17	4.4
KKEN & CHRIS VARVARES Macroeconomic Advisers	2.5	2.6	2.8	3.2	2.8	2.6	6.50	5.63	4.3
SLER Nomura Securities	2.0	2.7	3.1	3.5	2.8	2.0	6.00	5.35	4.8
NCE YUN National Association of Realtors	2.5	2.6	2.8	3.4	2.8	2.5	6.25	5.60	4.3
SHROUDS DuPont	2.3	2.6	2.8	2.9	2.6	2.5	6.00	6.00	4.3
IN SOHN Wells Fargo	2.3	2.5	2.7	3.0	2.6	2.5	6.50	5.40	4.7
AROFF Naroff Economic Advisors	1.7	1.1	3.2	3.5	2.5	2.1	5.75	5.70	4.3
C. DUDLEY Goldman Sachs	1.5	2.3	2.7	3.0	2.4	2.5	5.75	5.50	4.5
MULSEN Wells Capital Management	1.80	1.0	1.5	2.0	1.7	2.0	5.00	5.10	4.9
U.S.	2.9%	3.0%	3.2%	3.4%	3.1%	2.5%	6.2%	5.7%	4.3%

more closely in line with income, which I think will be about 3%," says Richard D. Rippe at Prudential Securities Inc. Although the labor markets will loosen up a bit, the jobless rate is generally expected to rise to only 4.3%, hardly enough to dent income growth by very much.

Capital spending by businesses, especially for high tech, also will play a crucial role in the slowdown. But despite the outlook for slower demand, tighter financial conditions, and softer profit growth, no one expects business investment to collapse. The folding of many dot-coms and other tech companies, plus a tapering off of the breakneck pace of tech growth, will be felt. But as Greenspan said on Dec. 5: "The orders and output surge this past year in a number of high-technology industries, amounting in some cases to 50% and

including the prices of gold and nonoil commodities, bond yields, inflation expectations, the yield curve, and money growth, all suggest that inflation remains in check," says Jim Coons of Huntington National Bank in Columbus, Ohio. In particular, the forecasters are betting that oil prices

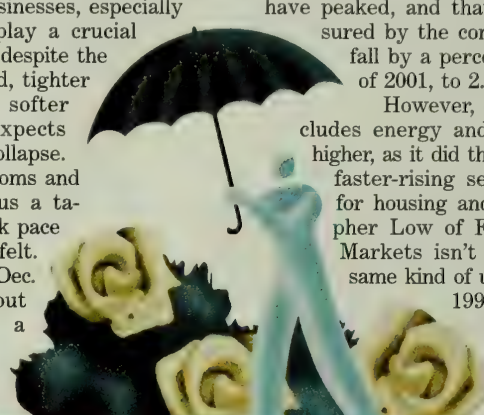
have peaked, and that overall inflation, measured by the consumer price index, will fall by a percentage point by the end of 2001, to 2.5%.

However, core inflation, which excludes energy and food, may well creep higher, as it did throughout 2000, reflecting faster-rising service prices, especially for housing and medical care. Christopher Low of First Tennessee Capital Markets isn't worried. "We saw the same kind of uptick in core inflation

in 1995, after the economy overheated in 1994," says. "But once

Fed reined in growth, inflation came back under control."

The problem for the Fed is that labor markets are far tighter now than they were then, when the unemployment rate was 5.5%. Although the risk of overly weak growth in coming quarters has risen, the risk of rising inflation still has not cooled down. While most forecasters expect one to two quarter-point cuts in the federal-funds rate in 2001, 28%



A Global View of 2001

	REAL GDP PERCENT CHANGE			CPI PERCENT CHANGE			EXCHANGE RATE UNITS PER U.S. \$*		
	1999	2000	2001	1999	2000	2001	1999	2000	2001
CANADA	4.5	4.8	3.4	1.7	2.7	2.4	1.48	1.51	1.45
MEXICO	3.7	6.9	4.6	12.3	9.1	8.2	9.45	9.52	10.14
BRAZIL	1.0	3.8	4.2	8.9	6.7	5.2	1.88	1.92	1.90
EURO ZONE	2.4	3.4	3.1	1.1	2.2	2.0	1.00	0.89	0.98
BRITAIN	2.1	3.0	2.6	2.3	2.5	2.5	1.61	1.44	1.52
JAPAN	0.8	1.8	2.1	-0.3	-0.6	0.1	102.20	107.10	107.00
KOREA	10.7	8.7	5.8	0.8	2.1	2.8	1150.00	1168.00	1130.00

*Britain and Euro zone are U.S. \$ per unit

Exchange rates are end of year

SOURCE: BLUE CHIP ECONOMIC INDICATORS

more, was not sustainable even in the more optimistic New Economy scenarios."

Long-term structural forces still support tech spending. "Competitive pressures and ever-shortening product cycles will continue to demand healthy rates of investment spending over the next few years," says Michael P. Carey at Credit Lyonnais. Stephen Slifer at Lehman Brothers Inc. is more blunt, saying: "The firm that does not spend money on technology will, before long, be out of business." All this means that the upshift in the long-term growth rate of productivity will remain in place.

The short run, however, is where the outlook gets tricky. As the economy slows, productivity will slow as well, even as labor compensation continues to grow rapidly. "If compensation doesn't slow commensurately, then businesses will either raise prices more aggressively or their profit margins and stock prices will erode," says Mark M. Zandi of Economy.com Inc. Either way, the economy's performance will suffer.

Most forecasters believe that slower growth and stiff competition will restrain prices at the expense of profits. "Leading indicators of inflation,

expect no cut or further hikes.

For 2001, at least, the Fed will retain policy freedom it has enjoyed in recent years without the complication of big tax and spending initiatives from the new White House and Congress. "No passage of tax legislation would be possible before the summer recess in August and very likely not until late 2001 or early 2002," says Allen Sinai of Decision Economics Inc. Moreover, economists agree that the Fed will not alter policy based on uncertain legislative prospects. If the Administration does carry through with a new tax-cutting and spending agenda, Sinai believes the financial market reactions will be "negative in fixed income, positive for stocks, and positive for the dollar."

Of course, increased globalization will also play a key role in the outlook. Slower growth in Europe and Asia will limit U.S. export growth (table), but foreign shipments should not grow much less than the expected 9% pace in 2001, buoyed especially by exports of capital equipment. "The U.S. will retain a large comparative advantage in the high-tech sector, even if domestic demand slows," says Michael R. Engle

The trade deficit, oil prices, and the stock market are danger points in a vulnerable economy



e-business software

WebSphere software.

For e-businesses
that actually plan to
make money.

It's a different kind of world.
You need a different kind of software.

WebSphere™ is the broadest, most powerful e-business software platform available. It helps you integrate with your customers and suppliers, grow as your e-business prospers and personalize each user's experience. WebSphere is part of the IBM portfolio of e-business software that includes Lotus®, Tivoli® and DB2®. To learn more about WebSphere and to get a free copy of the Patricia Seybold Group report, "How to Succeed @ e-business," visit us at ibm.com/websphere/discover2

of Standard & Poor's MMS. But while U.S. import growth will cool from about 12% in 2000, that will not be sufficient to prevent a further widening in the trade deficit.

Therein lies one of several risks for 2001: The trade deficit—and the ever-growing external financial obligations that come with it—could unwind faster than the markets can smoothly accommodate, especially if the U.S. economy weakens more than expected. "This could lead to capital flight from the U.S., a sharp depreciation in the dollar, and more complications for Fed policy," says Diane Swonk of Bank One Corp.

Another risk: A spike in oil prices, to \$45 or \$50 per barrel, could hit hard in a more vulnerable economy. However, OPEC would find that level tougher to hold amid slower world growth. A credit crunch is also a threat, although, as

Bill Cheney at John Hancock Financial Services says: "That's something that the Fed can react on a dime as soon as it's really visible."

But perhaps the biggest danger in the outlook is the stock market—and not just the tech-laden Nasdaq. Stock prices have never in the postwar period played such a large role in determining demand by consumers and businesses, especially through the wealth effect on consumer spending. The threat is a potentially vicious cycle in which slower growth cuts into earnings expectations, which hit stock prices, further erode growth and earnings expectations, and so on. That's a recipe for a serious recession.

Still, the forecasters are optimistic that Greenspan & Co. will keep things moving along. So don't worry—2001 won't be a funeral, but you can put away those party hats for a while.

'On the Money' in More Ways than One

Forecasting the 2000 economy was tough for economists. Growth was stronger than anyone expected, and most economists missed the runup in inflation to above 3%.

Most, but not all. Robert "Tim" McGee, the chief U.S. financial market economist in New York for Japan's Tokai Bank, correctly forecast a gain in consumer prices even though the consensus view called for a drop in inflation. And his bet on rising inflation meant that McGee correctly foresaw more Federal Reserve tightening. Daniel Laufenberg of American Express, Richard Berner of Morgan Stanley Dean Witter, and Stephen Gallagher of SC Cowen were also close to the mark. BUSINESS WEEK's own economists round out the top five.

McGee's forecast could best be described as "right on the money" because he watches the monetary data to determine his economic views. As a monetarist, he based his 2000 outlook partly on the inverted yield curve when short-term interest rates are uncharacteristically higher than long-term ones. He also looked at monetary policy as far back as 1998, when the Fed had to deal with signs of deflation and the financial woes of Long-Term Capital Management and Russia. Back then, "Greenspan turned policy to be more accommodative," says the 50-year-old McGee, "and the aggressive easing started the reflation process." And because "inflation is a long-term, slow-moving process," McGee expected prices to keep moving up in 2000 even as the Fed hiked the federal funds rates from 5.5% to 6.5%.

SOFT LANDING. So what does the Montclair (N.J.) resident see in his tea leaves for 2001? First, he expects a year of 3% economic growth, right near the consensus: "It's a soft, rather than hard, landing," he explains, "because the U.S. has a reservoir of stimulus," including the



McGEE: The monetarist's 2000 outlook was accurate

huge government surplus that can be used for a tax cut. He also sees the Fed cutting short-term interest rates by a full percentage point by the end of 2001, but bond yields will edge higher. Why the difference? McGee thinks that although falling energy prices bring down overall inflation, the core inflation rate, which excludes prices for food and fuel, will edge up because of increasing service prices. The bond market will reflect higher inflation expectations.

Normally reticent, the Virginia native can be quite loquacious when discussing the virtues of monetarism, the school of economics that bases the outlook for price trends and growth on monetary data. He is

equally ardent about Greenspan & Co.'s need for vigilance. "The Fed's commitment to price stability has been the linchpin of the economy's stellar performance," he says. "If we let inflation creep up, we might undermine the good times we've enjoyed."

So let others dissect wage growth or capacity utilization rates. Tim McGee will continue to scan the monetary numbers for insights into the economy's growth rate and inflation. As his 2000 forecast proves, watching the money can be a savvy strategy for forecasting.

By Kathleen Madigan in New York



e-business software

WebSphere. Ideal software for a wired world. Even if it's wireless.

It's a different kind of world.
You need a different kind of software.

Arm your company with superior accessibility to a business environment that's quickly going mobile, with the WebSphere™ software platform for e-business.

It can translate Web content to a variety of wireless devices, like PDAs and smart phones. WebSphere and Lotus® Domino™ give you the ability to tailor content to every customer. WebSphere is part of the IBM portfolio of e-business software that includes Lotus, Tivoli® and DB2®. To learn more about WebSphere and to get a free copy of the Patricia Seybold Group report, "How to Succeed @ e-business," visit us at ibm.com/websphere/discover2

Retro Fashion for The New Market

As rates ease, non-tech plays show promise

BY MARCIA VICKERS

New Year's salutations usually sound an "out with the old, in with the new" theme. But for stock market 2001, it may well be an "in with the old, out with the new" kind of year.

The Nasdaq, weighted largely with New Economy technology stocks, will probably end 2001 flat or slightly up—better than the 28% loss so far this year but a long way from its 40% average annual returns of the past five years up until March, and a far cry from the many bullish predictions on Wall Street. On the other hand, the Standard & Poor's 500-stock index, which has a 75% weighting in non-tech and Old Economy stocks, should rebound and could score a neat double-digit gain. Sure, as the economy continues to slow, earnings will be a problem for many companies, and the market next year will be tough. But there's good news on the horizon: an easing interest-rate environment; oil prices that have likely peaked; and accelerating money-supply growth, or increased liquidity, in the market.

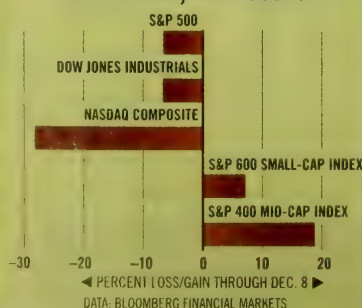
JANUARY RALLY? Lower interest rates will more than offset the effect on stocks of a slowing economy and dwindling earnings growth. With Wall Street expecting the Fed to ease by as much as 50 basis points by March, many expect a rally as early as January. John L. Manley Jr., chief equity strategist at Salomon Smith Barney, says the market has been focused on economic deceleration, overlooking "the bright side of a slowing economy—lower interest rates."

Growth stocks tend to fare best during the first six months of a rate-easing environment, according to Edward Keon Jr., Prudential Securities Inc.'s chief quantitative strategist. Keon recommends companies in what he terms "growthier" industries—that is, areas that are growing faster than others. Among his picks: retailers Home Depot, Wal-Mart, Intimate Brands, and Gap, as well as sectors such as bank stocks, building supplies, and air

freight, which also tend to do best when rates are being cut. And although tech is considered the ultimate in growth and historically has benefited from rate reductions, Keon warns: "There may have two strikeouts and two home runs. That's because many tech stocks remain highly valued and their earnings expectations continue to be slashed. Also, the sector's sharp volatility is likely to worsen."

Earnings estimates for the S&P 500 also continue to be revised downward—analysts predicted 14.8% growth for 2001 in early October vs. 10.6% now, according to First Call Capital's earnings research firm. First Call expects more negative earnings warnings from companies in early January. But tech stocks in particular will continue to be hit the hardest. In early October, tech earnings were expected to increase 24% next year; now forecasts are for only 1% growth. And investors likely will continue to punish richly valued tech stocks with lower earnings. "The magic is gone from the Nasdaq. As long as there are still no overwhelming value compelling investors to buy these stocks, it won't be a great place next year," says Jeremy Siegel.

BIG STOCKS, BIG LOSSES





Abby Joseph Cohen issued a recent report lauding the relative valuation of smaller issues which "sets the stage for solid price appreciation."

It's not all bad news for the Nasdaq. Tech stocks will also benefit from rate cuts. And some say the index has bottomed. "The fact that techs rallied the week following Intel's Dec. 7 earnings warning was a sign we're bottoming," says Charles W. Kadlec, chief investment strategist for Seligman Advisors Inc. Another sign: The equity call/put ratio, a contrarian market indicator, recently dropped to its lowest level since October, 1998, signaling a market upturn.

GRIDLOCK. Of course, the election aftermath could loom over the stock market for much of 2001, as the legitimacy of whoever takes office is called into question. Congressional gridlock has been lauded by Wall Street as positive for the market, because no extreme proposals from either party would likely gain approval, but it still means uncertainty, which the market hates.

So what's the best strategy for investors next year? First, they may want to revisit that age-old concept of diversification. With investors having poured billions into tech stocks in the past two years, many portfolios are tech top-heavy. "You need different asset classes and sectors to minimize volatility. But that doesn't mean you can't still have a leaning toward growth," says Russ Ketron, a Novato (Calif.) financial planner. Some broad areas to consider: small- and mid-cap funds, equity-income funds, and trusty S&P funds.

In terms of growth plays, the best strategy is to look for strong, sustainable growth coupled with attractive valuations. "Over the next few years we think p-e's will not rise, so more moderately priced growth stocks will have the advantage," says Merrill's Callies. What about those tech stocks, whose prices have come down? No dice, says Callies, who says memories of this year's debacle are still fresh. Seems like old times again. □

BEST BET

THINK SMALL

Several analysts are recommending small- and mid-cap stocks for 2001. They "improve the fastest and most dramatically in a rate-easing climate," says Steven G. DeSanctis of Prudential Securities

ance professor at the University of Pennsylvania's Wharton School. The price-earnings ratio on a 12-month trailing basis of the Nasdaq Composite Index is 120. But that's still much higher than the average over the past five years of 92. Valuations for the S&P 500 are a different matter. "S&P 500 multiples look the most attractive in the past two years," says Christine Callies, chief U.S. investment strategist at Merrill Lynch & Co. Callies predicts the S&P will end 2001 around 10—about 22% higher than its current level. It's good news for the S&P 500: Since the Nasdaq correction last March, the market has continued to broaden as investors have poured money into a more diversified group of stocks.

A beneficiary of this broadening has been the small- and mid-cap stocks. So far this year the MidCap 400 index has returned 19%; the SmallCap 600 index, 7%. And these stocks, which tend to benefit from falling interest rates, because they have less liquidity, these stocks have proved the fastest and most dramatically in a rate-easing climate," says Steven G. DeSanctis, director of small-cap research at Prudential Securities. And Goldman, Sachs & Co. strategist

FOR THE RECORD

Christine Callies, chief U.S. Investment Strategist at Merrill Lynch, thinks the S&P 500 will stage a comeback in 2001.

ON MARKET DIRECTION:

Because p-e's have improved so much, we expect the S&P could reach 1720 by yearend [of 2001].

ON INTEREST-RATE CUTS:

The next rate cuts would mean that market leadership would broaden or rotate. Expect a shift to growth cyclicals, includ-



ing quality retailers, parts of the communications sector, and some consumer services.

ON TECH:

We think the Nasdaq and tech will come back somewhat. In addition to likely rate cuts, it has overshot almost as much on the downside in expectations as on the upside this year.

"Market leadership would broaden"



Why the Experts Are Upbeat

They see lower rates driving stock gains in 2001

BY HEATHER TIMMONS

This year's roiling markets may have given investors heartburn, but Wall Street's finest are calmly predicting better times ahead. According to BUSINESS WEEK's survey of 40 investment strategists, 2001 will be a year of controlled growth. The average prediction: a 12% rise, to 12,015, for the Dow Jones industrial average; a 14% rise, to 1,558, for the Standard & Poor's 500-stock index, and a 23% jump for the Nasdaq Composite Index.

Most forecasters believe that the Federal Reserve will lower interest rates at some point in 2001. The move will be driven by a weak first half, they say. And thanks to the Fed's action, the economy will finish the year strong. "Expectations are low now and should shift toward optimism as the year progresses," says Clare W. Zempel of Robert W. Baird & Co. "Recession will be avoided." Zempel, in fact, is

the most bullish for 2001, predicting a Dow 13,250 and an S&P of 1,825 by yearend.

Nonetheless, strategists stress that they do see a return to 1999's irrational exuberance. "Investors, hurt by 2000's market, will be more valuation-sensitive," says Prudential Securities Inc.'s Greg A. Smith, who expects "growth, but at a price." Many foresee similarities between the second half of 2000 and the first half of 2001, as credit troubles affect big commercial lenders come home to roost.

ZERO BOUND? The dismal performance of Internet stocks certainly burned the true believers. Last December, many forecasters predicted a volatile year for the sector, yet only a few, including Thomas M. Galvin of Donaldson, Lufkin & Jenrette, George Egan of Spence, Trask, and Thomas McManus of Bank of America Securities—were decidedly bearish on Internet issues.

But for next year, expectations are gloomier. Many foresee continued failures for all but the strongest, best-recognized players. Investing in Internet stocks is "very tough for mere mortals," says McManus. "Yes, there will be diamonds to find among the ashes, but many of the stocks are still going to zero." One lone optimist, John H. Shaughnessy of Advest Inc., says the Internet sector should rebound if the Fed cuts rates.

Most market watchers, though, have their eyes on financial services, technology, and healthcare—focusing on bargains. Technology is "prime for recovery," says David A. Katz of Matrix Investors Value Fund. Katz picked Compaq Computer Corp. as his favorite for 2001—because

"selling at a reasonable valuation." Financials stand to benefit from lower interest rates. You may not want to believe stockpickers. After all, few of these gurus foresaw that the Nasdaq would plummet or that the Dow would end up lower at the end of the year than at the start. Instead, they predicted an average 8.3% rise in the Dow and a 5% rise in the Nasdaq. And their individual stock picks were even less accurate.

But there were some good calls. A market analyst Cassandra Award goes to James M. Sawyer of Janney Montgomery Scott, who said in his year's survey: "Excessive speculation will lead to a 10% to 20% correction at some point

during the year." His predictions for 2001 include a rebound in the tech sector after valuation adjustment and a strong finish for the year. Strictly by the numbers, the investment team at Jurika & Voyles were the big winners. The Oakland (Calif.) value investors nearly nailed the Dow's Dec. 8 close of 10,719, and came close on both the Nasdaq and the S&P.

There were some wild misses. Bull Laszlo Birinyi Jr. of Deutsche Bank Securities Inc. predicted a 14,000 Dow. Bear George Jacobson of Trevor Stewart Burton & Jacobson forecast an 8,800 close. They both were about 2,000 points off. Jacobson again is bearish, predicting that the Dow will fall in 2001 to 8,100 and the Nasdaq

Business Week Market Forecast Survey for 2001

	DOW JONES INDUSTRIAL AVERAGE		STANDARD & POOR'S 500	NASDAQ COMPOSITE	ASSET ALLOCATION			FAVORITE STOCK SECTOR	FAVORITE STOCK
	2000	2001	2000	2001	STOCKS	BONDS	CASH		
CLARE W. ZEMPEL Robert W. Baird & Co. Inc.	12500	13750	1825	3850	65	30	5	Technology	Tellabs
GEORGE W. EGAN Spencer Trask & Co.	11800	13500	1750	3500	85	10	5	Financials	Next Level Communications
ROBERT S. ROBBINS Robinson-Humphrey	11844	13250	1674	3099	80	15	5	Financials	National Commerce Bancorp
LASZLO BIRINYI Deutsche Bank	11200	13050	1600	3450	60	10	30	Technology	Microsoft
AMES M. WEISS State Street Research	11200	12920	1710	3290	60	35	5	Health Care	JDS Uniphase
PHILIP J. ORLANDO Valueline Asset Management	12380	12880	1630	4500	80	15	5	Technology	Siebel Systems
MR. ROBERT GOODMAN Putnam Investments	12500	12750	1580	4600	NF	NF	NF	Financials	NF
STUART T. FREEMAN AG Edwards & Son	11400	12700	1700	4000	70	30	0	Technology	Freddie Mac
JOSEPH BATTIPAGLIA Gruntal & Co.	11860	12700	1650	4300	100	0	0	Health Care	Intel Corp.
LAINE GARZARELLI Garzarelli Capital	NF	12700	1635	NF	100	0	0	Financials	Lehman Brothers
JOHN K. LYNCH IJL Wachovia	11525	12500	1700	4000	70	25	5	Technology	NF
UBODH KUMAR CIBC World Markets	12000	12500	1625	4300	60	30	10	Financials	Citigroup
UGENIA M. SIMPSON Kirkpatrick Pettis	11500	12250	1550	3500	70	20	10	Technology	Koala Corp.
RICHARD I. SICHEL The Philadelphia Trust Co.	11700	12165	1560	3400	65	30	5	Technology	Sun Microsystems
AMES MEYER Janney Montgomery Scott	11200	12100	1550	3750	65	30	5	Financials	Citigroup
ILLAN R. RONESS JW Genesis	11200	12100	1470	3625	85	0	15	Technology (bio)	Trust Co. of New Jersey
JOEL DeDORA Fremont Investors Group	11490	12060	1550	4000	70	20	10	Financials	Oracle
DAVID A. HENWOOD Raymond James Financial	11000	12000	1550	4200	65	20	15	Technology	Calpine
DOUGLAS JOHNSON First Albany	11500	12000	1530	3700	58	42	0	Technology	EMC Corp.
DAVID A. KATZ Matrix Advisors Value Fund	11200	11900	1515	3340	75	25	0	Financials	Compaq
INVESTMENT TEAM Jurika & Voyles	11000	12000	1475	3100	NF	NF	NF	Services	KLA Tencor
MURRAY HYMAN Weatherly Securities Corp.	11280	11877	1525	3875	60	25	15	Financials	Liberty Media
JOHN H. SHAUGNESSY Advest Inc.	11000	11800	1540	3250	60	30	10	NF	Oxford Health Plans
JOSEPH H. BARTHEL Fahnstock & Co.	9700	11800	1520	4000	45	45	10	Health Care	Astra Zeneca
ERNIE SCHAEFFER Schaeffer's Investment Research	10500	11750	1500	3250	60	40	0	Health Care	Krispy Creme Doughnuts
STEVEN M. FRENKEL Ladenburg, Thalmund & Co.	12500	11700	1589	4480	70	30	0	Technology	Extreme Networks
THOMAS McMANUS Bank of America Securities	9500	11500	1525	3000	60	35	5	Utilities	Home Depot
MARSHALL ACUFF Salomon Smith Barney	11500	11500	1500	3200	65	30	5	Financials	John Hancock
HARLES J. PRADILLA SG Cowen Securities	11001	11500	1495	3850	65	30	5	Fin/Health/Tech	America Online
RICHARD JANDRAIN BancOne Investment Advisors	11000	11500	1470	3050	50	50	0	Financials	Freddie Mac
REG A. SMITH Prudential Securities	10500	11500	1450	3300	65	35	5	Financials	Bank One
DOUGER DeBARD iGlobal Capital	10862	11495	1483	3197	40	25	35	Technology	America Online
THOMAS MADDDEN Federated Investors Inc.	9000	11000	1450	4000	58	42	0	Utilities	Enron
DOUGLAS CLIGGOT J.P. Morgan	10000	11000	1400	2500	50	25	25	Health Care	NF
HARLIE CRANE Spears Benzak Salomon & Farrell	10000	10750	1400	3150	60	25	15	Consumer	America Online
GEORGE W. JACOBSEN Trevor Stewart Burton & Jacobsen	9000	8100	1000	1800	50	40	10	Technology	Raytheon
FREY APPLEGATE Lehman Brothers Inc.	NF	NF	1800	NF	80	20	0	Technology	BEA Syst.
HOWARD KERSHNER UBS Warburg	NF	NF	1715	NF	55	23	22	Fin/Health/Tech	NF

AVERAGES 11124 12015 1558 3583 66 26 8

NF-Not Forecast

to 1,800. Bernie Schaeffer of Schaeffer's Investment Research and John L. Regan of Josephthal & Co. were widest of the mark on the Nasdaq, predicting levels of 5,000 and 4,800 respectively, vs. 2,917 on cut-off day.

Where many of our fearless forecasters really stumbled, though, was in their picks of individual stocks. Of the 42 companies that were lauded as good bets twelve months ago, a staggering three quarters lost value in 2000. Some of the widest misses were, as could be expected, Internet and high-tech stocks. Kudos,

though, are due to a few forecasters who stuck to gold. State Street Research's James M. Weisbach, insurer Ace Limited, was up 160% for the year. Prudential's Smith named graphics processor NVIDIA Corp., for a 110% gain. And the investment team from Jurika & Voyles picked OM Group Inc. for a 50% gain.

But they were among a minority. After a rough year, it's no wonder that our fearless forecasters are hoping for a more forgiving market. And if the Federal Reserve lowers interest rates as they expect, they may just get it.

The Fortune Tellers' Triple Crown



The late 1990s were a tough time to be a value investor—especially one based in the New Economy nexus of the San Francisco Bay Area. But 2000 provided sweet revenge for the investment team from Jurika & Voyles in Oakland, Calif. Their mix of economic analysis and old-fashioned value-stock picking gave them top honors among the investing gurus polled by BUSINESS WEEK 12 months ago.

The three-man team forecast that the Dow Jones industrial average would be at 11,000

at yearend: They overshot the mark by just 281 points, or 2.6%, on BUSINESS WEEK's Dec. 8 cutoff date. Even closer was the team's prediction of 1,400 for the Standard & Poor's 500-stock index, off by 2.2%. And its forecast of 3,000 for the volatile Nasdaq Composite Index was just 83 points, or 2.8%, out. Runner-up Edward P. Nicoski, of U.S. Bancorp Piper Jaffray, had the same Dow forecast but was more than 800 points adrift on the Nasdaq.

SUMMER OF LOVE. Jurika & Voyles's emphasis on the real economy paid off. "We just thought that the laws of gravity had to take hold at some point," explains Karl O. Mills, vice-chairman of the firm. He compares the late 1990s stretch of overinflated stock values and easy capital to another historic San Francisco event. "It was like the Summer of Love" all over again, he says, referring to the influx of hippies into the city's Haight-Ashbury district in 1967.

Jurika & Voyles's researchers—Guy R. Elliffe, Eric R. Hull, and Nicholas E. Moore—use economic analysis to pick promising sectors, then sift through stocks within them, searching for bargains with bright-looking futures. "Our approach is to try to have the

SEERS: Elliffe, Hull, and Moore came out on top

best of both worlds," says Hull. "We focus on both value and growth." Hull provides the overall economic analysis, Elliffe

hunts for bargains, and

Moore analyzes their business models.

They may be on to something. Their top stock pick for 2000, OM Group Inc., a specialty chemical company, is up nearly 50% for the year. They're a little more optimistic about the Dow for 2001, predicting 12,000 by yearend. Stock picks for 2001 include bulk food distributor Sysco Corp. and semiconductor manufacturer KLA Tencor. If 2000 is any indication, investors might be well advised to take a look at them.

By Heather Timmons

THIS MAY BE THE MOST MEMORABLE HOUR OF YOUR LIFE.

**GIVE US AN HOUR AND SEE HOW OUR
EWP WILL CHANGE YOUR COMPANY'S FUTURE.**

Day wants to show you something you've probably never seen before. A comprehensive, global-ready Enterprise Web Platform that doesn't fall short on its promises. One that really can meet all the needs of your Internet strategy—from Websites to corporate portals to digital exchanges. One that already includes multi-language/multi-currency capabilities.

Our integrated suite of products offers our customers dramatically accelerated time

to market, reduced cost of ownership, and consistent worldwide brand protection.

We've done it for Novartis, Roche, UBS, and Zurich Financial Services. Now let us do it for you.

Give us an hour and we'll give you the future. And for once, that's no empty promise. Call 1-866-644-2557 for a demonstration.

www.daycorporation.com

DELIVERING ON THE PROMISE OF e



Day

CONTENT MANAGEMENT COMMERCE PERSONALIZATION COLLABORATION CATALOG

The Bull Slows to a Trot

BY PETER COY

A year ago, optimism was high in the annual BUSINESS WEEK/Harris Poll of investors. Fully 52% of respondents thought stocks would go up in the year ahead, many more than in the three previous years. How wrong they were: Wall Street is headed toward its worst year since 1990. Now, chastened, only 32% of poll respondents expect stocks to rise, the lowest figure in the five years the question has been asked. Are they right this time? Or does their pessimism mean that the market is oversold, setting the stage for an enormous rally?

The value of the BUSINESS WEEK/Harris Poll is the insight it gives into investors' thinking. For instance, this year's poll helps explain why so many people are still pumping money into stocks—when so few expect the market to go up in 2001. Apparently, it's because many think they have a talent for picking winners. We asked investors if they thought they could beat the market. Some 79% said they were very or somewhat confident they could, vs. just 3% who weren't.

The stock market's bad year seems to have influenced investors in other ways as well. Slightly fewer thought stocks were

overpriced at current levels. Investors were a little less worried about turbulence: The numbers expecting less stock market volatility the year ahead more than doubled, from 11% in 1999 to 24% this year.

But people have lost a bit of confidence about likely long-term returns from stocks. Some 40% thought total returns would be less than 10% this year, a figure that has risen steadily from a low of 31% in 1997. The share of people expecting returns of 15% or more has correspondingly shrunk, to 24%.

Despite the collapse of Internet stocks, 25% continued to believe such issues are very overpriced, down from 33% last year. Only 8% thought they were somewhat or very cheap. Views on the overall stock market shifted little, with 11% saying the market was overpriced, compared with 12% last year.

One last thing: Without getting specific, we asked people between Nov. 1 and Dec. 4, in the midst of the Florida election dispute, how they thought "the political situation in Washington" would affect the stock market over the next year. Some 30% thought the effect would be positive, 38% said it would be negative, and 18% believed there would be no effect at all.



Sadder but Wiser?

After a year of market stasis—or erosion—only 33% of investors see rising stock prices in the year to come, down from 52%

BEST INVESTMENT

If you had to choose the one investment that you think would be the best to make right now, which would it be?

	1989	1997	1998	1999	2000
Real estate	40%	33%	30%	30%	28%
Mutual funds	8%	21%	18%	20%	21%
Bank or savings & loan deposits.....	8%	9%	11%	12%	14%
Common stock	5%	12%	13%	13%	8%
Money market funds.....	11%	6%	7%	7%	8%
Gold or other precious metals	8%	4%	4%	5%	4%
Government bonds.....	15%	5%	5%	5%	5%
Corporate bonds.....	3%	4%	3%	2%	1%
Don't save/Not sure/No answer	2%	6%	9%	5%	10%

WHERE'S YOUR MONEY?

Thinking about your household's total assets including real estate, stocks (including stock mutual funds), bonds (including bond mutual funds), savings instruments, and cash, does your household own any of the following?

	YES	NO	NOT SURE/NO ANSWER
Real estate			
1999.....	62%	34%	4%
2000.....	59%	32%	9%
Stocks			
1999.....	50%	46%	4%
2000.....	47%	42%	11%
Bonds			
1999.....	28%	67%	5%
2000.....	27%	61%	13%
Savings instruments and cash			
1999.....	74%	23%	3%
2000.....	67%	21%	12%
Some other asset			
1999.....	22%	74%	4%
2000.....	34%	55%	12%

BILLS OR BEARS?

Over the next year, do you think stocks will go up, stay about the same, or go down?

	1996	1997	1998	1999	2000
Up	39%	39%	37%	52%	33%
Stay about the same	36%	38%	34%	20%	26%
Down	19%	16%	21%	17%	23%
Not sure/No answer	6%	7%	8%	10%	19%

A CRASH COMING?

Over the next 12 months, how would you rate the chance of another big crash in the stock market—very likely, somewhat likely, not very likely, or not at all likely?

	1996	1997	1998	1999	2000
Very likely	12%	13%	14%	15%	13%
Somewhat likely	35%	43%	41%	37%	37%
Not very likely	35%	31%	29%	33%	35%
Not likely at all	15%	10%	11%	11%	7%
Not sure/No answer	3%	3%	4%	4%	8%

REMAINING QUESTIONS ASKED ONLY OF STOCK INVESTORS

PERSONAL PLANS

Over the next six months, do you think you will probably invest a lot more in stocks or stock mutual funds, invest somewhat more in stocks or stock mutual funds, reduce your investment in stocks or stock mutual funds somewhat, or reduce your investments a lot?

	1999	2000
Invest a lot more	10%	7%
Invest somewhat more	37%	35%
Reduce somewhat	10%	13%
Reduce a lot	5%	5%
Stay the same (vol.)	29%	32%
Don't invest/Not sure/No answer	10%	7%

WHAT CAN YOU EXPECT FROM STOCKS?

In the long run, what sort of total returns (capital gains plus dividends) do you expect the stock market to produce for you—below 5% a year, 5% to below 10% a year, 10% to below 15% a year, 12% to below 15% a year, or 15% or higher a year?

	1996	1997	1998	1999	2000
Below 5% a year	8%	4%	9%	7%	7%
5% to below 10%	36%	27%	26%	30%	33%
10% to below 12%	29%	30%	29%	27%	25%
12% to below 15%	13%	19%	18%	14%	12%
15% or higher	9%	14%	17%	13%	12%
Not sure/No answer	5%	5%	2%	10%	11%

HOW CAN YOU BEAT THE MARKET?

How confident are you that the stocks or mutual funds you pick will beat the market averages—very confident, somewhat confident, not very confident, or not at all confident?

	2000	2000
Very confident	17%	Not at all
Somewhat confident	62%	confident
Not very confident	12%	Not sure/No answer
Not at all confident		3%
Very confident		6%

VALUATION OF STOCKS OVERALL

Overall, how would you describe the stock market's valuation—very overpriced, somewhat overpriced, fairly valued, somewhat cheap, or very cheap?

	1999	2000
Very overpriced	12%	11%
Somewhat overpriced	46%	40%
Fairly valued	31%	28%
Somewhat cheap	4%	9%
Very cheap	*	1%
Not sure/No answer	7%	11%

INTERNET STOCK PRICES

Overall, how would you describe the valuation of Internet stocks—very overpriced, somewhat overpriced, fairly valued, somewhat cheap, or very cheap?

	1999	2000
Very overpriced	33%	25%
Somewhat overpriced	27%	27%
Fairly valued	14%	11%
Somewhat cheap	4%	4%
Very cheap	1%	4%
Not sure/No answer	22%	29%

VOLATILITY

Do you believe that next year, the stock market will be less volatile, about as volatile as this year, or more volatile?

	1998	1999	2000
Less volatile	16%	11%	24%
About as volatile as this year	56%	54%	43%
More volatile	26%	28%	24%
Not sure/No answer	2%	7%	10%

HOW DO YOU TRADE?

In general, how do you buy and sell stocks?

	1998	1999	2000
By phone	51%	37%	35%
In person	26%	26%	33%
Through my employer/ direct deposit (vol.)	13%	22%	16%
On the Internet	11%	9%	12%
By mail (vol.)	2%	4%	3%
Other	5%	5%	4%
Don't trade/Not sure/ No answer	1%	6%	10%

WHAT'S UP WITH POLITICS?

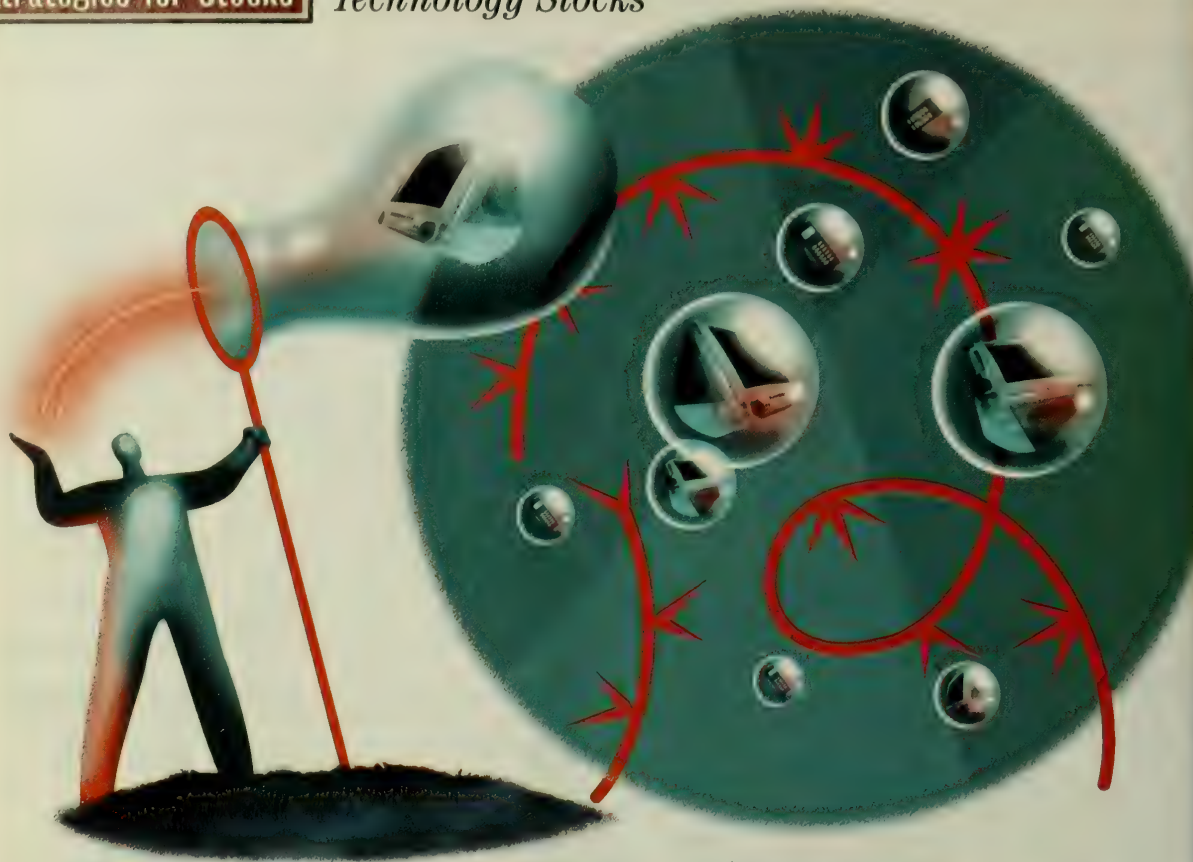
How do you think the political situation in Washington will affect the stock market over the next 12 months—very positively, somewhat positively, somewhat negatively, very negatively, or will it have no effect at all?

	2000		2000
Very positively	8%	Very negatively	7%
Somewhat positively	22%	No effect at all	18%
Somewhat negatively	31%	Not sure/No answer	13%

*Indicates less than 0.5%. (vol.) means answer was volunteered.

This survey of 1,026 adults, including 484 stock investors, was conducted from Nov. 28 to Dec. 4, 2000, for BUSINESS WEEK by Harris Interactive Inc. The margin of error for stock investor responses is plus or minus 4.5%. For more results, see the Dec. 25/Jan. 1 issue online at www.businessweek.com.

The "irrational exuberance" seems to have dissipated without sparking despair: Figures show no increased expectation of a crash



Still Looking For the Bottom

Meantime, pros are picking their bets carefully

BY GEOFFREY SMITH

Garrett R. Van Wagoner manages \$3 billion in technology mutual funds, and he's not thrilled. Through Dec. 8, his funds are down an average 5% for the year, and he's worried 2001 will bring more of the same. The Nasdaq is doing even worse—down 28.3% for the year and 42.2% off its Mar. 10 high. Meanwhile, the economy is slowing, and tech companies are cutting growth forecasts. "It's hard to dive in when you don't know where the bottom is," he says.

Calling the bottom is tricky because the outlook for tech profits, while improving later in 2001, looks terrible in the first half. Bad earnings could keep lowering stock prices. But shares typically head up before profits do—and might

take flight sooner if the Federal Reserve starts to cut interest rates. So investors who wait might miss the turn. To escape this bind, a lot of tech pros are putting their money in tech sectors that look relatively strong, such as software, data storage, and personal digital assistants.

MUDDY OUTLOOK. The first-half outlook is grim. Profits of tech companies in the Standard & Poor's 500-stock index will grow just 8.5% in the first six months, down from 56% in the first half of 2000, according to First Call Corp.'s consensus of analyst estimates. Business looks particularly lousy for such sectors as personal-computer makers, dot-coms, chipmakers, and telecom-equipment suppliers. What's worse, earnings estimates themselves "are in a free fall," says Charles Hill, First Call's research director. Don't be surprised, he says, if a lot of estimates are revised downward through most of January.

The second half of 2001 should be better, provided the economy improves. For the year, tech profits are expected to be up 15%, well ahead of the 10.6% earnings growth anticipated for the S&P 500—but behind transportation (up 24%), health care, and capital goods (both up 16%). Even so, tech remains the favorite of many of the largest growth funds. "Technology still has the fastest-growing companies anywhere," says Paul E. Marrkand, co-manager of the \$41 billion Putnam Voyager fund.

Patient investors may fare best in some of the most battered sectors. Telecom stocks, for instance, are suffering largely because they can

AOL All-New Version 6.0!

**The Easiest
Just Got Even Easier!**



- New look, design and features make it even easier to get started
- Free 24-hour customer service means help is just a phone call away
- Your security and privacy are always protected on AOL
- Parental controls to help safeguard your kids
- There's never been a better time to join

**Call 1-800-4-ONLINE
NOW To Sign Up Today!**



So easy to use,
no wonder it's #1

Most pros aren't ready to gamble on telecom yet, but they're confident about market leaders such as Sun, Microsoft, Oracle, and Cisco

raise new debt on the markets. "[But] if the high-yield bond market frees up, it will be a catalyst" for telecom, says Marrkand. As for chip stocks, Dresdner RCM fund manager Walter Price thinks many are becoming buys as they reach 10-year lows.

Most seasoned tech investors aren't willing to gamble on chips and telecoms yet. Instead, some are focusing on such market leaders as Cisco, Sun Microsystems, Oracle, and Microsoft. "We're playing a more prudent, risk-adjusted game and tilting more toward the heavyweights," says David E. Sette-Ducati, manager of the MFS Technology Fund.

NOSEBLEED. The trouble is, top stocks still command big premiums, with price-earnings ratios well above 50 times their 2001 earnings estimates. But fund managers pay up because they expect these companies' sales or profits (or both) to top expectations. Many of them favor software, where profits margins are high and sales are holding up, and data-storage companies, such as EMC Corp. and rival Network Appliance Corp.

Sette-Ducati likes EMC, reasoning that large companies' high demand for storage will keep EMC from stumbling next year. EMC's nosebleed market cap is higher than IBM's, despite having just 10% of IBM's sales. But EMC management expects sales to grow 30% to 40% next year,

Top Tech Picks

STOCK/SYMBOL	PRICE*	P-E**	DESCRIPTION
VERITAS VRTS	\$122.73	155.4	Company's storage software is in strong demand
VERISIGN VRSN	111.98	203.6	2001 profits expected to rise 60% at Net security firm
NETWORK APPLIANCE NTAP	87.19	155.7	Stock halved despite 100%-plus sales growth in '01
SIEBEL SEBL	101.00	153.0	Could beat Street's 40% profit estimates for '01
NOKIA NOK	50.31	47.4	AT&T deal should boost market share
PALM PALM	54.19	258.0	Popular PDAs may accelerate 60% growth rate
PEOPLESOFT PSFT	44.19	77.5	New software could help double '01 profits
JUNIPER NETWORKS JNPR	166.13	221.5	Favorable product cycle for Net infrastructure leader

* Close Dec. 8

**Based on estimated 2001 earnings

DATA: FUND MANAGER SURVEY, BLOOMBERG FINANCIAL MARKET

FOR THE RECORD

Dennis McKechnie's PIMCO Global Innovation Fund was up 68.7% through Dec. 8.

ON HIS OUTLOOK FOR

TECH STOCKS: The first half will be tough. Once we reach an inflection point—and we think that will be in the spring—we'll head north. The Nasdaq should trend up 25% to 35%.

ON HIS FAVORITE SECTORS:

We're moving into cell phones (Nokia), PC stocks (Compaq), PDAS (Palm and



DENNIS MCKECHNIE
Manager, PIMCO Global
Innovation Fund

Research in Motion), and software (Microsoft and Peoplesoft).

ON TECH STOCK VALUATIONS:

Tech stock valuations, such as price-earnings ratios, should take a back seat to fundamentals (sales growth, profits, etc.). We consider fundamentals 85% and valuations 15% when picking stocks.

against maybe high-single-digit growth for IB

In software, Marrkand picks Siebel System Inc. and Veritas Software Corp., because he figures sales growth in the coming year could exceed 40%. And several tech pros like Microsoft. They're betting that more and more corporate customers will soon upgrade to Windows 2000, which has been slow to catch on. "There's some evidence it may take off in the spring, and if that happens it will be the biggest new-product cycle since Windows 95," says Dennis McKechnie, manager of the PIMCO Innovation fund. He also likes Compaq Computer Corp., believing it will be the biggest beneficiary of a Microsoft upgrade.

Wireless communications stocks have been disaster because of concerns about slowing demand and excess inventories. Still, some funds favor cell-phone and PDA companies. McKechnie likes Nokia. The handset maker's recent deal with AT&T, he believes, will help it take market share from Motorola and Ericsson. And he likes Palm Inc., whose handheld personal organizer is so popular that he thinks sales growth could accelerate beyond Palm's current 60% clip.

Also popular are Internet infrastructure plays. One of Van Wagoner's top picks is Juniper Networks, which makes routers crucial for long-distance data networks. At a recent price of 148 share, Juniper is trading at a heady 194 times earnings estimates. But analysts expect sales to justify the price tag by growing some 110% next year, to \$1.3 billion. "The valuation is enormous, but the opportunity is also," Van Wagoner says.

The tech shakeout isn't over. "In the next six months, a lot of companies will blow up," Marrkand predicts. "At the same time, a lot of the bad news has already come out and been digested by the market." Sooner or later, of course, tech will find a bottom and trek north again. And if the Fed cooperates, that could come more quickly than many expect.

"The first half will be tough"

Think of Kyocera as a maker of dot components.



There's a lot more to the Internet than dot com. Capacitors, oscillators, fiber optic components, semiconductor fabrication parts and ceramic IC packages for a start. Glamorous? No, but they are essential to the technologies that make the Internet so powerful. As a world-leading manufacturer of these components, the Kyocera Group has helped fuel the exponential growth enjoyed by e-businesses and service providers. By supporting those businesses, our components help make the Internet exciting for everyone.

Our components are marketed under the **Kyocera**, **AVX** and **Elco** brands.

Shown here is the AVX BestCap™ ultra-low ESR super capacitor — a key component of the long-life, hybrid battery packs essential to PDAs and cell phones.

www.kyocera.com



These Oldies Are Goodies

Some traditional companies shine

BY SUSAN SCHERREIK

Many investors have been so preoccupied with technology stocks that they've overlooked another place with big investment potential. It's called the Old Economy. Often with little fanfare, formerly stodgy industrial and service businesses are successfully redefining themselves using the tools of the New Economy. Deregulation, for example, is allowing once-sleepy energy and phone companies to enter zippy new markets. The Internet is enabling all sorts of old-line companies to broaden their customer base and purchase supplies more efficiently. Meanwhile, technological innovations are letting lumbering manufacturers become nimble on the factory floor.

For proof, look no further than Houston's Enron Corp. Thanks to sweeping deregulation in the utility industries, the onetime natural-gas pipeline company has recast itself as a highly profitable provider of energy and telecom services. Ten years ago, all of Enron's earnings came from gas pipeline operations and oil and gas exploration. Now, however, these traditional endeavors generate just 20% of the company's \$1.2 billion in annual earnings. The other 80% comes largely from the trading of commodities that include oil, natural gas, electricity, and even broadband capacity. Its year-old EnronOnline has handled more than \$150 billion in trading, making it the world's largest e-commerce site. **GOING UP.** In the past year, Enron's stock price has more than doubled, to 73.06, with shares trading at a lofty 44 times estimated 2001 earnings. "Enron has had a great run," says Oscar Castro, manager of the Montgomery Global Communications Fund. "But it's still a good long-term investment." Another fan, Christopher J. Wolfe, equity strategist at J.P. Morgan Co.'s private client group, expects Enron's share price to hit 100 during the next six months, and the company sees rising trading profits from volatile energy markets and rapid expansion in online trading.



Elsewhere, local phone companies are dialing new opportunities in the long-distance market. In December, 1999, Verizon Communications, formerly Bell Atlantic Corp., became the first regional phone company to win government approval to offer long-distance service. It has since red more than 1 million long-distance customers in New York State. Similarly, SBC Communications Inc., based in San Antonio, has gained up 1 million customers in Texas since July. Atlanta's BellSouth Corp. figures to enter the market in the first half of 2001.

SY SELL. Claude C. Cody IV, a senior portfolio manager at AIM Advisors Inc., holds shares of all three because he thinks long distance will be an easy sell. He notes that the Bells pitch to established customers, own their lines, and have support services, such as billing, in place. "It's a fair-low-cost market for the Bells to enter," adds Brian Kulick, an analyst at Merrill Lynch & Co. Over the next five years, Kulick expects the Bells to expand earnings at a 12%-to-15% annual clip, with long-distance service accounting for about 10 percentage points of that gain. She sees Verizon, SBC, and BellSouth notching stock price gains as much as 42% over the next 12 months. Allstate Corp. is among the old-line businesses harnessing the power of the Internet. The nation's second-largest car and home insurer has additionally sold its products through a network of 14,000 agents. In the past year, however, Allstate has begun selling insurance over the Web. Forester Research Inc. projects that \$13.1 billion worth of auto and homeowner's insurance will be sold online in 2004, up from some \$1.7 billion this year. In addition, Allstate is hawking insurance over the phone. These moves have reduced the need for back-office personnel, allowing Allstate to cut 4,000 jobs, representing 10% of its agent workforce. Allstate hopes to double its

FOR THE RECORD

Christopher J. Wolfe, 32, is the equity strategist for J.P. Morgan & Co.'s private client group.

ON WHY OLD ECONOMY COMPANIES ARE GOOD INVESTMENTS:

The winners in the New Economy will be companies that learn how to use changes to their advantage. Plenty of Old Economy companies are doing that.

ON WHAT TO SEEK IN AN OLD ECONOMY COMPANY:

Managements that jump on



CHRISTOPHER WOLFE
J.P. Morgan

opportunities and turn them into businesses.

ON CHOICE OLD COMPANIES WITH NEW LOOKS:

We're big on El Paso Energy and Williams Cos., which are leveraging their natural-gas pipelines to enter telecommunications. Allstate is also in the midst of a revolution, extending its reach through the Web.

Do execs "jump on opportunities"?

tepid 4% revenue growth through both Web and phone sales.

Allstate's shares, at 44, have risen 78% so far this year, but J.P. Morgan's Weston M. Hicks is keeping his buy rating. There's a risk, he admits, that Allstate could flub the new strategy. But Hicks doesn't expect that to happen. "Management is very focused and determined to win," he says.

Other kinds of technological innovations, such as computer-assisted design tools, are helping aircraft manufacturer Boeing Co. ramp up profitability. In the past year, its shares have gained 79%, thanks to robust demand for jets from leasing companies and Asian airlines. But next year, commercial aircraft orders are expected to fall as much as 40%, a casualty of steep fuel prices and a faltering economy. Still, over the next 12 to 18 months, Pierre A. Chao, an analyst at Credit Suisse First Boston, sees Boeing's stock climbing from its recent 69.94 to 100. He reasons that the drive for efficiency will keep earnings growing at an average 15% annual pace over the next three years, even if airline orders fall.

Old-line companies that, like Boeing, learn new tricks stand a better chance of holding their own in a slowing economy.

A New Look for Established Businesses

COMPANY/SYMBOL	PRICE*	P-E RATIO**
ALLSTATE ALL An insurance company broadening its reach through the Web	\$44.00	14.7
BOEING BA The world's biggest aircraft maker, whose efficiency push is fattening profit margins	69.94	19.0
GEART CPRT Sells wrecked autos for insurers on the Internet	17.50	28.0
IRON ENE Has transformed itself from gas-pipeline company to innovative energy trader	73.06	44.0
ELON EXC The nation's third-largest electric utility has foot in the fast-growing telecom market	66.65	15.45
VERIZON COMMUNICATIONS VZ This former Baby Bell is finding new access in the long-distance arena	56.19	17.9

EC: 8 **BASED ON ESTIMATED 2001 EARNINGS DATA: ANALYSTS SURVEY, BLOOMBERG FINANCIAL MARKETS

BEST BET

NEW TRICKS

Look for old-line companies that are looking beyond their traditional horizons to build new businesses. Enron, Verizon, Allstate, and Boeing have all branched out into new fields—or are using new channels to do business

BusinessWeek online

For a video of Christopher Wolfe, go to the Dec. 25 issue online at www.businessweek.com



biotech industry, experts say, is stronger than ever. "It comes down to the three P's: products, profits, and pipelines," says Michael Becker, author of the monthly *Internet newsletter, Beck Biotech*. He notes that some 30 biotech drugs are now in human clinical trials, and more than 100 of them are close to coming to market. And at least 20 biotech companies are posting profits, compared with four just six years ago. And the group has strong financing. Of the 30 publicly traded biotech outfits, analysts figure 194 have enough cash to weather an economic downturn. "The

Biotech Should Keep Rolling

The stocks look like good bets as most tech shares fade

BY ELLEN LICKING

BEST BET

OLD STANDBYS

Amgen remains the stockpickers' darling because of the blockbuster potential of three drugs in late-stage trials. Genentech is poised to clean up once the FDA approves Xolair, its new asthma drug, possibly in 2001.

Biotech stocks are a monster roller-coaster. News of a potential blockbuster drug or pending merger—or, conversely, bad results in a clinical trial—can make prices soar or plunge 15% or more in a day. For all their volatility, though, biotechs have racked up big gains this year. Can they continue to buck the tech decline?

Consider this: The AMEX Biotech Index is up 75.2% for the year, while the Nasdaq Composite Index is down nearly 30%. Biotech's day-to-day gyrations won't disappear: Bringing new therapeutics to market is, after all, a high-risk game. But analysts and fund managers expect the group to continue to outperform the market into 2001, because they consider biotech shares to be like pharmaceutical and other health-care equities—good defensive picks when markets turn bearish. No matter what the economy does, people need new and more powerful medicines, a demand that will likely increase as the population ages.

There are other reasons to be bullish. The

year alone, the industry raised \$40 billion more than four times the record of just under \$9 billion [raised] in 1993," says Scott Morris of Ernst & Young's national director of life sciences. Companies flush with cash include Immunex, which raised an additional \$3.2 billion in November, and Human Genome Sciences Inc., which raised \$825 million in October. The market for initial public offerings has stayed open for biotech issuers, too. The most recent IPOs include Specialty Laboratories Inc. and Harvard Bioscience Inc.

Biotech companies fall broadly into three categories. Genomics companies are among the riskiest investments. These are early-stage companies such as Celera Genomics Corp. and Incyte Genomics, that sell patented genetic information and analytical tools to other biotech and pharmaceutical outfits. Then there are small-cap biotechs, such as Geron Corp. and Cell Pathways Inc., that are struggling to turn novel technologies into new drugs. If they survive the grueling 12-to-15-year process required to turn an idea into a marketable product, these outfits could become huge successes. But the risks are enormous: Only one in 5,000 compounds actually makes it out of the lab and into the clinic.

GENOME TOOLMAKERS. The safest investment, however, are biotech's top-tier businesses. They have real profits, products on the market, and well-filled pipelines. Still, because of the inherent volatility of all biotechs, Faraz Naqvi, manager of Dresdner RCM Biotechnology Fund, cautions investors to put no more than 10% of their portfolio into biotech stocks and to hold them for at least three years.

Much of the recent buzz about biotech is due to the rise of genomics companies, which mine the human DNA sequence for information that

— CERTIFIED PRE-OWNED LEXUS —

Other Cars Are Pre-Owned. But That's Where The Similarities End.



Truth be told, Certified Pre-Owned Lexus Vehicles have more in common with new cars. Like the "Lexus of warranties" that backs them for three years from your purchase date or 100,000 total vehicle miles.* A complimentary loaner car.† Extremely competitive financing rates and lease terms. And one more important thing that separates a Certified Pre-Owned Lexus from others: They're available only at your Lexus dealer. Stop by for a test drive today.



lexuscpo.com

Many biotech stocks trade at frothy multiples of 25 to 30 times revenues. A good story, warns an expert, "doesn't mean a viable business model"

might be turned into novel therapies. Many trade at frothy multiples of 25 to 30 times revenues. "[Although] many of these early-stage companies have great stories," Naqvi cautions, "that doesn't mean they have viable business models."

For investors who want to play genomics, Naqvi recommends "pick-and-shovel" outfits that develop the analytical tools that drug developers need to exploit the genome. "The advantage of these companies is that their revenues don't depend on getting drugs through risky clinical trials," Naqvi says. His top bets: Applied Biosystems Group and Waters Corp. Meanwhile, Robert J. Toth, an analyst at Prudential Securities Inc., likes Rosetta Inpharmatics Inc., which went public late this summer and is developing software programs to help genome researchers.

If genomics plays seem too risky, consider such biotech heavyweights as Amgen, Genentech, Immunex, and Idec Pharmaceuticals. These companies, which have products both on the market and in late-stage human testing, are also working with genomic data—and their prices have come down a good deal. Genentech Inc., for instance, is trading in the mid-70s, down from its March high of 122, despite the imminent launch of Xolair, a drug that Naqvi calls the "first asthma advance in 40 years." Xolair appears to prevent asthma symptoms, instead of lessening the effects of an attack once it's under way, as current medications do. Meanwhile, Chiron Corp., which is developing novel tests to diagnose AIDS and other infectious diseases, is trading at 44, not far from its 52-week low of 33.

Yet another good buy may be Amgen Inc., whose shares have remained flat since March.

FOR THE RECORD

Faraz Naqvi runs the \$976 million Dresdner RCM Biotechnology Fund, which has posted a return of 396% over the past three years.

ON VOLATILITY

The biotechnology industry is inherently volatile. It's not uncommon to see stocks jump up 10% one day and fall 15% the next. Investors have to turn a blind eye to huge short-term swings in stock prices, and hold on for a longer period.

ON GENOMICS

This is a substantial



FARAZ NAQVI
Manager, Dresdner RCM's
Biotechnology Fund

industry that will transform medicine. But most genomics stocks are bet stocks, so be selective. Choose the most mature companies with well-developed business models, such as Human Genome Sciences and Millennium Pharmaceuticals. Companies that sell cutting-edge technologies to drug developers are also a good bet, such as Waters.

Biotech Plays

COMPANY/SYMBOL	PRICE*	P-E RATIO*
AMGEN AMGN Biotech's bellwether stock	\$66.68	53%
IDEC PHARMACEUTICALS IDPH A big hit with Rituxan, and another in the pipeline	195.43	141
APPLIED BIOSYSTEMS ABI Producer of analytical tools for drug discovery	86.38	82
WATERS CORP WAT Another tool maker, with a leg up on ABI	72.81	55
ROSETTA INPHARMATICS RSTA Software developer could be biotech's Microsoft	18.81	N/A

*As of Dec. 8 **Based on estimated 2001 earnings

DATA: ANALYSTS SURVEY, BLOOMBERG FINANCIAL MARKETS

Reason: uncertainty about a patent-infringement suit that the company filed against a rival, Transkaryotic Therapies Inc. Patent experts and analysts widely believe that Amgen will come out on top. And the company is expected to launch several new drugs in the next year and a half. In December, 1999, the company filed for Food & Drug Administration approval for Aranesp, long-acting anemia drug. Next year, it's hoping to gain approval for two other biotech drugs, IL-1 for rheumatoid arthritis, and Abarelx for prostate cancer. The company anticipates big markets for these three products could total more than \$6 billion. "If I had to recommend just one stock, it would be Amgen," says Dan Gillespie, manager of the Rydex Biotechnology Fund.

PRACTICE DIVERSITY. The most cautious way to invest in biotech is through a diversified mutual fund. Naqvi's fund, for example, racked up a 26.7% return in the third quarter, highest of any fund in health care. And its return of 263.9% over the past year makes it the leading fund in any category. Naqvi tries to limit volatility by investing in as many as 60 different biotech outfits. His largest holding, Genentech, makes up less than 4% of his portfolio.

Even more diversified is Gillespie's Rydex fund. Although he owns such up-and-comers as Celera and Human Genome Sciences, most of his 75 holdings are established companies with products at least in late-stage human testing. His return so far this year is 34%. "Investors won't hit a home run" with his fund, Gillespie says. "But neither will they crash and burn if the sector gets spooked."

Even if the tech plunge eventually pulls biotech down, too, analysts believe the group is just beginning to flower. There's little doubt that novel medicines derived from the human genome will eventually transform the way medicine is practiced. Chosen wisely—and held for the long haul—biotech investments might transform your portfolio, too.

"Turn a blind eye to huge swings"



**Your daughter's
thinking, "A black-tie
wedding for 300."**

**We're thinking,
"Good thing you
considered PNC's
BlackRock Funds."**

sors

PNC
Real Estate
Finance

PNC
Mortgage

BlackRock

PNC
Bank

PNC
Secured
Finance

PFPC

Venture
Bank@
PNC

PNC, we offer a wide range of investment opportunities—including prestigious BlackRock Funds. So when you think about what you want of life, let PNC think about the investments to get you there. For more information, just call us at 1-888-PNC-7030, or visit www.pnc.com.



The Thinking Behind The Money

Any Lose Value
No Bank Guarantee
©2000 The PNC Financial Services Group, Inc. ("PNC"). For more complete information about BlackRock Funds, including all charges and expenses, call 1-888-PNC-7030 to obtain a prospectus. Please read it carefully before investing. Shares of the Funds are distributed by BlackRock Distributors, Inc., which is not an affiliate of PNC. Affiliates of PNC receive compensation from the Funds for providing investment advisory and other services.

'Screaming Buys' Among the Small Fry

Little guys in industry, finance, and energy look hot

BY LEWIS BRAHAM



BEST BET

BUY WISELY

Be contrarian, but not foolhardy. Look for beaten-down small caps that still have strong cash flow, have little debt, and which are buying back shares

Over the past year, investors' experiences with large-cap stocks have ranged from disappointment, as with IBM or Wal-Mart Stores, to outright disaster, as with Lucent Technologies or Yahoo! But in one little dark corner of the market, some savvy investors are delighted with returns from small-company stocks that most have never heard of—auto-parts makers Simpson Industries and Tesma International; or Agrium, which produces fertilizer.

Yes, small caps are back—but not the tech whizzes that so dazzled Wall Street in 1999. Those are “small-cap growth” companies, so named because of their perceived high-growth prospects. Since the Nasdaq peaked in March, many small-cap growth stocks have been in a death spiral. The Russell 2000 Growth Index, a

barometer of their stock price performance, down 19.6% so far this year. Small-cap value stocks, which are mainly small industrial, financial, and energy companies—yes, Old Economy stocks—are in the pink. The Russell 2000 Value Index is up 16.7%, and the sector's prognosis for the new year is continued good health.

What's going on? Historically, value stocks have been economically sensitive, falling as economic growth slows and rallying as the economy climbs out of recession. Yet growth is slowing and these small-cap value stocks, with market capitalizations of \$2 billion and under, are on a tear. There is a reason for this odd behavior, says Satya Pradhan, a quantitative strategist at Merrill Lynch & Co., who focuses on small-cap stocks: “You have a lot of stocks that are priced as if we're in a recession,” he says. In effect,

says, small value stocks never recovered from the global market crisis in late 1998.

The result is rock-bottom valuation. The price-to-book value ratio of the Russell 2000 Value index is an exceptionally low 1.5, vs. 5.4 for large company stocks. That valuation gap has existed for more than two years, but it wasn't until recently—when the large-cap glamour stocks stumbled—that any attention was paid to the mundane little companies.

Now, investors are taking notice—and so are corporate buyers. Not only are the stocks cheap, but they're small enough to be bought by big companies using pocket change. “Over the last 18 months, 15% of our holdings got bought off by larger companies,” says Robert H. Perkins, portfolio manager of the Berger Small Cap Value Fund. “If the investing public doesn't want to recognize the value, Corporate America will.”

And those acquirers have been willing to pay substantial premiums. This June, Ingersoll-Rand acquired one of Perkins' holdings, refrigeration maker Hussmann International, for a 116.7% premium over its pre-deal price.

SELF-SUFFICIENT SECTOR. Most value investors don't go looking for takeover candidates. It's the natural benefit of owning cheap stocks. Perkins buys companies well off their stock-market highs that trade for low multiples of free cash flow. Free cash flow takes net earnings and adds back depreciation and amortization (noncash charges but subtracts capital expenditures and dividends (which use cash). The idea is to see how much “leftover” cash a company has after one year of business as usual.

Such companies are self-sufficient enough that they don't need outside financing to grow. With the extra cash, they often buy back their own stock, which increases earnings per share. Two of Perkins' favorites are Manitowoc Co. and Tecumseh Products. Manitowoc is the largest crane

HUMAN & DIGITAL

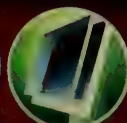


Hyundai Electronics:
Creating a Friendlier Digital World

While others concentrate their efforts merely on making digital products, one company is building the foundation of a new digital world. At Hyundai Electronics, we've long been a leader in semiconductors, and now we're bringing new digital technology to the world. Through specialization and an innovative management system, Hyundai Electronics is building the digital world you've always wanted to live in. Hyundai Electronics. Welcome to the friendly future.



Semiconductors



LCD



Communications

HYUNDAI
ELECTRONICS

Small Plays with Potentially Big Returns

COMPANY / SYMBOL

PRICE*

P-E**

AVT AVTC

Specializes in unified messaging for voice mail, faxes, and e-mail.

\$4.94

11.0

LEAR LEA

Leading supplier of auto interiors—seat frames, door panels, and acoustic systems.

21.44

5.2

MANITOWOC MTW

Largest crane manufacturer in the world. Also big in building ice machines.

28.00

10.1

PARTNERRE PRE

Midsize catastrophe and casualty reinsurer in a sector ripe for takeovers.

55.81

11.4

TECUMSEH PRODUCTS TECUA

Maker of lawnmower engines and refrigeration gear is buying back stock.

46.56

10.2

WENDY'S INTERNATIONAL WEN

Fast-food franchiser trades at a low p-e relative to its expected earnings growth.

25.38

14.8

*As of Dec. 8 **Based on 2001 earnings DATA: ANALYST SURVEY, BLOOMBERG FINANCIAL MARKETS, FIRST CALL



manufacturer in the world and a leading player in the ice-machine business. Tecumseh makes lawnmower engines. Both companies are buying back shares. Both are generating large amounts of free cash flow and sell at bargain-basement prices. Manitowoc trades at 11 times free cash flow and Tecumseh at 14 times.

Portfolio manager John Burbank of State Street Research Aurora Fund tries to buy companies selling at a discount to what he calls their private market value—what a knowledgeable investor in the industry would pay for the whole company. With that analysis, he thinks there are some “screaming buys” in old industrials, particularly in the auto-parts industry. His favorites, Lear and BorgWarner Automotive, are both selling below book value and less than seven times earnings. That, he says, makes them cheap even though the auto industry is slowing. Lear currently trades at 4.5 times cash flow, while the average in the auto-parts industry is 6.1.

While value investors gravitate to the tried and true, some will venture into technology and telecom if the price is right. Jerome J. Heppelmann of PBHG Small Cap Value Fund says many fallen tech companies are now on his radar screen. His current favorite is CTS Corp., an electronics components supplier



that's 49.6% off its high a trades at just 11.9 times next year's earnings. The Berg Fund's Perkins likes telecom equipment maker AVT, at 4.94 and with a

e of 11. What interests him is that AVT's close competitor, Active Voice Corp., was recently acquired by Cisco Systems Inc. He figures AVT is now 86.3% off its 52-week high, could be next. **RECESSION THREAT.** A problem with small stock is liquidity—which means the ability to sell stock quickly without taking a hit on price. That's got some institutional investors shifting upsize into mid-caps, with market capitalizations from \$1 billion to \$10 billion. Indeed, mid-cap value stocks have done nearly as well as small-cap value. Strategist Christopher Wolfe of J.P. Morgan & Co. suggests PartnerRe, a reinsurer; and Wendy's International, the fast-food chain, as good mid-cap value plays.

While liquidity is important for both small-cap growth and value investors, growth players need it more. “There is absolutely less liquidity in small-cap value stocks than in small-cap growth,” says analyst Brad Lawson of Frank Russell Co. “But value investors tend to trade much less frequently. They don't need the liquidity.”

One potential threat to the value story is deep recession. But Federal Reserve Chairman Alan Greenspan is already signaling that he may move to lower interest rates rather than risk a recession. If that's the case, the takeovers and upward momentum of small-cap value stocks should continue.

BusinessWeek online

For an audio interview with Satya Pradhuman and John Burbank, go to the Dec. 25 issue online at www.businessweek.com

FOR THE RECORD

Satya Pradhuman is Merrill Lynch & Co.'s quantitative strategist for small-cap stocks.

ON SMALL-CAP VALUE STOCKS:

They should continue to move upward. There haven't been these kind of valuation discrepancies between growth and value in 20 years. As a result, we have seen a pickup in merger-and-acquisition activity in value stocks. That ultimately puts a floor under small-cap value stocks.

**ON FAVORITE SECTORS:**

In health care, we like nursing homes and hospitals, where there are compelling values and great outlooks. Energy isn't the deep value play it was a year ago. But as a group, small-cap energy valuations have historically been at parity with large-caps. Currently, they're trading at a 20% discount.

“We have seen a pickup in M&A”

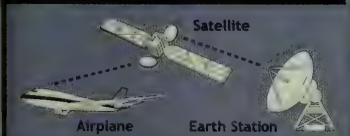
We integrate. You communicate.

We bring the IT revolution to you.

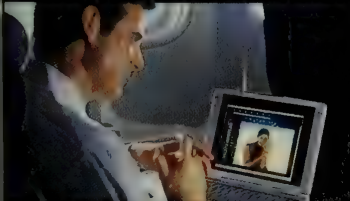
Mitsubishi Electric technologies are all around you. In more than 200 satellites, nearly 500 earth stations and countless points in between. Integrated into wide-ranging systems—our own and those of partners and customers—our products and know-how are helping change the way you keep in touch.

Witness the coming *Connexion by Boeing*SM broadband global communications network, to which we are contributing as a regional partner. You may be hurtling through the air at 10,000 meters, but e-mail and real-time Internet connections will still be within reach.

We integrate. You communicate.



Connexion by BoeingSM communications network.



Picture simulated.



www.mitsubishielectric.com/IT



REITs Still Offer A Solid Defense

But returns probably won't be as hot as this year's

BY LEWIS BRAHAM

Real estate investment trusts promise salvation for risk-averse investors in 2001. While the sector will never have the oomph of tech stocks, it should continue to do its job. Although REITs, which are real estate holding companies, trade like stocks, most of their earnings are paid out as dividends. So they have some of the growth potential of stocks and some of the stability of bonds.

When the Nasdaq index took a nosedive in March, money managers suddenly saw the defensive value of REITs. Equity REITs had a 21.6% average total return in 2000 vs. the Nasdaq's 28.2% slide. "The collapse of the tech stocks was a major factor in the REIT rally," says Barry Vinocur, editor of *Realty Stock Review*.

Most experts think the sector will do well in 2001, but not as well as in 2000. Merrill Lynch & Co. recently lowered 2001 earnings estimates on nearly 35% of the companies it covers. "We're not throwing in the towel," Merrill analyst Steve Sakwa stresses. "We still think the group is going to deliver 10% to 12% total returns next year."

Even if earnings drop, REITs currently have a 7.6% average yield, which is protected by their strong balance sheets. Any

stock price appreciation above that just add to your total return. Nor are the estimates that bad, given that the entire economy is slowing. "There are estimates out there for the S&P 500's growth next year that are lower than REITs," says manager David Jellison of Columbia Real Estate Equity Fund.

BARGAINS. Certain sectors will hold up better than others. Take REITs that own office and apartment buildings in the Northeast and Northwest. Demand is strong, and supply limited, says Martin Cohen, manager of Cohen Steers Realty Fund. Office REITs also look attractive because their leases are typically for 10 years, locking in high earnings growth. Cohen likes Vornado Realty, Equity Office Properties, and Boston Properties. His favorite is Spieker Properties, the largest office landlord in Silicon Valley. Such popular names have higher valuations and lower yields.

Bargain hunters can look at health-care and nursing-home REITs. "But they're not for the faint of heart," says Vinocur. Indeed, cuts of government reimbursements to nursing homes have led to losses. But the worst has been priced into these stocks, and because the U.S. population is aging, their earnings may soon pick up. Cohen and Vinocur both favor Nationwide Health Properties and Health Care Property Investor, which yield 14% and 10.5%, respectively. Cohen thinks those yields are sustainable.

Columbia's Jellison thinks industrial REIT ProLogis is a great bargain. With a big part of its warehouse and cold storage business in Europe, ProLogis has been hurt by the euro's decimation. But Jellison says "the underlying industrial business is extremely healthy." When the euro turns the corner, this stock should do well.

Managers are avoiding two REIT sectors—hotels and retail—because of their economic sensitivity, but the others should have bright future. Everyone needs a place to live and work. In that respect, REITs could be one of the safest places to invest as the economy cools.

BusinessWeek online

For an audio interview with Martin Cohen, go to the Dec 25 issue online at www.businessweek.com

BEST BET

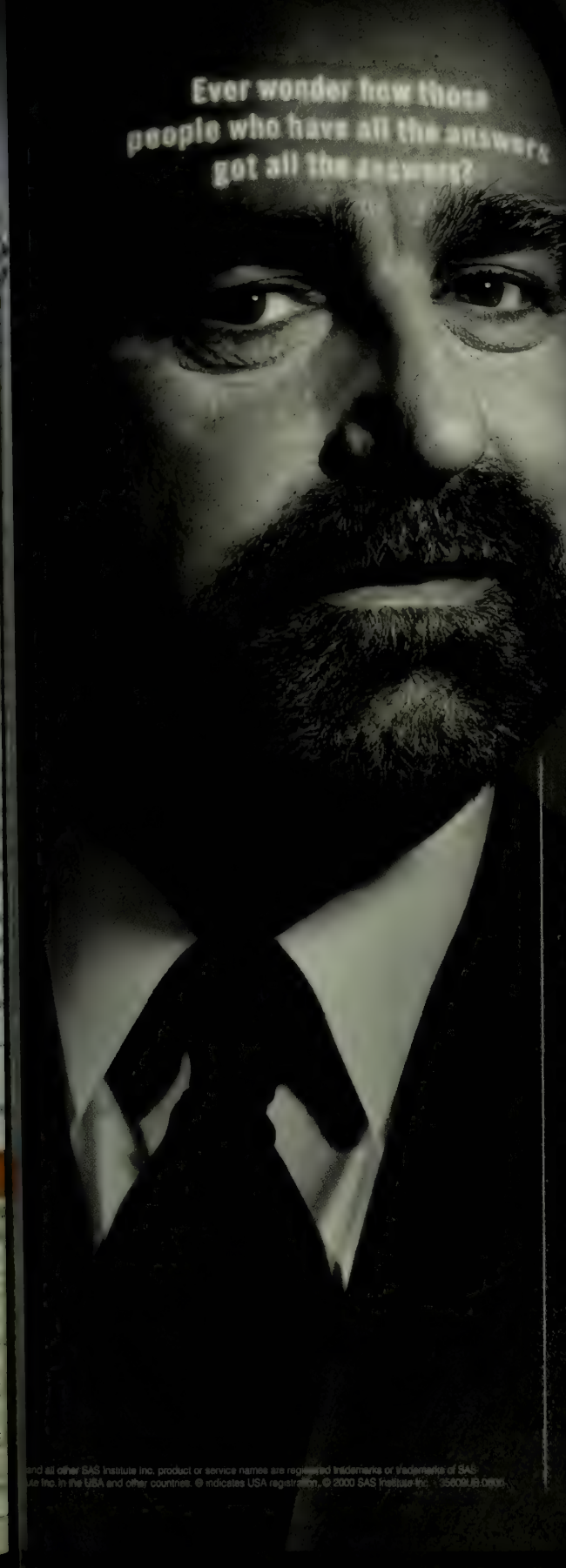
STAYING POWER

Certain REIT sectors should hold up better in a slowdown than others. Companies owning offices and apartment buildings in the Northeast and Northwest should do well because demand is high and supply is limited

Real (Estate) Opportunities

STOCK/SYMBOL	PRICE*	YIELD
EQUITY OFFICE PROPERTIES EOP Largest office REIT in the U.S.	\$31.12	5.8%
HEALTH CARE PROPERTY INVESTORS HCP Largest health-care REIT	28.69	10.5%
PROLOGIS TRUST PLD Industrial REIT with properties in Europe	21.44	6.2%
SPIEKER PROPERTIES SPK Largest landlord in Silicon Valley	53.06	5.3%
VORNADO REALTY TRUST VNO Largest owner of office properties in NYC	37.81	5.6%

DATA: ANALYST SURVEY, BLOOMBERG FINANCIAL MARKETS, BUSINESS WEEK *AS OF DEC. 8, 2000



Ever wonder how those
people who have all the answers
got all the answers?

Chances are, we had something to do with it. Fact is, 98 out of the FORTUNE 100 count on business intelligence solutions from SAS to explore information, better understand customer and supplier relationships, predict behavior, and unlock hidden opportunities. Today, SAS is leading the industry in bringing this same level of intelligence to the world of e-business. With e-Intelligence from SAS, you can capture, analyze and react to data gathered at any point of contact. And then just as quickly disseminate new findings to anywhere they're needed across your extended enterprise. To get the answers you're searching for, call us today at 1-800-727-0025 or stop by www.sas.com.

The Power to Know.



SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. © indicates USA registration. © 2000 SAS Institute Inc. 15609JL0800

Here's Where the Easy Money Ends

Sluggish earnings and deregulation could sting

BY EMILY THORNTON

You can sense it from analysts' recent downward revisions of earnings prospects for even financial juggernauts such as Morgan Stanley Dean Witter and Goldman Sachs. And you can see it in the dwindling list of initial public offerings, as well as an alarming increase in bad loans.

After several years of record-breaking earnings growth, Wall Street is facing rough times.

To be sure, key ingredients remain in place for financial services to do better than the economy as a whole over the long term. A growing legion of individual investors continues to flock to the stock market. And in several years, banks, brokers, and asset managers will surely benefit from a wave of retiring baby boomers.

But in 2001, financial stocks hold big risks for investors. Despite the prospect of lower interest rates—normally a boon for financial stocks—sluggish earnings growth combined with deregulation have triggered a shakeout. Since the passage of the Gramm-Leach-Bliley Financial Services Modernization Act in November, 1999, banks, insurers, asset managers, and brokers have been free to compete in one another's territories for the first time since the Depression.

So, executives are bracing themselves for lower margins partly as a result of the increased competition. "It will be a little bloody for some of these businesses," Bank One Corp. Chairman and CEO James Dimon told executives at a recent Securities Industry Assn. meeting. "I don't think the advice business will go away. But it may come cheaper."

As the Darwinian struggle plays out, the consensus among analysts is that the growth of securities firms' profits will trail

the anticipated 10.6% rise in 2001 earnings of companies in the Standard & Poor's 500-stock index for the first time in two years. Brokers' and asset managers' earnings may decelerate to a tepid 7% increase in the coming year, vs. a crackling estimated 27% rise in 2000, according to First Call Corp. Indeed, investment banks such

as Morgan Stanley Dean Witter & Co. and Bear Stearns Cos. Inc. could soon post their first quarterly earnings declines since they were battered by the Russian currency crisis in the last quarter of 1998.

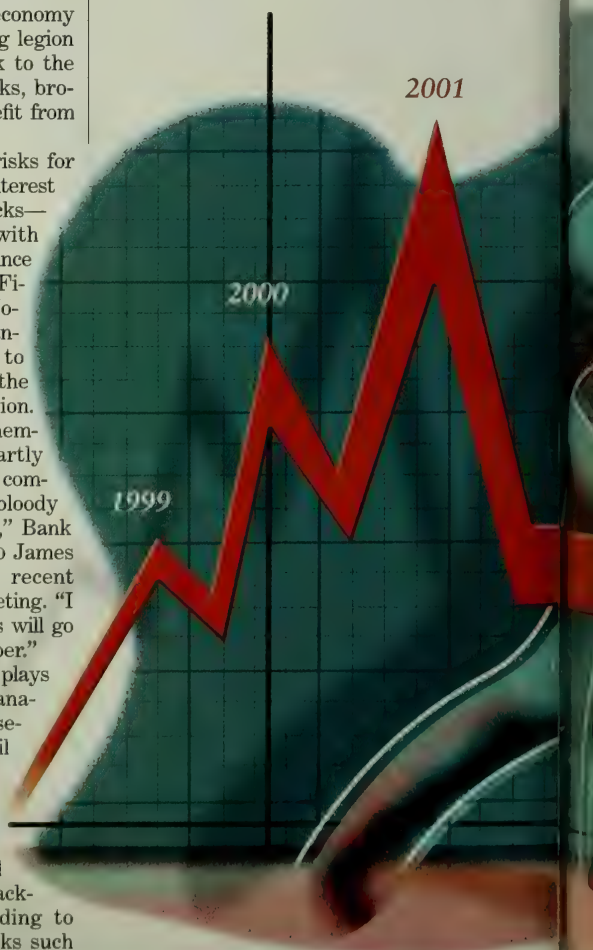
FOLLOW THE MONEY. Banks wallowing in credit woes such as First Union Corp. and Bank of America Corp. could be even worse off. For now, though, First Call says analysts are estimating bank earnings will rise by 11%. That leaves the industry's least exciting players—insurance companies—as potentially its best earners with profits jumping 21% in 2001.

Investors with iron nerves should be able to find some winners even in sluggish sectors. Investment pros' advice: Follow the money. That means investing in brokers, banks, and insurance companies that are raking in retail assets from the rich—and avoiding those weighed down by widening credit spreads and vanishing advisory fees.

Asset-based businesses such as retail securities firms or money managers with stable revenue and earnings streams stand the best chance of surviving the war for assets, say analysts. Firms with a focus on high-net-worth clients or stron

Free-For-All

Banks, insurers, asset managers, and brokers can now compete in one another's territories. The result: Margins could get hammered



istribution systems are best placed to beat the competition, says Bear Stearns analyst Amy Butte. That's why Charles Schwab Corp. looks alluring to many. Following its purchase of U.S. Trust, it is raking in more assets from wealthy customers. Butte also likes two outfits often mentioned as potential takeover targets—securities firm Legg Mason Inc. and asset manager Neuberger Berman Inc.

Given that some brokers' stocks have already taken substantial hits, bargains are popping up. Some analysts like Morgan Stanley Dean Witter and Goldman, Sachs & Co. for that reason. And expectations for Lehman Brothers Inc. have sunk so low that it's a candidate for a strong bounce. Indeed, the stock surged 10%, to 68, on Dec. 11 after Goldman Sachs suggested its stock price had fallen too low.

Firms that dominate a niche may perform better than the sector as a whole. Tom Goggins, portfolio manager of John Hancock Financial Industries Fund, which is up 25.2% this year, likes State Street Corp. and Northern Trust Corp. because they are less reliant on loans and have strong fee-based global custody and estate planning franchises. But his real fa-

FOR THE RECORD

Bear Stearns Cos. analyst Amy Butte is known for making gutsy calls. She's looking for retail securities firms and asset managers to rally.

ON SECURITIES' STOCKS:

We're looking for a less robust 2001. The return on equity at investment banks will come down. In 2000, they will produce anywhere from 25% to 33%. Next year, we're looking for a 20% to 25% return.

ON FINANCIAL STOCKS:

Our favorite is Lehman Brothers. We're also recom-



AMY BUTTE
Securities analyst
Bear Stearns

mending asset-based businesses such as Charles Schwab, Legg Mason, and Neuberger Berman.

ON CONSOLIDATION:

The consolidation in asset-based businesses will continue. These firms, with growth prospects of 10% to 12%, are very attractive to banks, insurance companies, and European firms.

'Our favorite is Lehman Brothers'

vorites are commercial property/casualty insurers that have been only recently able to raise premiums for the first time in years. "We think the property-and-casualty stocks have the potential to continue their run because we believe there will be a continuing hardening of the cycle," says Goggins. "Price increases are sticking." Among his top choices: Ace Ltd. and Everest Re Group Ltd.

The tectonic shifts now reshaping the financial-services industry will create lots of opportunities, says Lanny Thorndike, chief investment officer of Century Capital Management Inc., whose financials-heavy Century Shares Trust is up 33.81% through Dec. 8. "This is a good opportunity to participate in the change agents," he says. Thorndike likes Bank of New York and insurer American International Group partly because both companies are leading the pack in building up global franchises.

Risk takers who believe that big is beautiful may want to look at new megabanks.

Merrill Lynch & Co. financial-services industry analyst Judah Kraushaar's first choice is Chase Manhattan Corp.

He thinks that with more corporations asking for credit lines from securities firms, investment banking is becoming more of a balance-sheet game. Through its merger with J.P. Morgan, Chase could become a trailblazer by combining Chase's clients and balance-sheet strength with Morgan's securities products and global reach. Still, some money managers are cautious about recent financial mergers. They're staying on the sidelines until it's clear that these new marriages will be driven by asset growth—or cost cutting.

If investors choose wisely, it could pay to invest in a broker, bank, or insurer. But they had better tread carefully. □

BEST BET

SIZE MAY COUNT

Risk-takers who believe that big is beautiful may want to check out the recently formed megabanks. Chase Manhattan could become a trailblazer by combining Chase's clients and balance-sheet strength with Morgan's global reach

Some Dot-Com Jewels Will Shine Again

But investors need to be extremely discriminating

BY DEAN FOUST

Forget *The Millionaire Next Door*. For that matter, forget all those Motley Fool books. For many investors who got swept up in the dot-com craze, the true story of 2000 would be titled *How I Turned a \$25,000 Internet Portfolio into \$1.95 in Cash*. And with the Goldman Sachs Internet Index now down 67% for the year and a growing number of former high-fliers verging on bankruptcy, many investors may be content never to go near another dot-com.

But lest we forget, one old saw of investing is that the time to buy is when the blood is running down Wall Street. And many pundits believe that investors willing to dig carefully through the Internet rubble—and with the stomach to ride out the inevitable ups and downs of the Net sector—will find undervalued gems yielding big payoffs in a few years. “There are so many bargains right now,” says money manager Alberto Vilar, whose Amerindo Technology Fund in 2000 has given back roughly two-thirds of the 249% gain it racked up in 1999. “They’ve thrown the baby out with the bathwater.”

To be sure, investors dabbling in Net stocks

must be extremely discriminating: The dot-com shakeout is far from over. Wall Street pros recommend against bottom-fishing among e-tailers even those whose shares look tempting at mere buck or two. “I think a number of e-tailers will fold in January if Christmas doesn’t go well and [venture capitalists] refuse to put any more money in them,” says Alan Loewenstein, chief manager of the John Hancock Technology Fund. **STAYING POWER.** And despite the sharp correction in recent months, many analysts warn that even media and e-commerce icons that have demonstrated staying power, such as Yahoo! Inc. and Amazon.com Inc., still look overvalued when measured by traditional standards. “I think Yahoo will be a survivor, but does it deserve a market cap of \$23 billion? I just don’t know at what price you should get in,” says Loewenstein.

Similarly, some savvy analysts remain cautious about the outlook for Internet service providers, such as EarthLink Inc., and data carriers like Level 3 Communications Inc., which may see pressure on their margins. “ISP is ultimately a bandwidth business, and the price for bandwidth is heading toward free,” says David Nadig, portfolio manager for the Open Fund.

The near-consensus pick among fund managers and analysts interviewed by **BUSINESS WEEK**: Web-hosting giant Exodus Communications Inc. Exodus stock plunged from a peak of 90 last April to around 35 in mid-December.

FOR THE RECORD

Robert Turner is chief investment officer for the Turner family of funds. His Turner Technology Fund was down 7.5% through Dec. 8.

ON THE NEXT BIG TREND

Remember the scene in *The Graduate* where the character advises Dustin Hoffman to go into “plastics”? This decade, the story is going to be the wireless Internet.

HIS FAVORITE PLAYS

Three stocks could be in the sweet spot of the next-generation Internet. Aether Systems has the operating sys-



ROBERT TURNER
Chief Investment Officer,
Turner Funds

tem that a lot of the new wireless networks will operate on. Openwave, formed by the merger of Phone.com and Software.com, provides critical software to the wireless providers. If everything kicks in, it could earn \$1 a share in 2002. VeriSign provides user authentication—which, on the wireless Internet, is more complex and more necessary.

“The story is going to be wireless”





Net play is E*Trade Group Inc. Its shares have tumbled from 20 to below 10 since September. But E*Trade has been diversifying. It now has healthy businesses in banking and corporate stock option programs and is expanding globally—with a presence now in 30 countries.

And with E*Trade's stock now trading at less than 2 times book value—vs. 2.9 for traditional Street firms and 3.7 for other cyberbrokers—Appleby says E*Trade may get snapped up. "They'd make an excellent acquisition candidate," he says.

STRONG BRAND. Paul G. Meeks, senior portfolio manager at Merrill Lynch Internet Strategies Fund, looks for companies reaching critical mass in their niche. Meeks likes homestore.com Inc. Thanks to close partnerships with the likes of the National Association of Realtors (NAR), it now has a dominant share of online real estate listings. Meeks also favors Getty Images Inc., which controls more than 70 million images and some 30,000 hours of film—giving it a lock on the online images sold to ad agencies and other media companies.

Meeks is similarly bullish on TMP Worldwide Inc., whose Monster.com subsidiary has a strong brand among jobs and e-recruiting sites. "TMP is an absolute gift every time it hits the mid-50s," says Meeks, who expects TMP to boost profits more than 40% next year, to \$1.31 a share. If so, TMP's shares, now in the mid-60s, "could easily go back into the 80s," he says.

But then, this is the Internet: No dot-com stock is without risk. Meeks cautions that if the economy dips into recession, demand for TMP's placement services could fall. And the government is reviewing homestore's partnerships to determine if—a la Microsoft Corp.—they're inhibiting competition. But if you're willing to ride out such risks, now might be the time to take a flier on the beaten-down Internet sector. If the Web is here to stay, investors may never see these kinds of valuations again. □

BEST BET

STRONG SITES

Look for Internet companies with high gross margins such as eBay and Homestore. These companies have a better chance of surviving the online price wars and shouldering the rising marketing costs associated with attracting new customers to their sites.

gely on fears that its many dot-com clients could go belly-up. But First Analysis Securities Corp. analyst Howard Smith notes that Exodus w derives roughly 60% of its revenues from d Guard companies such as Merrill Lynch & i. "They have a broad base of customers who ll survive the downturn," says Smith, who expects Exodus to turn profitable in late 2001.

Internet security software, too, is looking like a orm-proof sector. Many companies deferred ending on security while they dealt with the Y2K

sis, but analysts are now looking the sector to grow 40% annual- SunTrust Equitable Securities alyst P. Sean Jackson's favorite npanies are Check Point Software Technologies Ltd. and Inter- Security Systems Inc. But giving their lofty valuations, Jackson nks better bargains may lie in inbow Technologies Inc., whose ware speeds the transfer of encrypted data, and SafeNet Inc., hich sells products to network- giant Cisco Systems. "When a hear Cisco talking about its urity solutions, there's a good e that SafeNet's technology is bedded in them," he says.

Robertson Stephens Inc. analyst ott W. Appleby believes the best

Glimmers of Potential

COMPANY/ SYMBOL	PRICE*	COMMENT
EXODUS COMMUNICATIONS EXDS	\$30.63	Web hoster gaining big-league clients such as Merrill Lynch
E*TRADE EGRP	9.96	Diversifying revenue stream beyond stock trading
GETTY IMAGES GETY	28.25	Leading player in digital images used by media
AETHER SYSTEMS AETH	68.06	Operating system is becoming wireless standard
HOMESTORE.COM HOMS	28.00	Emerging as leading real-estate portal
TMP WORLDWIDE TMPW	64.50	Online job-search service is already profitable
INTERNET SECURITY SOFTWARE ISSX	81.43	Corporate spending on Internet security software likely to explode
RAINBOW TECHNOLOGIES RNBO	20.00	Software maker's programs help speed encrypted data

* At Dec. 8 close

DATA: ANALYST SURVEY, BLOOMBERG FINANCIAL MARKETS



I DON'T TAKE SICK DAYS.

CHANGE WHAT YOUR SOFTWARE IS CAPABLE OF DOING

Today's business needs the reliability of Microsoft® Windows® 2000 Professional. If you want your people to work faster. Work mobile. Work smarter. They need a PC operating system that works all the time. Windows 2000 Professional is up to 30% faster and, based upon NSTL test results, 13 times more reliable than Windows 98*. So at a time when any competitive edge can make a difference, your people will spend far less time calling the help desk, and far more time



*For full reports, and test results see: eTesting Labs (formerly ZD Labs) test results November 1999 (<http://cg.zdnet.com/link?18431>), and NSTL, February 2000 (www.nstl.com/html/windows_2000_reliability.htm).
© 2000 Microsoft Corporation. All rights reserved. Microsoft, Windows, and the Windows logo are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

A close-up portrait of a man with light brown hair and blue eyes, looking directly at the camera with a serious, determined expression. He is wearing a dark green button-down shirt. The background is a solid, bright yellow.

I WILL NEVER QUIT.

YOU CHANGE WHAT YOUR PEOPLE ARE CAPABLE OF DOING.

productive. Windows 2000 Professional was designed specifically for
s Internet-based technology and gives your people the reliability, speed,
mobility required to do their jobs. Microsoft Windows 2000 Professional.
business. All the time. For information on upgrading your business, talk
or IT professional or visit microsoft.com/windows2000/pro
are for the Agile Business.

Microsoft

After the Bubble Bursts

Some European sectors could do well in a downturn

BY DAVID FAIRLAMB

Investors in Europe face a very modern muddle in 2001: how to make money in the first New Economy slowdown. Old Economy problems—higher oil prices and interest rates, plus the sickly euro—cut short the long-awaited tech-driven growth spurt, which peaked at 3.5% in the second quarter of 2000. Europeans had barely gotten used to the idea of investing in dot-coms when the bubble burst worldwide. Frankfurt's Neuer Markt, which specializes in young companies, has lost more than half its value since February. The euro zone markets fell about 7% in 2000, and analysts expect they'll end 2001 higher by 10% to 15%.

"European high tech now has all the appeal of a French beefsteak," quips Simon Ferguson, a Paris-based strategist for the Swiss private bank Julius Bär, referring to the "mad cow" panic.

When an economy slows, investors traditionally sell high-growth and cyclical stocks for dividend-paying value stocks and sectors whose earnings hold up in a slump. But normally in-

trepid analysts say they're having more trouble than usual proffering advice. "We've never experienced a New Economy downturn, so we don't know precisely what it means," explains Johannes Reich, head of equity research at Bank Metzler, a leading German private bank. To complicate things, fund managers who track Morgan Stanley Dean Witter's MSCI index may see euro-zone stocks and buy British issues following changes in the index's weightings.

No question, caution is the watchword of the day. Still, strategists are relatively optimistic about the European outlook for 2001. For one thing, the euro-zone economy will expand by about 3%. That figure is half a percentage point less than previously forecast, but it should match U.S. growth. If the euro continues to recover from its doldrums, European investors will repatriate some of the \$250 billion they are estimated to have put in U.S. equities in the past three years. A U.S. rate cut, which would likely weaken the dollar, might help. "It could give Continental stock markets a big boost," says Achim Stranz, the chief investment officer in Germany for AXA Investment, the big French insurer. "Either way, we sincerely believe that Europe is undervalued compared to the U.S."

CROSSCURRENTS. Which sectors will do best in an environment with so many cross-currents? Financial-services companies should do well. With the long-term solvency of state pension plans in doubt, Europeans are putting more money than ever into mutual funds and private pension accounts. That will boost the earnings of insurance companies and fund managers. Such companies are usually big bondholders and should also benefit when European interest rates start to fall. Analysts expect that to happen in the second quarter of 2001.

UBS, Switzerland's largest bank, is a favorite, says Aurelia Marxer, a strategist at Vaduz-based Verwaltungs- und Privat-Bank. After two mediocre years, she says, UBS' \$1.25 trillion asset-management operation is picking up steam. UBS also strengthened its global reach by buying U.S. investment bank PaineWebber Inc. UBS shares rose 25% in 2000.

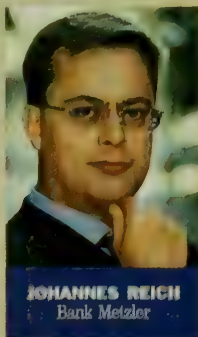
Anne Méniel, deputy head of equity management at Finama Asset Management in Paris, likes well-managed Barclays Bank, Lloyds-TBS, Italy's San Paolo-IMI, and Banca Popolare di Milano. All outper-

FOR THE RECORD

Johannes Reich is head of equity research and strategy at B. Metzler Seel, Sohn & Co. His top 10 list of German equities outperformed Germany's Dax index by more than 25% through Dec. 1, 2000.

ON THE ECONOMIC ENVIRONMENT:

Europe's economy has peaked. But the slowdown is different from previous ones and far more complicated. Old Economy patterns are being overshadowed by New Economy trends that no one fully understands. This is terra incognita, and investors need to be cautious.



ON STOCKS TO BUY:

The investments of choice are Old Economy companies with sound asset structures and the ability to make rapid, selective, and productive use of the Internet and the New Economy. Deutsche Lufthansa is a good example. It sells an increasing number of tickets online. Companies that can benefit from the structural changes sweeping Europe will also do well.

"Investors need to be cautious"



formed the sector. (Bank shares rose 30% in 2000 on heavy merger activity.)

Dropping long-term rates should help shares of insurers, says François Lemoine, head of equity strategy at BNP-Paribas. Lemoine likes Germany's Allianz, which should benefit from German pension rules taking effect in 2002, and France's AXA, which gains from rising retirement savings and more focus on life insurance and asset management.

WIND POWER. Anglo-Dutch consumer giant Unilever, whose shares are

well below their July peak of \$73, is a buy. The company's U.S. acquisitions in the noncyclical food sector should boost 2001 profits. Investors like Unilever's new focus on growing markets.

Analysts are high on several European pharmaceutical companies. Switzerland's Novartis will keep reaping rewards from its recent restructuring. Its share price has risen 10%, to \$1,700, since its September announcement that it would merge its agribusiness unit with that of Britain's AstraZeneca. A softer dollar should cut imported raw-material costs and help earnings.

Along with other strategists, Metzler's Reich predicts that utilities will do well in 2001—particularly Germany's RWE Energie and E.ON. Competition has transformed the once-sleepy German energy market, deregulated two years ago. Reich argues that the companies are more efficient. "German utilities will do better than their counterparts elsewhere in Europe," he says.

Despite Europe's slowing economy, most strategists like auto stocks, especially Germany's Volkswagen. It has reaped the rewards of aggressive management and marketing. Since July, its share price has risen 50%, helped by a buy-back plan started in September and investors shifting funds away from DaimlerChrysler.

A New Economy pick is Copenhagen-listed wind-turbine maker Vestas Windsystems. It has a quarter of a \$3 billion to \$4 billion market that's growing 25% a year. Its shares rose 200% in 2000. Wind energy "is clean, and the technology is advancing rapidly," says Kraland.

It won't be an index buyer's market. But Europe's many high-quality companies could be a haven in a difficult global environment.

Europe's Best Buys

COMPANY/SYMBOL	PRICE*	P-E RATIO
AXA CS France Well-managed insurance and asset-management company	\$135.62	23.1
LUFTHANSA LHA Germany Pioneer among airlines in exploiting the Internet	21.94	12.7
UNICREDITO UC Italy A fast-growing financial services powerhouse	4.78	13.8
UNILEVER UNC UK/Netherlands Consumer-product giant with strong demand for core brands	57.00	10.4
UBS UBSN Switzerland The world's largest asset manager is benefiting from a recent managerial shake-up	152.40	14.1
VOLKSWAGEN VOW Germany The auto manufacturer has cut costs and boosted profits	51.49	11.6

*As of Dec. 8, local prices converted to dollars

DATA: ANALYSTS SURVEY, I/B/E/S/ INTL.

**Estimated 2001 earnings

BEST BET

STRONG STUFF

The New Economy slump is a blow to Europe's recovery. Still, consumer group Unilever is a strong bet. Recent U.S. food-sector acquisitions should help earnings. And Danish wind-turbine maker Vestas Windsystems is a play that benefits from high energy prices

With Inka Resch in Paris

Diving for Pearls? Steel Your Nerves

The bears prowl, but you can find some bargains

BY BRIAN BREMNER

Investors tearing open their Asia mutual-fund statements had plenty to grimace at in 2000—and 2001 augurs little better. Virtually every Asian market clocked double-digit declines last year. Tokyo and Singapore fell more than 20% in dollar terms. In Taipei, Bangkok, and Seoul, the damage was closer to 50%.

It takes an intrepid investor to wade into such a maelstrom, but one with a stout constitution and long-term view can find bargains. Some sectors and countries are best avoided: Dot-com startups and all but a handful of bank stocks look bad regionwide. The Philippines, Indonesia, and Thailand have been disasters. China was Asia's red star in 2000. The Shanghai and Shenzhen B shares sold to foreigners rose 100.6% and 42%, respectively.

Overall, Asia struggles with crisis and recession. Japan faces another year of glacial growth, while elsewhere an expected U.S. downturn threatens an export-led recovery. That means "the private consumption everyone thought would kick in [across Asia] is unlikely to do so," says Sani Hamid, a senior economist at BNP Paribas Peregrine Securities in Singapore. South Korea, where annual growth is expected to fall to 5% in 2001 from 9% last year, is especially vulnerable because some 35% of the country's export revenues come from memory chips, computer parts, autos, and mobile phones—the bulk of which are U.S.-bound.

STANDOUT. If such bad news doesn't chill your ardor, you should prospect among credible restructuring plays. Look for tech companies with an edge. The cyclical downturn in the chip industry means investors should avoid even such profitable stalwarts as Japan's Tokyo Electron, Advantest, and Kyocera, which make specialty semiconductors, chip-making equipment, and packaging. Their shares are down about 50% from their 52-week peaks. HSBC Securities Japan Ltd. equity strategist Gary Evans looks for value stocks pounded in 2000. He recommends Japan's No. 2 brewer, Kirin, at 21 times

expected profits, and Honda Motor Corp., another heavy-equipment maker Komatsu. Honda plans 20 new models in 2001. Komatsu sees an 18% gain in pretax profit.

Japan's bank stocks plunged in 2000. But ING Barings analyst James Fiorillo thinks Sanwa Bank and Asahi Bank, which have restructured and sold off billions of dollars in bad loans, can beat earnings forecasts for 2001.

Believers in Korea's tech boom should look at Samsung Electronics, says Chang In Whang, chief executive of KTB Asset Management Co. One of the world's biggest and most efficient memory-chip makers, its diversified chip and high-end consumer businesses cushion it from downturn. He considers its shares, down around 40% last year, to be a bargain based on projected earnings of \$4 billion in 2001.

The Asian standout in 2000 was China. In opaque companies' shares are illiquid and risky. Still, China should grow 7% in 2001. Analyst Eric Hu of BNP Prime Peregrine Securities Ltd. in Shanghai favors Shenzhen-listed Luthai Textile Joint Stock Co. Its stock rose by about half in 2000, and there's more upside, he says. He also likes Shanghai Zhenhua Port Machinery Co., up 39% in 2000. The world's largest crane producer, it expects strong sales growth.

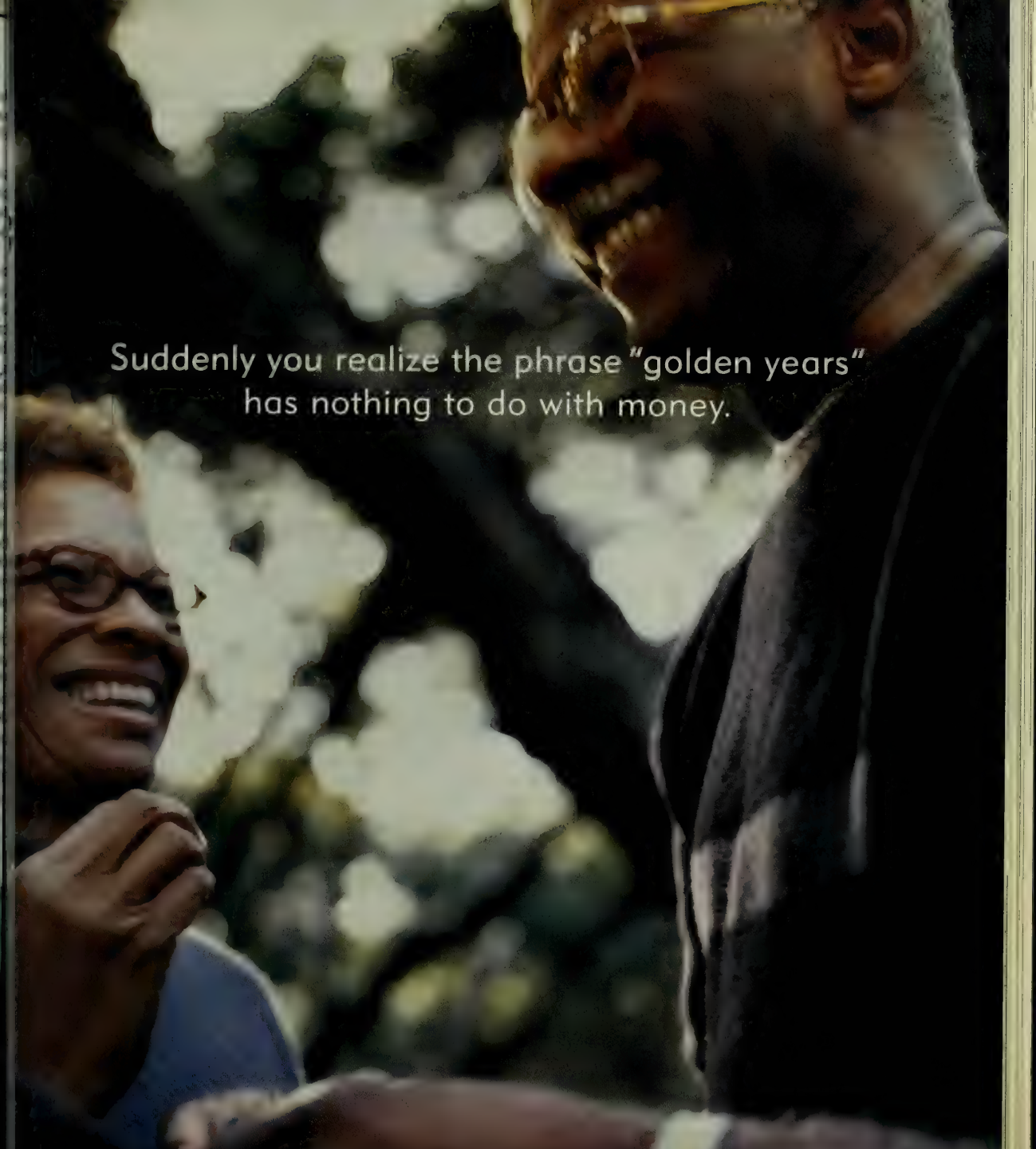
China will lift Hong Kong stock prices, which fell 10% in U.S. dollar terms in 2000. Mark Konyak, director of Dresdner Bank's Global In-

BEST BET

HONG KONG

The 7% growth expected in China in 2001 should help lift ailing Hong Kong stocks. And bank and property stocks there could benefit from a fall in U.S. rates. Sun Hung Kai Properties and Kerry Properties both trade at 30% below their net asset values





Suddenly you realize the phrase "golden years"
has nothing to do with money.

With the right investments, everyone can appreciate life's TRUE WEALTH. From mutual funds to unit investment trusts, Van Kampen has nearly four generations of money management experience. Because enjoying life is what life is really all about. Call your financial advisor or 1-800-231-2808. Or visit www.vankampen.com

VAN KAMPEN
FUND S

Generations of Experience™

For a prospectus containing more complete information, including a discussion of risk considerations, charges and expenses for any Van Kampen investment product, contact your financial advisor. Please read the prospectus carefully before investing or sending money. Distributed by Van Kampen Funds Inc., 1 Parkview Plaza, Oakbrook Terrace, IL 60181. © 2000 Van Kampen Funds Inc.

Asia's Top Picks

COMPANY	PRICE*	P-E RATIO**
HONDA MOTOR Japan Rolling out new models to capture more of U.S. market	\$34	14.6
KOMATSU Japan Global construction-equipment maker growing fast	4.86	32.6
SAMSUNG ELECTRONICS South Korea High-end specialized chip business protects it from downturn	141	4.7
HON HAI PRECISION INDUSTRY CORP. Taiwan Benefits from consolidation in electronic components industry	5.30	19.4

*As of 12/8 **Estimated 2001 earnings

DATA: ANALYSTS SURVEY, I/B/E/S INTL.

All Eyes on Argentina

A foreign-debt default would hurt all Latin stocks



BY JONATHAN
WHEATLEY

Investors in Latin America need to have tough hides. Few years go by without a crisis that sends foreign capital fleeing and bolsas plunging. Fair warning: Argentina is already shaping up as the 2001 trouble spot.

Two years of stagnation have brought this pivotal Latin economy to the brink of a foreign-debt default. Default would hurt stock markets from Santiago to Mexico City. It would shut Argentina itself, a major borrower, out of world markets, painfully delaying its chance of recovery. Borrowing costs would rise across the region. Argentina's creditors will do their utmost to prevent default, and an International Monetary Fund loan package negotiated in December should help. The loan will give Latin markets "a short-term pop," according to Geoffrey

Dennis, Latin American equities strategist at Salomon Smith Barney. The Buenos Aires market—down about 24% this year—may rebound by up to 10%, led by banks and service companies such as Telecom Argentina.

BE PATIENT. Assuming Argentina stabilizes, most investors will put their eggs into two baskets: Brazil and Mexico. Brazil's economy should grow by about 4.5% next year, Salomon estimates. A U.S. slowdown could cut Mexico's growth in gross domestic product from its current blistering 7% a year to a rate on a par with Brazil's. Both economies can weather external shocks better than in the past and should generate strong consumer demand.

vestors, likes stock-settlement specialist Hong Kong Exchanges & Clearing Ltd. Listed in June 2000, its shares should jump 35% in the next 12 months. If U.S. rates fall, so should Hong Kong's benefiting banks and property companies. Morgan Stanley Dean Witter Pacific equity strategist Ajay Kapur notes that Sun Hung Kai Properties Ltd. (target U.S. dollar price \$11, vs. \$9.00 at the end of 2000) and Kerry Properties Ltd. (\$1.92, vs. \$1.25) are nearly 30% below their net asset value.

There are good values in Asia. But bearish sentiment still grips its markets. Investors who jump in now are taking a big gamble.

With Frederik Balfour in Hong Kong, Modahlwan in Seoul, and bureau reports

The paradox is that even if Argentina recovers quickly, the region's share prices may not. U.S. market woes often trump good company performance. That's the main reason Brazil's Bovespa index and Mexico's IPC index are down about 12% and 18%, respectively, in dollar terms this year. Eventually, says John Mullin, Latin American equity strategist at AB Amro in New York, international institutional investors—whose presence still makes or breaks the thinly traded Latin markets—will see the diamonds in the rubble. "There comes a point where you have to recognize stocks' value," says Mullin.

In the interim, look for companies that serve domestic consumers, rather than exporters whose fortunes rise and fall with global trends. That's easier in Brazil, where international trade accounts for 18% of the economy, than in Mexico where it's 58%. Telecom stocks—such as Mexico's Telmex and Brazil's TNE—are appealing. Rising disposable incomes make Brazil's biggest brewer Ambev attractive. And cement giant Cemex is good play on Mexico's strong home-improvement market. The upshot: There are lots of well-run undervalued Latin companies. But to profit from them, investors will have to be patient.

Diamonds Amid the Rubble?

COMPANY/ADR SYMBOL	PRICE*	P-E RATIO
TNE TNE Brazilian telecom serving high-income customers	\$22.25	26.8
FEMSA FMX Mexican brewer should benefit from high disposable income	35.19	9.5
BRADESCO BBQCY Fast-moving Brazilian bank serving under-banked mass market	7.25	10.8
CEMEX CX Mexican cement giant in buoyant construction market	19.63	4.8
PETROBRAS PBR Brazilian oil group investing aggressively in production	24.69	5.7

*Prices as of 12/8

**Estimated 2001 earnings DATA: ANALYSTS SURVEY, I/B/E/S INTL.

Want to save \$1,000,000,000?

Larry Ellison,
Marc Andreessen,
John Chambers,
& Carly Fiorina
will show you how.



FEBRUARY 11-14, 2001 PARIS

FEBRUARY 19-23, 2001 NEW ORLEANS

THE FUTURE OF E-BUSINESS STARTS HERE.

oracle.com/appsworld

ORACLE
SOFTWARE POWERS THE INTERNET™

Copyright ©2000 Oracle Corporation. All rights reserved.
Oracle is a registered trademark, and Software Powers the Internet is a
mark or registered trademark of Oracle Corporation.
All other names may be trademarks of their respective owners.

COMPAQ

**Deloitte
Consulting**



PRICEWATERHOUSECOOPERS



cated—it's just reversing the sequence of buy low, sell high. Perfect for a bear market, right? Not necessarily. Shorting is an extremely risky business, with a potential for loss that is theoretically unlimited. And it can get even riskier as more players decide to bet on declines.

If stock prices turn up, for example, people who have shorted stocks can sometimes panic and all try to buy back shares at the same time. That can make closing out short position and limiting your losses extremely tough to do—and the higher the prices rise, the more money you lose. "Liquidity is one of the biggest risks of shorting," says Sean McDaniel, portfolio manager at EMX Investments, a Dallas hedge fund. But done properly, he adds, short-selling can provide opportunities in any market.

The technology sector has already taken beating this year. But that doesn't mean there aren't still good ideas for short sellers. One way to find them: Look for companies that might be forced to lower prices on their products, which could clobber both revenues and earnings. One such prospect is SanDisk Corp., which makes "flash" data-storage cards for cameras and audio products. Because of overcapacity in semiconductors, says a hedge-fund manager who asked not to be named, the cost of flash memory could drop by 50% in the next few quarters. SanDisk, he believes, will be forced to sell its products for less as competitors cut their prices—and will thus fail to meet revenue projections.

Not surprisingly, SanDisk disagrees. "We don't expect a 50% decline in the next two quarters," says CEO Eli Harari. "We have very substantial cost reductions coming ahead, but we are able to reduce manufacturing costs at the same time, so we can maintain our earnings and grow the market." Still, the pessimistic fund manager is looking for SanDisk's share price, currently \$60, to halve in the next six months. He figures the market will slash SanDisk's 50 price-earnings ratio if it senses that sales are stumbling.

Another way to evaluate short potential from a company's ratio is justified by how its products stack up against those of rivals. Steve Worthington, a portfolio manager at Barbary Coast Capital Management, a San Francisco hedge fund, thinks programs offered by Manugistics, a developer of software for supply chain management, don't measure up to the competition's. "i2 Technologies is clearly the leader

It's Boom Time For the Shorts

Short sellers are ahead for the first time since '94

BY DEBRA SPARKS

More than a few people made a killing earlier this year by selling Internet stocks short. And with many other stocks heading south these days, the tactic of short-selling—borrowing shares, then selling them in the hopes of buying them back later at a lower price—is fast coming back into vogue after half a decade in the wilderness.

The year 2000 was certainly far kinder to short sellers than it was to bull-market riders. According to Harry Strunk, an investment consultant in Palm Beach, Fla., who tracks professional short-only money managers, this is the first year that shorts have reaped positive returns since 1994. They were ahead 6% in October, and Strunk expects that figure to be a lot higher when November results are toted up.

Making money by selling short isn't compli-

this field," he says. Yet Manugistics' stock, now around 100, is trading at a price-earnings ratio of 78. By contrast, Wall Street expects 12's earnings to grow 30% faster than Manugistics'—yet the stock, at 57, has a p-e ratio of 249. His conclusion: Manugistics shares are in for a 50% correction.

Another outfit with a stratospheric valuation is Research in Motion Ltd., a Canadian company that makes the BlackBerry, a handheld wireless mail device that has been a hot seller. RIM's profits are forecast to grow 80% a year—but its p-e ratio is a staggering 13,600. With cell-phone makers such as Motorola now targeting RIM's market, Worthington thinks RIM shares are way overpriced. "It has a \$10 billion market cap with only \$175 million in revenues," he says. "This company is a day-trading fool's special."

What about short-selling ideas in nontech industries? A good rule of thumb: Look for earnings that don't reflect steady cash flow from an ongoing business. For instance, Sunrise Assisted Living Inc., which provides services to the elderly, has increased earnings through a novel strategy: selling off its most profitable facilities to a partnership in which it holds a 25% stake, and reporting these one-time gains as net income. Worthington argues that this practice makes the quality of its cash flow suspect. Sunrise executives say the company has enough properties to sell for some time to come.

WARNING. Faulty business strategies can also cause future blowups. Multilevel marketing schemes, which increase sales by continuously recruiting more salespeople who must recruit other salespeople, can sometimes lead to disaster when the addition of new salespeople falters. One such company to keep an eye on is PrePaid Legal Services Inc., which markets legal services for a monthly fee through a multilevel network of 1,000 sales associates. Its revenues grew 30% last year. But in the third quarter, the increase in new sales associates slowed to 23%, down from 36% a year ago—a sign that PrePaid may not be able to sustain its rate of revenue growth. Com-

pany execs explain that this year's decline is due to tough comparisons following a major sales-recruiting drive in Canada in 1999.

Short sellers also say PrePaid is not making adequate reserves against uncollectible commissions. The shorts note that 64% of the company's assets are prepaid commissions, which aren't likely to be recoverable if an employee quits. While commission advances have increased 160% since March, 1998, reserve for bad debts as a percentage of advanced commissions has declined by half, to a mere 2.8%, which some fund managers feel doesn't adequately protect its balance sheet from a slowdown. Randy Harp, PrePaid's chief operating officer, says the company monitors its advances to individual sales associates quarterly and has determined that the reserve is sufficient.

SCOOT. Retailing is facing lots of woes. One item in huge oversupply is scooters, which have plunged in price this year. An interesting short-seller strategy is to look at outfits that sell a lot of scooters—such as Sharper Image, Children's Place, and bicycle distributor Huffy. As one hedge-fund manager sees it, all three may be vulnerable to sales declines.

And problems at Children's Place, a leading seller of children's clothing, aren't limited to scooters. Sales growth has eased in the most recent quarter, to 41% from 52% a year ago, and short sellers note that the average time required to collect accounts receivable increased more than 50%. Seth Udasin, chief financial officer for Children's Place, says that growth is still strong and he's not concerned about accounts receivable, since those payments are coming chiefly from landlord rebates and credit-card users.

While falling stock prices seem to be the norm these days, picking the right stock to sell short can entail difficult analysis—and great risks of being wrong. But professional short sellers couldn't be more delighted. After five years of slim pickings, they finally have the kind of rocky market they need to rack up some fat rewards. □

BEST BET

FAD ALERT

There's always some craze that leaves retailers with a glut of product. This year, it's scooters, which have plunged in price. So outfits that sell a lot of them, such as Sharper Image, Children's Place, and bike distributor Huffy, may be vulnerable

Good Prospects

Look for companies that might be forced to lower prices on their products, which could clobber both revenues and earnings

A Short List for Short Sellers

COMPANY/SYMBOL	STOCK PRICE*	YTD CHANGE*	COMMENT
CHILDREN'S PLACE PLCE	25.12	53%	Sales growth slowing, margins declining
MANUGISTICS MANU	54.76	239	Software product vulnerable to competition
PREPAID LEGAL SERVICES PPD	30.25	26	Multilevel marketing strategy may stumble
RESEARCH IN MOTION RIMM	94.75	105	Tough to sustain 13,600 price-earnings ratio
INTEGRATED CIRCUITS SNDK	52.00	9	Declining semiconductor prices will force price cuts
SUNRISE ASSISTED LIVING SNRZ	29.37	114	Asset sales make quality of cash flow suspect

*as of Dec. 8

DATA: ANALYSTS SURVEY, BLOOMBERG FINANCIAL MARKETS



It's time to take cars in a new direction. Along a cleaner, more open road that travels the outskirts of convention. That's why we've created the Toyota Hybrid System, the power inside our breakthrough gas/electric vehicle, the Prius. Toyota is the first company to mass-produce a hybrid vehicle, and we're working to develop even more advanced technologies down the road. Fasten your seatbelts. It's going to be an exciting ride.

www.toyota.com/ecologic 800 GO TOYOTA © 2000

ioing our way?



ODAY TOMORROW **TOYOTA**

2000: The Triumphs And the Turkeys

Most pros blew it big time, but a few found ways to win

BY MIKE McNAMEE



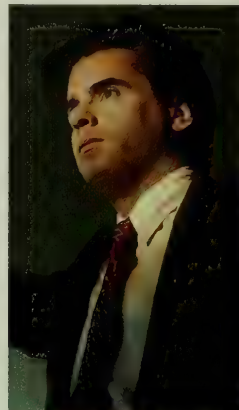
Ahhh, 2000. What a year. From the over-hyped hysteria of the Y2K bug to Florida's chad-filled electoral swamp, confusion reigned. Throw in rising interest rates, a slowing economy, and a faltering stock market, and it's not hard to fill this year's roster of bad calls, deals gone awry, and investment bloopers. What's harder to find are real winners.

Years of bull markets have ingrained habits in Wall Streeters that they find hard to shake. Even after major stock indexes started to swoon in March, the big investment houses' cheerleaders kept trumpeting every sign of good news. One of the lead bulls, Lehman Brothers Inc.'s chief U.S. strategist, Jeffrey M. Applegate, finally admitted in a mea culpa to clients in November that his allocation of 80% stocks, weighted heavily toward tech, "looked pretty stupid" in a year when the Standard & Poor's 500-stock index lost 6.76% and bonds were returning 10.35%. So is it time to back off? No way, says Applegate: At 22 times earnings, S&P stocks are selling below "fair value"—so keep 80% in equities.

THE HARDER THEY FALL. Even the smart money was caught unawares. In March, hedge-fund titan Julian H. Robertson Jr. had to shut down his Tiger Management group—once a \$23 billion empire. Robertson admitted he missed the high-tech riches of 1998 and '99 and was no better positioned to reap benefits from the tech crash of 2000. Drained by years of losses and heavy investor redemptions, Tiger was only the first of the big hedge funds to suffer. A month later, George Soros announced a "reorganization"—including the departure of two top managers—of his \$14 billion Soros Fund Management.

Big brokers made some bad gambles, too. In August, Credit Suisse Group spent \$13.4 billion to buy Donaldson, Lufkin & Jenrette Inc., figuring that it could combine its expertise in banking for high-technology companies with

DEFANGED: After years of losses, Robertson shut down his Tiger fund



DOT-BOMBED: Jacob's Net fund is down over 72% for the year



VIDEO SATIRE: Star bankers left after DLJ gave ex-CEO Roby \$82 million

DLJ's top-notch junk-bond team. But bad blood over the deal—and resentment of the \$82.4 million package negotiated by former DLJ CEO Joe L. Roby—has spurred an exodus of DLJ bankers. One of the firm's greatest losses: star Kenneth D. Moel, who has left for Credit Suisse's rival, UBS Warburg, along with 25 investment bankers in the West Coast team.

The best place to look for 2000's loser, though, is in the rubble of the tech sector. With the Nasdaq 40% off its March peak, the market is littered with tech turkeys.

For 2000's bad-timing award, two players are running neck-and-neck. The first candidate: Morgan Stanley Dean Witter. Encouraged by the 360% rise in Internet stocks during 1999, it launched its Morgan Stanley Internet Index with great fanfare on Mar. 24, with index-based options trading on the American Stock Exchange. Talk about catching the peak: The index, launched at a value of 122.8, has since fallen below 39—a 68% drop.

Another ill-fated move was made by Ryan Jacobson, top-rated manager of Kinetics Internet Fund. After posting triple-digit gains in 1998 (up 196%) and 1999 (up 216%), Jacobson struck out on his own

RESPITE: Followers of Rietbrock's hotel "buy" call reaped 50% gains





POWERED UP: Seattle broker Stroufe's utility picks have climbed 145%

July. Morgan Stanley's Mary G. Meeker isn't doing much better: Her picks are off 68% this year.

Indeed, investors seeking wisdom on the New Economy needed to look in out-of-the-way corners. One of the year's most prescient forecasts came from Ravi Suria, a Lehman Brothers bond analyst. Instead of listening to dot-com CEOs' strategic insights, Suria crunched the numbers—and announced in June that Amazon was suffering from “extremely weak and deteriorating” credit. It took the sell-side pack—including Lehman's Internet analyst, Holly Becker—another month to downgrade the stock.

HOT POCKETS. Where could investors find solace in 2000? How about in the low-tech world of hotels? Salomon Smith Barney lodging and gaming analyst Michael J. Rietbrock put the “buy” sign on Starwood Hotels & Resorts Worldwide Inc. when he saw that “lots of cities just don't have enough hotel rooms.” Clients who followed that call reaped 50% gains. Indeed, real estate investment trusts (REITs) generally defied rising interest rates to notch strong gains in 2000. Another unglamorous winner: electric utilities, with stocks in the sector up 35% for the year. Investors who followed the advice of Lesa A. Stroufe, CEO of Seattle-based brokerage Ragen MacKenzie, did even better: Her utility picks are up 145% this year.

Will the bitter experience of 2000 put an end to momentum investing, overpriced mergers, and analysts who grab headlines by setting out-

landish price targets for the stocks they follow? Perhaps—but only to make way for a new set of fads. For all we know, next year's biggest blooper may turn out to be betting on today's hot small-cap value stocks. There's one thing you can take to the bank: On Wall Street, excess always follows success.

With Emily Thornton, Marcia Vickers, and bureau reports

Most high-profile Internet analysts stayed bullish—even boosterish—on companies with failing Web strategies for far too long

2000 to found Jacob Internet Fund—and ran straight to the dot-bomb implosion. The fund has lost 72.57% this year, the second-worst performance among 3,100 equity funds tracked for BUSINESS WEEK by Standard & Poor's. Jacob is now redirecting his portfolio, admitting that he stuck too long with startups that depended heavily on advertising from other Internet companies for revenues.

Prolonged loyalty to failed Internet strategies was common on Wall Street in 2000.

Just big-name Internet stock analysts remained bullish—boosterish even—for far too long. Merrill Lynch & Co.'s Henry M. Blodget, who made his name projecting a 400 price target for Amazon.com Inc. late in 1998, served as a contrarian indicator for this bellwether in 2000: He upgraded his rating in February, just as Amazon hit a brief split-adjusted peak above 80, and he stayed bullish until it had fallen almost to 30 in late



BEFORE THE FALL: Wall Street had a hard time seeing past the party

Where The Buys Are

The experts give us their best ideas

BY ANNE TERGESEN

When the stock market was soaring, it seemed like everyone—from taxi drivers to Wall Street gurus—was a winner. Over the past year, though, making money was no small feat. So kudos to two of the four participants in BUSINESS WEEK's annual stock-picking contest who managed to earn impressive gains on hypothetical \$100,000 portfolios invested in 10 stocks.

Michael H. Winer, manager of the Third Avenue Real Estate Value Fund, rode a turnaround in long-neglected real estate stocks to a 24% gain.

Catellus Development, Forest City Enterprises, and Echelon International rose over 40% each, while only one of his picks fell.

The aptly named Eugene A. Profit finished next with a 21.2% gain. The manager of the Profit Value Fund did well with investments including Merrill Lynch, Merck, and Berkshire Hathaway. Profit's biggest hit was Elan Corp., whose stock rose 91.7%, benefiting from this year's rise in biotech shares.

Our other two contestants didn't fare so well. Mary Lisanti, manager of the Pilgrim Small-Cap Op-

portunities Fund, posted a 16.4% decline. Of course, small-cap growth stocks—her specialty—were out of favor. Biotech company Abgenix Inc. and drugmaker King Pharmaceuticals Inc., soared 261% and 42%, respectively. Declines in seven of the other eight dragged returns down.

Last place went to Sevgi Ipek, manager of the socially responsible Citizens Global Equity Fund. Heavily exposed to two lagging investment themes—technology and international—Ipek's portfolio lost 27.4%. Only three stocks, including tech star JDS Uniphase Inc., finished in the black. Good luck to this year's contestants.

Maura Shaughnessy

MFS Capital Opportunities Fund

COMPANY/SYMBOL	PRICE*	P-E**
CALPINE CPN	\$38.31	32.0
EXTREME NETWORKS EXTR	81.94	86.6
GLOBAL CROSSING GX	15.69	NA
GRANT PRIDECO GRP	15.13	15.3
LEHMAN BROTHERS LEH	61.81	9.8
MICRON TECHNOLOGY MU	34.69	7.8
PARTNER COMM. PTNR	5.75	NA
SANTE FE INTERNATIONAL SDC	29.00	15.1
TYCO INTERNATIONAL TYC	57.00	17.3
XO COMMUNICATIONS XOYO	16.69	NA

*As of Dec. 8 **Based on estimated 2001 earnings
DATA: ANALYSTS SURVEY, BLOOMBERG FINANCIAL MARKETS

Buying Growth At the Right Price

MFS Capital Opportunities is the kind of mutual fund most stock pros would love to run. Although primarily a large-cap fund, mid-cap and foreign stocks are fair game. So an unglamorous but steady engine of the Old Economy, and dynamic New Economy upstarts. Indeed, manager Maura Shaughnessy says, "I'll go anywhere the ideas are."

To find the best ideas, Shaughnessy blends the aim-for-the-stars growth investing style with its bottom-feeding value counterpart. She looks for companies that can improve earnings at fast clip. But she buys only when the price is right. By that she means stocks that are cheap relative to their "history, peer group, and prospects." That approach has paid off. In the three years ending Dec. 8, MFS Capital Opportunities earned an average of 20.3% a year, placing it in the top 2% of its large-cap peers.

Where does Shaughnessy find opportunities now? Beaten-up telecom stocks. "Many of the



“Many of the telecom stocks have been so badly beaten that if you have a one-year time frame, I feel confident you potentially are going to make a lot of money” — MAURA SHAUGHNESSY

telecom stocks have been so badly beaten that if you have a one-year time frame, I feel confident you potentially are going to make a lot of money.” Take Global Crossing Ltd., a worldwide telecom player. Its stock, down from 62 in February to 15.69, sells at a lower cash-flow multiple than some of the Baby Bells with three times the growth potential, she says.

Another pick, telecom company XO Communications Inc., has been punished. But Shaughnessy's cash-flow models show it's worth 50 a share. Hit by falling chip prices, Micron Technology Inc.'s fundamentals are unlikely to worsen, “and

er time should get a lot better,” she adds. Shaughnessy is also betting on Israeli cell-one company, Partner Communications, and tremere Networks Inc., a broadband provider. Although oil stocks have run up this year, aughnessy believes that Sante Fe International Corp. and Grant Prideco Inc. have a ways go. Indeed, both are trading closer to their 75 than to their highs for the year. The last of aughnessy's picks are independent power company Calpine Corp. and investment bank Lehman Brothers Inc. Shaughnessy believes both are undervalued, but Lehman could also be a takeover get. At 61.81, the stock trades at a little over ice book value, while acquirers have paid 3 to times for its competitors.

Value Manager Who Thinks Small

Buzz Zaino is a contrarian. Growing up in the 1950s, the Bronx (N.Y.) native rooted for the Brooklyn Dodgers—the Subway Series rival his borough's home team, the Yankees. Now, Zaino's contrarian bent has found an

outlet in his approach to investing. The manager of the \$275 million Royce Opportunity Fund hunts for small-cap value plays. That entails buying beaten-down stocks, betting on recovery.

For the past three years, that strategy has suffered as small-stock buyers clamored for tech stocks, not the gritty manufacturing and industrial companies of the value universe. But unlike most value managers, Zaino thrived. In the three years that ended on Dec. 8, Royce Opportunity returned 16.6% vs. 1.8% for its small-cap value peers. This year, it is up 18.3%, vs. 12.5% for its rivals.

Many value managers shun technology, but Zaino—who once worked as an office-equipment analyst—is not afraid to jump in when the sector gets cheap. “That's what a value manager should do—go where the best values are,” Zaino says. His high-tech pick for the BUSINESS WEEK contest is Westell Technologies, a maker of telecommunications products that sells for 5.38, or just about book value (assets minus liabilities).

Zaino also finds value in small suppliers to the aerospace and defense industries. Many have yet to recover from Asia's 1998 downturn, when overseas buyers canceled orders. That's left Fansteel, Titanium Metals, and Evans & Sutherland Computer each selling below book value. Another, Ladish Co., sells at a 44% premium to its book value but is cheap compared to its industry and growth prospects.

The rest of Zaino's picks hail from a number of industries. Contract manufacturer Deswell Industries Inc., says Zaino, is highly profitable, cash-rich, and debt-free. At 15.50, it's trading at 6.7 times next year's projected earnings of \$2.30 a share. Another



Buzz Zaino

Royce Opportunity Fund

COMPANY/SYMBOL	PRICE*	P-E**
COLORADO MEDTECH CMED	\$4.47	10.4
DESWELL INDUSTRIES DSWL	15.50	6.7
DONNA KARAN INT'L DK	4.63	5.6
EVANS & SUTHERLAND COMPUTER ESCC	6.44	6.4
FANSTEEL FNL	3.69	4.3
LADISH LDSH	9.75	6.9
SPIEGEL SPGLA	4.94	4.4
TITANIUM METALS TIE	6.69	N/A
VOLT INFORMATION SCIENCES VOL	19.13	7.4
WESTELL TECHNOLOGIES WSTL	5.38	8.9

*As of Dec. 8 **Based on estimated 2001 earnings
DATA: BLOOMBERG FINANCIAL MARKETS

favorite is staffing company Volt Information Sciences Inc. Hit by big expenditures on one of its divisions, Volt's stock has slid from 39.88 to 19.13 this year. Zaino figures the stock will return to 39 if, as he expects, earnings rise from \$2.25 this year to \$2.60 in 2001.

In the health-care sector, Zaino likes medical-product manufacturer Colorado MEDtech Inc. Although a thwarted suitor bid 12 a share for

the company, the stock is languishing at 4.47. Thanks to new management, Zaino thinks it's only a matter of time before the \$12 bid looks too low. "This is a bet on management," he says.

Likewise, he says, retailers Donna Karan International Co. and Spiegel Inc. are trading at or below discounts to their book values. But the turnaround under way at each company should jump-start earnings, propelling their stock prices up as well.

Debby Kuenstner

*Putnam International
Growth & Income Fund*

COMPANY/SYMBOL*	PRICE**	P-E***
AIFUL 8515.T	\$85.24	14.2
ASTRAZENECA AZN	48.88	25.4
BCE BCE	27.81	16.8
GRANADA COMPASS GCP.L	9.12	20.9
INVENYS ISYS.L	2.39	9.4
MISYS MYS.L	9.84	32.4
ROYAL PHILIPS ELECTRONICS PHG	40.19	14.0
RHODIA RHA	14.00	8.2
VODAFONE VOD	38.69	53.0
ZURICH FINANCIAL ZURZN.S	550.00	14.0

*Reuters symbols **As of Dec. 8

***Based on estimated 2001 earnings

DATA: BLOOMBERG FINANCIAL MARKETS

A Yen for The Euro Zone

If it has been a tough year for domestic investors, those who held international stocks have had an even harder time. That's what Debby F. Kuenstner, a member of the three-manager team that runs the \$1 billion Putnam International Growth & Income Fund, feels vindicated by her fund's 2.3% decline. Indeed, the average international fund is down more than 5 times that. The reason the fund is doing better than its peers is simple: The value stocks it specializes in have perked up.

Next year, Kuenstner expects all the stars align for her fund. "Valuations are more attractive outside the U.S.," she says. Kuenstner is bullish on restructuring efforts in Europe, where 60% of the fund's money is invested. Moreover, the beleaguered euro is strengthening vs. the dollar, which means currency moves should help rather than hurt, performance.

◀◀ We like to buy improving companies dirt cheap ▶▶ — DEBBY KUENSTNER



To determine when a stock is attractive, Kuenstner & Co. rely on Putnam's proprietary rankings. These weigh factors such as a stock's cheapness compared to its home market and the ratio of a company's cash flow to its "enterprise value"—or its equity plus debt. Then, they zero in on prospects with catalysts that can propel the stocks back to a normal valuation. "We like to buy improving companies dirt cheap," she says.

One choice is Rhodia, a French specialty-chemical company. With management cutting costs and demand likely to improve with the world economy, Kuenstner thinks the stock has room to rise by at least 30%. Another pick, Japanese financial services outfit, Aiful Corp., stands to benefit from consolidation among companies that make unsecured loans to consumers.

Kuenstner also believes the market has mispriced the stocks of British engineering firm Invenys; British conglomerate Granada Compass and Zurich Financial Services Group, the product of a rocky merger between Swiss and German insurers that Kuenstner thinks is now on track.

Unlike some value pros, Kuenstner says tech stocks haven't fallen enough to qualify as bargains. Two exceptions are British business-tech business software firm Misys, which is expanding its market share, and Dutch giant, Philips Electronics, which Kuenstner thinks has been excessively punished.

Although Kuenstner calls European telecom stocks pricey, she thinks Canada's BCE Inc. is

"With Infinium
eBusiness we've been
able to launch strategic
HR initiatives over the
Web that help us maintain
the lowest turnover
in our industry."

Glen James, CIO
HGIEM/Infinium



THE CUSTOMER: Bellagio, Las Vegas, Nevada

THE GOAL: Integrate disparate operations data and
generate strategic reports for managers

THE SOLUTION: Infinium eBusiness

THE RESULT: HR staff of 50 now does work of 100.
Managers transformed from supervisors to analysts.

The Complete Story:



infinium.com/greatwork

Infinium® is a registered trademark of Infinium Software.



 **INFINIUM**
do great work



good value. Wireless giant Vodafone Group PLC is a favorite because it has a big slice of each of its markets. Finally, Kuenstner thinks AstraZeneca PLC will benefit from the successor to its blockbuster ulcer drug Prilosec and a cholesterol-lowering drug in the pipeline.

Hunting Among Tech's Fallen Stars

The \$1 billion Dresdner RCM Global Technology Fund is down 5.4% through Dec. 8. But with the average tech fund down 24.8%, it's a winner. One reason for its success: It dumped most dot-com holdings when the sector started to collapse.

That doesn't mean manager Walter C. Price Jr. has given up on e-tailers. Price and co-manager Huachen Chen are betting on eBay Inc. As the economy slows, Price believes people will move down-market to the second-hand goods that trade there. "There is a countercyclical element to eBay that is not appreciated," he says.

Price generally looks for price-earnings ratios that are not more than two times a company's projected earnings growth, in percentage terms. And though he can invest globally, Price says the best buys are in the U.S. One overseas pick is Infosys Technologies Ltd., an Indian software

Walter Price

Dresdner RCM Global Technologies Fund

COMPANY/SYMBOL	PRICE*	P-E**
CHECK POINT SOFTWARE TECHNOLOGIES CHKP	\$158.88	89.6
CISCO SYSTEMS CSCO	52.38	51.9
COMMERCE ONE CMRC	40.75	2144.7
COMPAQ COMPUTER CPQ	19.50	13.4
EBAY EBAY	38.63	103.0
INFOSYS TECHNOLOGIES INFY	125.44	66.1
INTUIT INTU	49.13	47.9
LEXMARK INTERNATIONAL LXX	43.81	15.7
MICRON TECHNOLOGY MU	34.69	7.8
TYCO INTERNATIONAL TYC	57.00	17.3

*As of Dec. 8 **Based on estimated 2001 earnings
DATA: BLOOMBERG FINANCIAL MARKETS

producer that benefits from low labor cost

Superstar networker Cisco Systems Inc. is another of Price's choices for 2001. Cisco now trades at 50 times projected earnings for 2001—\$1.05 a share. That nearly matches the company's estimated three-year growth rate of 40%—a reasonable valuation." Another bargain is Compaq Computer Corp., at 13.4 times 2001 earnings estimates. That's a discount to its growth rate which Price pegs at at least 18%.

Battered during this year's technology sell-off, Lexmark International Inc., a manufacturer of laser printers, now sells for 15.7 times the \$2.80 a share that Price estimates it will earn in 2001. Meanwhile, its profit margins and market share in printing supplies are improving.

Price likes two other busted growth stocks: Micron Technology Inc. and Tyco International Ltd. In Micron's case, Price figures chip prices will rebound, propelling the stock higher. As for Tyco, it trades at about 17 times Price's estimates of 2001 earnings—well below its long-term growth rate of 25%.

Another pick, Intuit Inc., is best known for its financial software, Quicken. But Price likes the company because it is a leading provider of accounting, payroll, and other services to small businesses, which it delivers over the Internet.

Price doesn't only like cheap stocks—and business-to-business software maker Commerce One Inc. is certainly no bargain. But if Commerce One hits Price's earnings target of \$1.50 to \$2 a share in 2002, the stock could quadruple, Price figures. Also expensive, Check Point Software Technologies Ltd. is nonetheless a favorite because it controls 70% of the market for Internet security systems and is poised to grow at a 65% clip over the next three years.

BusinessWeek online

Listen to our pros talk about their stocks in the Dec. 25 issue online at www.businessweek.com

WHAT SAVIN IS DOING TO MAKE XEROX YOUR X-DOCUMENT OUTPUT COMPANY.



You-know-who would have you believe that they're the first and last word in digital document solutions. At Savin, we're working hard to make you believe otherwise.

After all, at Savin we too have the forward-thinking, award-winning technology essential to boosting productivity in today's digital offices. Like our fast, versatile, connectable digital imaging systems that allow you (or your workgroup) to print, sort, duplex and staple—right from your desktop. And full-color digital imaging systems that turn electronic documents into brilliant hard copy.

But that's where similarities end. Because while it would appear that Xerox has dedicated themselves to becoming the biggest document company on the planet, at Savin we're dedicating ourselves to becoming the fastest, most responsive, most easy to work with name in the business. With smart, energetic, highly-trained Savin professionals willing to do whatever it takes to give you the satisfaction and service you deserve.

To find out x-actly what we'll do to win you over, contact us at 1-800-234-1900 or www.savin.com.



savin®

WE'VE GOT WHAT IT TAKES TO WIN YOU OVER™

SAVIN CORPORATION, 333 LUDLOW ST., STAMFORD, CT 06904

Feeding a growing



Dell offers a complete line of Intel® processor-based systems. Expand your e-business with robust Dell PowerEdge® servers based on the Intel Pentium® III Xeon® Processor, including the PowerEdge 8450 with up to eight processors and expandable to 32GB RAM.

Intel, the Intel Inside logo and Pentium are registered trademarks, and Pentium III Xeon is a trademark of Intel Corporation. Dell, PowerEdge, PowerApp and the Dell logo are registered trademarks of Dell Computer Corporation. These devices have not been approved by the Federal Communications Commission for use in a residential environment. These devices are not, and may not be, offered for sale or lease, or sold or leased for use in a residential environment until the approval of the FCC has been obtained. ©2000 Dell Computer Corporation. All Rights Reserved

Building an e-business isn't easy. But Dell can make it a lot easier.



PowerEdge™ 2450
*Rack-dense,
highly available
application server*

We've had the experience of growing to \$15 billion a year in e-commerce.

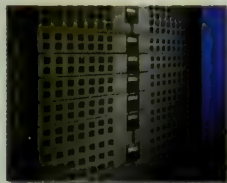


PowerEdge™ 6450
*Mission-critical
e-business server*

That's why we know what it takes: infrastructure like our reliable, rack-mountable, scalable Dell PowerEdge™ servers and PowerApp™ appliances. They can grow as easily as your e-business grows.

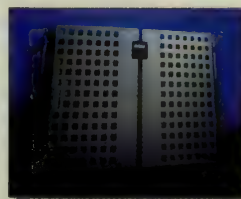
-business made easy.

We also make it easier with everything from custom integration of your operating system options online to service centers that let you test your solution before you buy. Not to mention our on-site service and pre-failure alert program.



PowerApp™
*Turnkey web
& cache
appliance servers*

All of which is why companies like Monster.com and NaviSite are powered by Dell PowerEdge servers with Intel® Pentium® III Xeon™ processors.



PowerEdge™ 8450
*Back-end
database server*

Why not make the care and feeding of your e-business a lot easier?

800.501.DELL www.dell.com



How Risky is The Risk Premium?

Economists square off over stock volatility

BY PETER COY

Over the past 75 years, stocks have outperformed bonds and other debt securities by a huge margin. The annual return on a broad portfolio of stocks has averaged 9 percentage points more than the return on risk-free U.S. Treasury bills. With that glorious history in mind, many investment advisers are saying that the longer your investment horizon is, the more you should be in stocks—right on up to 100% of your portfolio.

But beware: Many finance scholars say that investors would be making a big mistake to assume that stocks will earn them 9%—or even 7%—a year above the rate on T-bills. Past performance, they say, is no guarantee of future returns.

For long-range planning, the debate about the merits of stocks vs. Treasury bills or bonds boils down to what economists call the “equity risk premium.” This is a tricky and often misunderstood concept. In a nutshell, it’s the extra return that investors want and expect to receive from stocks because of the higher volatility of stock prices. Let’s say you’re choosing between a stock that fluctuates a lot in price and a bond that’s more stable. Because you dislike volatility, you’ll pay less for the stock than for the bond. And because your cost basis is lower for the stock, the

total annual return will be higher.

What makes the equity premium such a puzzle is why it’s so big, given that stocks are only slightly more volatile than bonds. After all, bond returns fluctuate, too. What’s more, the tax system favors stocks over bonds. Wrestling with this puzzle, some people have concluded that the equity premium is a case of mass delusion—one that’s about to end. That’s the thesis of James K. Glassman and Kevin A. Hassett’s best-selling book, *Dow 36,000*. The two scholars at the American Enterprise Institute, a conservative think tank, say the equity risk premium is unjustified—i.e., stocks are too

low—because in the long run, stocks aren’t more volatile than bonds. They argue that investors will soon catch on to that fact and will be content to receive the same low return from stocks that they get from bonds. The cute part is how they get from here to there. Stock prices will need to be higher than they are now, so people who buy stocks in the future will have a smaller upside on their investment. That implies a huge but one-time-only leap in prices. They advise readers to buy before the leap, because after it, stock returns will be as low as bond returns. When the book was published in September, 1999, they predicted that Dow would hit 36,000 in three to five years.

MEASURING THE PREMIUM. But critics question whether investors will ever be content to earn as little from stocks as they earn from bonds. As a result, they doubt that the leap in prices that Glassman and Hassett forecast will ever take place. Says Robert D. Arnott, managing partner of First Quadrant, a Pasadena, Calif., asset manager: “Their core thesis completely overlooks the fundamental reality of why people own stocks.”

What makes the equity premium so hotly debated is that there’s no direct way to measure it. If you can’t be sure how big it is now, you certainly can’t know how big it will be in the future. For example, many people assume that stock’s historical 9% edge over T-bills is a good indicator of what their future outperformance will be. But who knows? Maybe stocks have been rising in part because people have been losing their fe-

Debate Over the Equity Risk Premium

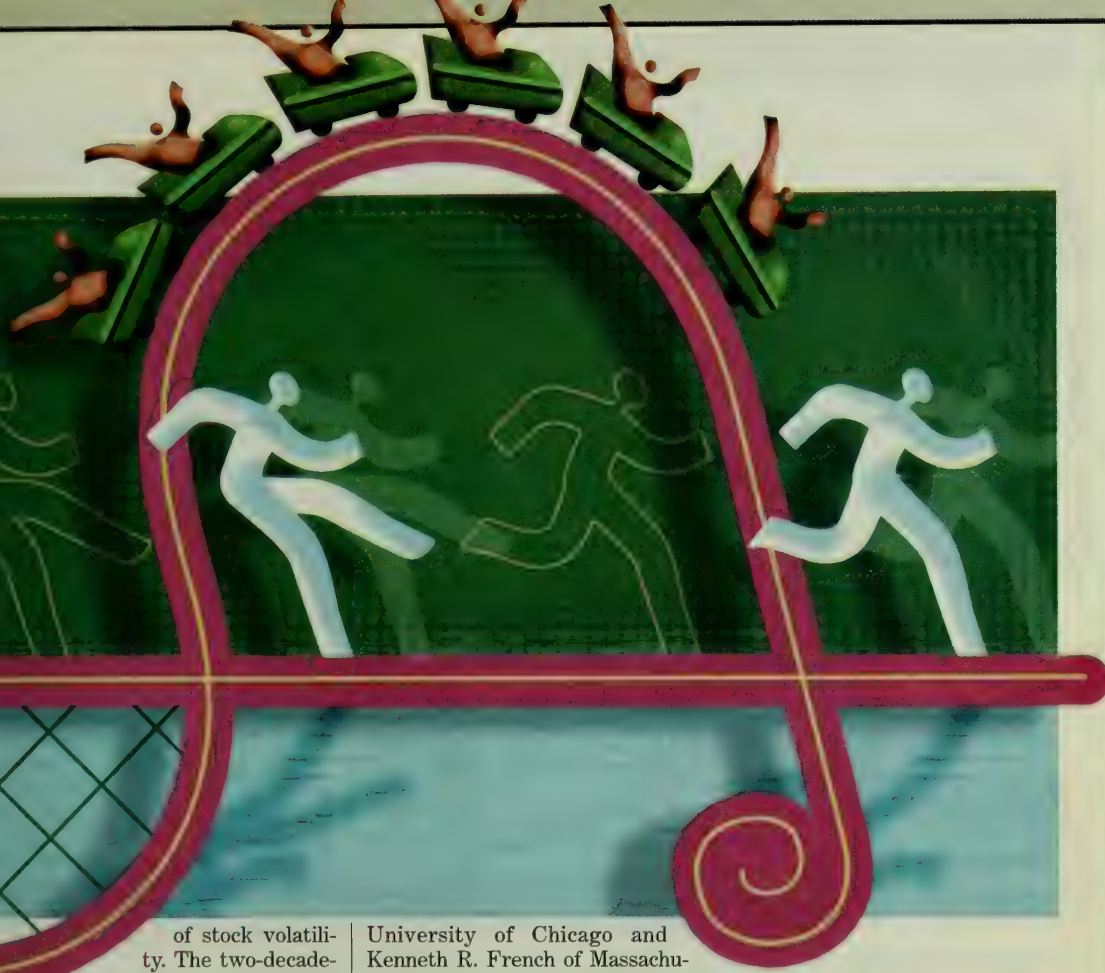
Stocks have trounced Treasury bills by 9% a year over the past 75 years. Academics cite the “equity risk premium”—the idea that investors demand a higher return from stocks to compensate for their higher volatility. But they have trouble explaining such a big performance gap. What comes next?

THE BULLS

JAMES GLASSMAN and **KEVIN HASSETT**, authors of *Dow 36,000*, argue that investors will soon realize that stocks are no riskier than bonds, so they won’t demand an equity risk premium anymore. Stocks will make a one-time leap to Dow 36,000. At that point, their expected future returns will be no higher than those of bonds.

THE BEARS

ROBERT ARNOTT, managing partner of asset manager First Quadrant, argues that investors have already bid up stocks to levels where there’s no remaining premium for the genuine extra risk of holding stocks. He thinks stocks will underperform bonds over the next 20 years, and that Dow 3,600 is more likely than Dow 36,000 over the next decade.



of stock volatility. The two-decade-long bull market proba-

bly caused people to become

s fearful of stocks and shrank the risk premium they demanded, says Harvard University economist John Y. Campbell. He thinks that if the mood changes for the worse, the premium will get bigger again, albeit not quite to its original size. People will demand to be compensated for stocks' riskiness, and that will put upward pressure on stock prices.

Theories for why the equity premium is so big range across the board. In a recent paper, Stephen Cecchetti and two co-authors from Ohio State University say that investors use a rule of thumb decisionmaking that makes them overly pessimistic about the likelihood that good times will continue—so they're afraid to own stocks. Other scholars finger "disappointment aversion," arguing that investors shy away from the volatility of stocks because they dislike losses more than they like gains.

An easier way to resolve the puzzle is to say it's a case of mistaken identity—that the premium isn't as big as it appears from looking at the historical data. Eugene F. Fama of the

University of Chicago and Kenneth R. French of Massachusetts Institute of Technology argue that the risk premium over the past half-century was only 4%. Their calculation is based on going back to the past and analyzing what kinds of returns investors had a reasonable right to expect for the future, given companies' dividend yields and expected dividend growth rates. The

return they got exceeding 4% was, they say, the result of a series of surprises, such as the end of the cold war and the development of the computer—windfalls that can't be counted on to repeat themselves. They expect stocks to outperform risk-free securities by only 3% to 3.5% a year in the long term, and by less than 1% in the short term.

Among the people who have studied the equity premium closely, most think it is probably no more than a few percentage points above Treasury bills. But their skepticism hasn't filtered out to investors, advisers, or even rank-and-file finance professors, who still peg the long-term premium at 7%, according to a survey published last year by Ivo Welch, then a professor at UCLA's Anderson School and now of Yale University. If those high estimates turn out to be wrong, a lot of investors are in for a lot of pain. □

Thrills and Chills

*Many experts say
the extra return from
stocks in the future will
be lower than most
investors are counting
on receiving*

A Year Upside Down

Low-key value and muni-bond funds look great

BY MARA
DER HOVANESIAN

During the latter half of the 1990s, mutual-fund investors might have gotten the impression that fat, double-digit returns were an entitlement. This year shattered that belief. Higher interest rates, slower economic growth, and a bear market for tech stocks resulted in the most disappointing year for fund investors since 1994. All told, equity mutual funds fell an average 2.37%, while U.S.-only funds eked out a scant 0.46% total return (appreciation plus reinvestment of dividends and capital gains through Dec. 8). Mutual-fund data were prepared for BUSINESS WEEK by Standard & Poor's Corp.

The funds that fell the hardest were the perstars of yesteryear—large-cap growth portfolios like Janus Twenty Fund and Internet play like Munder NetNet. In contrast, value-fund turns—and value managers' spirits—have revived. "The darlings of last year are the dogs this year," says David Winters, co-manager Franklin Templeton's Mutual Beacon Fund large-cap value fund up 12%.

Not that the new darlings are all that impressive. Large-cap value funds, up 4.63%, earned less than the average money-market fund. Small-cap and mid-cap value funds were virtually flat at 11.80% and 11.76% respectively. Still, all the value categories left their growth counterparts in the dust: Large-cap growth funds shed 6.71%, small-caps dropped 4.61%, and mid-caps managed a slim 1.80% gain (table, page 126).

That's sweet revenge for managers such as Edward T. Shadek Jr. His \$375 million Putnam Small Cap Value Fund earned a respectable 18.53% return, buying companies with low price-earnings ratios, such as Bindley Western Industries, a drug distributor, and Bank United Corp., a Texas thrift. A year ago, he was virtually ignored in the company lunchroom and, says Shadek, "no one cared that we owned solid companies in decent businesses with good cash flows." Today, his colleagues are constantly seeking him out for investment advice.

The comeback of value funds isn't the only

The Best Returns

FUND	TOTAL RETURN*	FUND	TOTAL RETURN*
SCHRODER CAPITAL MICRO CAP INV.	128.46%	AMERICAN GAS INDEX A	46.47%
EVERGREEN HEALTH CARE Y	117.84	OPPENHEIMER REAL ASSET A	43.92
AMERICAN EAGLE CAPITAL APPRECIATION	85.40	AIM GLOBAL HEALTH CARE A	43.84
MUNDER FRAMLINGTON HEALTHCARE A	85.33	BOSTON PARTNERS LONG SHORT EQUITY INV.	43.42
DRESDNER RCM BIOTECHNOLOGY N	82.62	FIRST AMERICAN HEALTH SCIENCES Y	42.28
EATON VANCE WLDWD. HEALTH SCIENCES A	79.99	MONUMENT MEDICAL SCIENCES A	42.17
MONTEREY MURPHY NEW WORLD BIOTECHNOLOGY	75.46	BURNHAM FINANCIAL SERVICES A	42.16
ORBITEX HEALTH & BIOTECHNOLOGY A	70.62	SG COWEN INCOME + GROWTH I	41.25
DRESDNER RCM GLOBAL HEALTH CARE	68.84	WARBURG PINCUS GLOBAL HEALTH SCI. COMM.	41.14
PRUDENTIAL HEALTH SCIENCES A	68.80	LORD ABBETT MID CAP VALUE P	40.60
FRANKLIN GLOBAL HEALTH CARE A	66.69	FIDELITY SELECT BIOTECHNOLOGY	40.02
SCUDDER HEALTH CARE	61.37	FIDELITY SELECT HOME FINANCE	38.61
ICON ENERGY	59.25	RYDEX BIOTECHNOLOGY INV.	38.47
FRANKLIN BIOTECHNOLOGY DISCOVERY A	55.62	ICON FINANCIAL	38.46
KINETICS MEDICAL	55.31	BRUCE	38.35
AMERICAN EAGLE TWENTY	55.00	SENTINEL SMALL COMPANY A	38.31
FIDELITY SELECT MEDICAL DELIVERY	54.93	FBR FINANCIAL SERVICES A	37.68
MORGAN STANLEY DEAN WITTER HEALTH SCI. B	53.85	MERCURY HW MID-CAP VALUE I	37.34
VANGUARD HEALTH CARE	53.59	MERRILL LYNCH HEALTHCARE D	37.24
FIDELITY SELECT NATURAL GAS	52.61	CENTURY SHARES	37.09
STATE STREET RESEARCH GLOBAL RESOURCES	52.05	PUTNAM HEALTH SCIENCES A	36.77
FIDELITY SELECT INSURANCE	50.93	BJURMAN MICRO-CAP GROWTH	36.21
T. ROWE PRICE HEALTH SCIENCES	50.16	FIDELITY SELECT AIR TRANSPORT	35.97
FIDELITY SELECT MEDICAL SYST. & EQPMNT.	47.28	BOSTON PARTNERS SMALL CAP VALUE II INSTL.	35.83
GALAXY II UTILITY INDEX	46.82	TCW GALILEO VALUE OPPORTUNITIES I	35.73

*Appreciation plus reinvestment of dividends and capital gains before taxes, Jan. 3 through Dec. 8, 2000

SOURCE: STANDARD & POOR'S

How the Big Funds Fared

FUND	NET ASSETS BILLIONS	TOTAL RETURN*
VANGUARD 500 INDEX	\$104.4	-5.70%
FIDELITY MAGELLAN	101.6	-5.04
INVESTMENT CO. OF AMERICA A	56.6	2.85
WASHINGTON MUTUAL INVESTORS A	46.8	4.60
JANUS	46.5	-5.90
FIDELITY CONTRAFUND	42.4	-5.76
FIDELITY GROWTH & INCOME	42.0	0.47
GROWTH FUND OF AMERICA A	39.4	11.74
AMERICAN CENTURY ULTRA INV.	38.6	-12.34
JANUS WORLDWIDE	37.8	-9.93

*Appreciation plus reinvestment of dividends and capital gains before taxes, Jan. 3 through Dec. 8, 2000

DATA: STANDARD & POOR'S

g that has turned 1999 on its head. Boring taxable money-market funds, up 5.18%, and -free money funds, up 3.13%, handily outdistanced stock funds. Among specialized equity funds, Old Economy stalwarts like financial services, up 23.71%, and real estate, up 21.09%, paced New Economy tech and telecom portfolios, down 20.85% and 24.02%, respectively. Many sorts of bond funds outdistanced equity. The average tax-free bond gained 8.47%, while taxable funds posted 4.74% (table, page 10). A flight to safety and a U.S. Treasury buyback led to 11.75% gains in long-term government bond funds. High-yield bond funds, hit by deteriorating credit quality and rising defaults, were down 9.73%.

FAST SECTOR. And what of those 300-odd winners—mostly Internet, tech, and Japanese funds—that racked up 100% to 500% gains last year? Only a handful are in the black for 2000, most barely at that. Funds that invest in Japan, which posted 120% gains in 1999, now rank as the year's worst sector, down 32.77% on average. Corporate restructuring in Japan hasn't gone far enough to revive the country's sluggish economy.

One of the best ways to play the tech sector in 2000 was to bet against it. Turns out, the Potomac Fund's Internet/Short Fund gained 23% by betting that the Dow Jones Internet Index was heading south. Still, ICON Information Tech

Fund, which is long stocks, did nearly as well, up 19.43%. Its secret: invest only in tech companies with earnings.

As for Internet-specific funds, the market made mincemeat of them all. The most battered was Jacob Internet Fund, which only got started about a year ago. The now \$63 million fund lost 72.57% in its first year—the second-worst of all equity funds (table). That was a comeuppance for portfolio manager Ryan Jacob, who in 1998 and 1999 led the Kinetics Internet Fund to gains of 196% and 216%, respectively.

It was also a year when some little-known funds had their day. Consider the Oppenheimer Real Asset Fund, a natural resource fund launched in 1997. "It came out at the wrong time and just went straight down for a year and a half," says co-manager John S. Kowalik. The fund is up 43.92% this year, more than twice

Most fund managers believe the new decade will deliver more modest returns than the past one—from 7% to 15% for the next few years

The Worst Returns

FUND	TOTAL RETURN*	FUND	TOTAL RETURN*
DODSON INVESTORS	-77.20%	MIDAS U.S. & OVERSEAS	-45.45%
DOB INTERNET	-72.57	PILGRIM WORLDWIDE EMERGING MKTS. A	-44.70
TOMAC INTERNET PLUS	-69.41	FIDELITY JAPAN SMALL COMPANY	-44.50
EX MID CAP GROWTH	-68.66	FIRSTHAND E-COMMERCE	-44.01
ARBURG PINCUS JAPAN SMALL COMPANY	-65.11	PAYDEN & RYSEL EUROPEAN GRTH. & INC. R	-43.83
ARBURG PINCUS JAPAN GROWTH	-61.73	VAN ECK ASIA DYNASTY A	-43.70
EDIT SUISSE INSTL. JAPAN GROWTH	-59.91	KEMPER ASIAN GROWTH A	-43.50
INTERNET A	-58.89	INVESTEC INTERNET.COM INDEX	-43.15
OFUNDS ULTRA OTC PROFUND INV.	-58.35	FEDERATED AGGRESSIVE GROWTH A	-43.04
DOCKJUNGLE.COM PURE PLAY INTERNET	-58.33	WWW INTERNET	-43.01
KINETICS INTERNET EMERGING GROWTH	-58.20	IPS NEW FRONTIER	-42.18
INTERNET INDEX	-58.10	MUNDER NETNET A	-41.97
INTEREY MURPHY NEW WORLD TECHNOLOGY	-51.66	FEDERATED WORLD ASIA PACIFIC GROWTH A	-41.82
ERINDO TECHNOLOGY A	-51.63	KINETICS INTERNET INFRASTRUCTURE	-41.60
ERITOR INDUSTRY	-51.11	H&Q IPO & EMERGING COMPANY COMM.	-41.33
ITH BARNEY WORLD PACIFIC A	-50.10	PUTNAM OTC EMERGING GROWTH A	-40.41
THEWEAS ASIAN TECHNOLOGY I	-49.93	JANUS VENTURE	-40.18
NUMENT DIGITAL TECHNOLOGY A	-49.91	PRUDENTIAL PACIFIC GROWTH A	-40.17
JRLOW GROWTH	-49.73	INVESTEC ASIA SMALL CAP	-39.75
KINETICS INTERNET	-48.07	SELIGMAN EMERGING MKTS. GROWTH A	-39.36
1 JAPAN GROWTH A	-48.00	PUTNAM ASIA PACIFIC GROWTH A	-39.26
ONTIER EQUITY	-46.99	ASAF JANUS SMALL CAP GROWTH A	-38.92
THEWEAS KOREA I	-46.31	PILGRIM SMALL CAP ASIA GROWTH A	-38.44
ERTY NEWPORT JAPAN OPPORTUNITIES A	-46.00	MUNDER FRAMLINGTON EMERGING MKTS. A	-38.23
GRIM ASIA-PACIFIC EQUITY A	-45.58	RS INTERNET AGE	-38.01

*Appreciation plus reinvestment of dividends and capital gains before taxes, Jan. 3 through Dec. 8, 2000

DATA: STANDARD & POOR'S

Stellar Returns for Most Bond Funds

	TOTAL RETURN*		TOTAL RETURN*
LONG GOVERNMENT	11.75%	SHORT GOVERNMENT	6.73%
MUNI. CALIF. LONG	11.22	SHORT (GENERAL)	6.44
MUNI. NEW YORK LONG	9.95	EMERGING MARKETS BOND	5.60
INTERMEDIATE GOVERNMENT	9.40	ULTRASHORT	5.35
MUNI. NATIONAL LONG	9.23	MUNI. SHORT	4.39
MUNI. SINGLE-STATE LONG	9.20	INTERNATIONAL BOND	0.56
MUNI. NEW YORK INTERM.	7.99	CONVERTIBLES	0.37
LONG (GENERAL)	7.96	MUNI. HIGH YIELD	-0.17
INTERMEDIATE (GENERAL)	7.95	MULTISECTOR	-0.92
MUNI. CALIF. INTERM.	7.94	HIGH YIELD	-9.73
MUNI. SINGLE-STATE INTERM.	7.22	ALL TAXABLE BONDS	4.74
MUNI. NATIONAL INTERM.	7.20	ALL NONTAXABLE BONDS	8.47

*Appreciation plus reinvestment of dividends and capital gains before taxes, Jan. 3 through Dec. 8, 2000.
DATA: STANDARD & POOR'S

the return of the average natural resource fund, and among the top 50 of all equity funds (table, page 124). The Oppenheimer fund has different results because it invests in commodity-linked bonds and futures and forward contracts rather than the stocks of oil and other natural-resource companies. Kowalik says the fund's unique approach "is beginning to prove its case."

Health-care funds, boosted by the booming biotech sector, are also in the winner's circle, with gains of 50.89%. Half of the 50 best-performing funds came from this category. One of the two funds with triple-digit returns is the

Evergreen Health Care Fund, run by Lui-Er Chen, who is also a physician. The year-old, 85-stock fund invests in six different health-care sectors, including distributors and services. A third of its \$60 million in assets are in its top holdings, which include heavyweights Genentech Inc. and Pfizer Inc. Chen is not sure he can replicate the fund's 117.84% return, but he's confident the sector's supercharged performance isn't a flash in the pan like last year's Internet runup. He shrugs off the threat of government-imposed drug price controls and cites aging demographics and a strong demand for biotech products that treat cancer and rare diseases.

Bigger was not better this year. Six of the 10 largest equity mutual funds lost money (table, page 125). That includes the \$104.4 billion Vanguard 500 Index, down 5.70%—its first negative performance in a decade. Similarly, the

\$101.6 billion Fidelity Magellan Fund clocked its first losses since 1994. Whatever success stories there were among the big funds belonged to value managers: Vanguard Windsor II, which lost 6% in 1999, climbed 12.39% this year.

The turmoil in the equity markets sent many investors fleeing to bonds for the first time in years—and municipal bond funds turned up the best returns since 1997. The strong Treasury market helped munis, but that was not all. New issues fell to \$185 billion from \$225 billion in 1999, and the shrinkage in supply hit the market just when demand was picking up.

BIGGEST RISK. Investors haven't yet shown as much interest in high-yield bond funds, which had their worst year since 1990. They're an opportunity, you're a contrarian, contends Jeffrey L. Ripp, co-manager of \$460 million in high-yield assets at Columbia Funds Management Co. "Our expectations will be, simply, a soft landing" for the economy, says Rippey, who has been adding beaten-down telecom bonds such as McLeodUSA Inc. and Level 3 Communications Inc. to his portfolio. Stakes in the more stable gaming and energy sectors have helped to smooth out some bumps along the way, he says. He says the biggest risk for high-yield investors in 2001 is that the Fed won't further ease interest rates, causing the capital markets to clamp up, prompting even more defaults.

That dire scenario isn't likely, say most fund managers. Still, even if the economic soft landing comes to pass, most fund managers believe the new decade will have more modest returns than the old one. They expect the stock market to deliver returns of 7% to 15% for the next several years, which is more like the average annual returns earned before the late 1990s frenzy. Says John G. Goode, 10-year veteran manager of \$2.3 billion Smith Barney Fundamental Value Fund: "We're getting back to the real world."

A Wide Range In Equity-Fund Returns

CATEGORY	TOTAL RETURN*	CATEGORY	TOTAL RETURN*
HEALTH	50.89%	SMALL-CAP GROWTH	-4.61
FINANCIAL	23.71	LARGE-CAP GROWTH	-6.71
REAL ESTATE	21.09	WORLD	-9.15
NATURAL RESOURCES	19.65	EUROPE	-11.79
SMALL-CAP VALUE	11.80	FOREIGN	-15.68
MID-CAP VALUE	11.76	LATIN AMERICA	-15.93
MID-CAP BLEND	9.28	PRECIOUS METALS	-17.57
UTILITIES	6.03	TECHNOLOGY	-20.85
LARGE-CAP VALUE	4.63	PACIFIC/ASIA EX-JAPAN	-23.98
SMALL-CAP BLEND	3.07	COMMUNICATIONS	-24.02
DOMESTIC HYBRID	1.91	DIVERSIFIED EMERGING MKTS.	-26.72
MID-CAP GROWTH	1.80	DIVERSIFIED PACIFIC/ASIA	-31.17
ALL CAP	-0.42	JAPAN	-32.77
MISCELLANEOUS	-1.65	U.S. DIVERSIFIED FUNDS	0.46
LARGE-CAP BLEND	-2.17	ALL EQUITY FUNDS	-2.37
INTERNATIONAL HYBRID	-3.22	S&P 500	-5.76

*Appreciation plus reinvestment of dividends and capital gains before taxes, Jan. 3 through Dec. 8, 2000.
DATA: STANDARD & POOR'S

**NO ONE EVER GOT
FIRED FOR HIRING A
WEB HOST WITH TOO
MUCH EXPERIENCE.**

You are the person charged with hiring a web hosting provider.

If you do it well, no one will thank you. If you do it poorly, everyone will blame you.

You are the unsung hero of the Internet Age. But even heroes sometimes need help.

Enter WorldCom. As the leader of the digital generation, we have the kind of web hosting experience few other companies can muster.

By teaming up Digex with our UUNET arm, we're able to offer you a comprehensive e-business solution.* Not just one of the most reliable IP networks in the industry. Not just data centers all over the world. But the far more critical, human element: an all-star team of web hosting experts that blue chip companies trust with their mission-critical applications.

All of which should alleviate any thoughts you have of being fired. And replace them with thoughts of being promoted.

For more details, visit us at www.wcom.com/generationd.

generation d

WORLD.COM

Backing The Right Horse

Bonds could be a great bet—but not just any bonds

BY SUSAN SCHERREIK

It finally looks as if the Federal Reserve will ease interest rates to shore up a sputtering economy. That's great news for bond investors. "We expect bonds to rally," says Sung Won Sohn, chief economist for Wells Fargo & Co.

But don't expect all bonds to behave equally. Over the past year, the bond market has been bipolar, with U.S. Treasuries performing smartly while corporate and high-yield bonds sagged. As the economy slows, worries about waning earnings will weigh down corporate and high-yield bonds. Meanwhile, U.S. government and other supersafe bonds figure to flourish against a backdrop of moderate economic growth

and a tame inflation rate. Owners of high-quality bonds should get some price appreciation at their yields.

U.S. Treasury bonds probably won't be the best high-quality choice, however. Treasuries have already had a big move, thanks largely to Uncle Sam's using some of the budget surplus to retire debt. You'll get more bang for your buck from Treasury Inflation-Indexed Securities (TIPS), government agency bonds, and municipal bonds.

BIG TIPS. The best approach for 2001 is twofold—build a portfolio from two extreme positions in the bond market, a variation on what bond pros call a "barbell," suggests Robert Rodriguez, manager of FPA New Income fund. Usually this is done with very short- and very long-term bonds, but Rodriguez has fashioned a credit-quality barbell with high-grade and high-yield, or junk, bonds.

Rodriguez' biggest bet is in TIPS. These unusual bonds adjust their payout depending on changes in the consumer price index. Recent TIPS maturing in 10 years yielded 7.2%, reflecting a CPI at a 3.4% rate. Rodriguez, who keeps 40% of his \$500 million fund in TIPS, says at this interest rate, these securities are better buys than 10-year Treasury notes as long as the average annual inflation rate stays above 1.7% over the next decade. That's a pretty safe bet, since

inflation has historically averaged over 3%

TIPS are also a great way to diversify a bond portfolio because, unlike conventional





AA.COM. THE ULTIMATE SITE FOR EVERYTHING **American Airlines**
American Eagle

FOR THE RECORD

Robert Rodriguez manages the \$500 million FPA New Income fund.

ON THE ECONOMY

The economy should be more resilient in the first half of the year than most people expect. It still has a full head of steam, with relatively high employment and consumer confidence.

ON INFLATION

The bond market is discounting a positive inflation outlook, but threats exist.



Productivity gains are leveling off, and unit labor costs could rise as a result. The wild card is the dollar, which has been strong relative to other currencies over the past two years. If the dollar weakens, export prices will rise, sparking inflation.

ON THE BEST BOND BUYS

High-yield bonds are cheap, but this sector remains risky.

'The wild card is the dollar'

bonds, they perform well when inflation rises. "They help to reduce your portfolio's volatility," Rodriguez explains.

Another place to get good yield and excellent quality is in mortgage-backed bonds issued by Fannie Mae and Freddie Mac, both quasi-government corporations. These bonds offer yields that range from one-half to nearly a full percentage point above comparable Treasury notes, yet the credit quality is AAA.

For investors in high tax brackets who are seeking safety, investment-grade municipal bonds look like the best deal around. During the past few years of vibrant economic expansion, the credit quality of the nation's states, counties, and cities has only improved, notes David Baldt, managing director for fixed income at Deutsche Asset Management.

"DIRT CHEAP." At first glance, the 4.4% yield on a five-year, AAA-rated insured muni doesn't look very appetizing. But for investors in the 36% federal tax bracket, that translates into a 6.8% yield; for those in the 39.6% bracket, the aftertax return is 7.3%. The muni payoff is even better in high-tax states such as New York and California, where there's often no state or city income tax on muni income from locally issued bonds. Marilyn Cohen, president of Envision Capital Management, a Los Angeles fixed-income management firm, especially likes the New York City general obligation bonds with a 5.5% coupon and maturing in 2015, recently yielding 5.6% to maturity, and the East Bay California Municipal Utility District 15-year

bonds with a 5% coupon and recently yielding 5.08%.

In the corporate sector, some pros believe it's time to start buying. Stephen Kane, co-portfolio manager of Metropolitan West Total Return Bond Fund, says top-drawer corporate bonds—Ford Motor, Bank of America, and Lehman Brothers—are attractive buys. They yield two percentage points above comparable U.S. Treasuries. The pickup in yield you get from high-grade corporates is even greater than was during the 1991 recession. That's because the corporate sector has been roiled by an uptick in bankruptcies and the credit collapse of household-name companies such as Xerox and J.P. Penney. "The consensus calls for a soft landing and corporate bonds have priced in a substantial slowing in the economy," says Robert Auwaert, senior fixed-income portfolio manager at Vanguard Group.

The fund manager says he is sticking to companies in sectors that continue to do well as economic growth moderates, such as electric utilities, life insurance, pharmaceuticals, and aerospace and defense. Conversely, he is avoiding cyclical industries such as chemicals and basic industries. One corporate bond that's "dirty" and "cheap" is Ford Motor Credit's 7½% bond due 2010, which recently yielded 7.63%, adds Metropolitan West's Kane.

RISK AND REWARD. In the junk-bond sector, rising default rates have spooked investors over the past year. As a result, junk-bond yields have spiked from an average of less than 5 percentage points over comparable Treasuries a year ago to more than 9 now. That's also the highest level since 1991. Deutsche Asset Management's Baldt notes that junk-bond mutual funds, the way most individuals invest in this sector, are yielding 8.5 percentage points more than Treasuries, twice the normal yield spread. "You're well compensated for the risk involved," he says. The biggest danger of buying into the junk sector right now, he says, is that prices will go lower. But that's not likely to happen unless the economy slips into a recession, he adds.

Investors learned in 2000 how rewarding and punishing—the debt markets can be, depending on which securities they bought. That's a lesson to keep in mind as you map out your strategy for the year ahead.

BEST BET

HOT TIPS

Treasury Inflation-Indexed Securities, or TIPS, will deliver more bang for your buck than regular U.S. Treasuries. These unusual bonds adjust their payout according to changes in the consumer price index. Recently, TIPS maturing in 10 years yielded 7.2%

Best Buys in Bonds

BOND TYPE	RECOMMENDATION	YIELD TO MATURITY*	COMMENT
CORPORATES	Ford Motor Credit 7½% of 2010	7.63%	Price reflects highly unlikely "50-50 chance" of default
MUNICIPAL	N.Y. City General Obligation 5½% of 2015	5.60	Strong credit, high yield
TREASURIES	10-year TIPS	7.20	Higher yield than 10-year T-notes

*As of Dec. 8

**WE DIDN'T
WRITE THE BOOK
ON THE
NEW ECONOMY.
JUST
THE TRAINING
MANUAL.**



SmartForce™ e-Learning. It's not just the training manual for the new economy, it's the catalyst for getting there. That's because SmartForce e-Learning gives your people the skills they need to succeed in this new, Internet-driven world. A world that demands a total solution for enterprise e-Learning. Just ask Unisys, PricewaterhouseCoopers or CSC, who already use our platform to create smarter, more e-savvy work forces. Better yet, see for yourself how the world's #1 e-Learning company can help transform your business to e-Business. SmartForce e-Learning. The new economy best seller.

Go to www.smartforce.com/neweconomy or call 1-888-395-0014

SmartForce™
The e-Learning Company



A PICASSO RECORD: The early *Woman with Crossed Arms* fetched \$55 million

pening to art prices the days. Photography, sculpture, and other relatively overlooked market segments have turned red-hot in the

past year. Old Master paintings are commanding top dollar. The most torrid price appreciation, however, is for risky, avant-garde contemporary art, whose prices blew through the roof at the November art auctions in New York. A male mannequin sculpture by Charles Ray went for \$2 million, a photograph by Cindy Sherman, \$259,000, and a painting by Cecily Brown, a young British artist now working in New York, \$87,000—record or near record prices for each artist.

DANGER AHEAD? Similar works by the same artists could have been had for a fraction of the prices just months earlier. "Recommending that someone buy contemporary art now is like recommending a dot-com stock at the peak," contends New York dealer John Herring.

Indeed, there are signs the art market is ripe for a nasty correction. "If we see a [deeper] crash in the stock market, some of those works that commanded huge prices at the fall auctions are going to be selling for less," predicts longtime collector Eli Broad, chairman of SunAmerica Inc., Los Angeles financial-services company.

Signs of weakness are most apparent in the huge impressionist and modern art category, which accounted for two-thirds of the \$457 million generated at the flagship New York auctions in November. The very best works are still being snapped up, but buyers have begun to balk at high prices for lesser works. "There was a time when a weak piece by a great artist commanded great price, but that isn't so anymore," says Boston financier Thomas H. Lee.

Prices for top modern works are astonishing. *Woman with Crossed Arms*, an ultra-rare canvas from Picasso's Blue Period, went for \$55 million at Christie's International, an all-time record for the artist. An Alberto Giacometti sculpture, *Grande Femme Debout*, fetched \$14.3 million. And many nouveau-riche collectors in the market, desperate for works—that look good on the wall—are aren't hard to explain—often go for huge premiums. For instance, many dealers were bemused when *La Robe Persanne*, a pretty Matisse painting of a woman in a striped dress, fetched \$17.1 million. One dealer says the buyer was Steve Wynn, the Las Vegas impresario who is flush from selling Mirage Resorts Inc. Wynn won't comment.

But with today's prices not far below the peaks they reached just before the 1990 crash, savvy buyers are turning cautious. As a result, 42% of the impressionist and modern works up for auction this fall failed to sell. Says Christopher Burrows, who used to head Christie's U.S. operations: "Some of the auction houses were at fault in pushing some price estimates too far."

One big reason is mounting competition among the auction houses. Giants Christie's and Sotheby's Holdings Inc. have been wracked by a pricing-fixing scandal that forced them to ante up a total of \$512 million to settle lawsuits against the

A Blue Period For Art Buyers

Peak prices have many collectors biding their time

BY THANE PETERSON

Londoner Michael G. Wilson, a producer of James Bond movies, is a renowned photo collector. But these days, when he peruses the offerings of dealers, he's often shocked to find classic works by such artists as Man Ray or Gustave Le Gray priced at \$500,000 or more. "I used to say a good photo cost the price of a used car," Wilson says. "Then it was a new car, and then a condo. Now, it's measured in houses."

Wilson's experience is typical of what's hap-

The average investor loses 2½ percentage points of return each year to taxes.*
That's a lot of water over the bow.

Performance is not just about what you make. It's about what you keep. To increase after-tax returns, Vanguard pioneered the first series of Tax-Managed Funds in 1994, and today we offer five. All use a disciplined investment strategy to minimize the impact of taxes, and none has ever paid a capital gains distribution. You might want to talk to Vanguard about this. **Call 1-800-523-2152.**



THE Vanguard GROUP
www.vanguard.com

Over the past ten years, taxes on income dividends and capital gains distributions reduced the pretax total return of the average U.S. stock fund by about 2.5 percent. For more complete information about Vanguard® funds including risks, charges, and expenses, call for a prospectus. Read it carefully before you invest or send money. © 2000 The Vanguard Group, Inc. All rights reserved. Vanguard Marketing Corporation, Distributor.



CINDY SHERMAN RISING: This self-portrait by the photographer sold for \$259,000 at Christie's in November

sale held by Alice, an upstart Paris auction house. "Frankly, I was prepared to pay more than the \$600,000 high estimate" for the Miró, Broad says.

New York money manager Arth Goldberg also is still buying contemporary art, focusing lately on movie-like works on videotape by such artists as Bill Viola and Slat Bradley. One reason: flat-screen technology has become good enough that much video art, long a staple of mixed-media installations, can now

hung on the wall like a painting.

A good strategy is to scope out talented artists before they become well known. In its annual art-market survey, the German magazine *Capital* tabs America's Walter de Maria, 63; Britain's Sir Taylor-Wood, 33; and China's Cai Guo-Qiang, 43, potential shooting stars.

Meantime, Chicago collector Lewis Manilow is buying works by Alex Katz, an established artist who recently had a major retrospective at Pittsburgh's Carnegie Museum of Art. San Francisco art dealer Richard Polsky recommends box constructions by the late Joseph Cornell, which sold at around \$75,000. And Stephen J. Abt III, president of ArtFact Inc., a North Kingstown (R.I.) research firm, says he has high hopes for such California artists as Edgar Payne, William Wendt and Maurice Braun.

Serious collectors never stop buying. But with prices so high, many are taking precautions. The first rule—always—is don't buy art solely as an investment. Rather, buy works you enjoy living with. It's also probably best to avoid the pretty, decorative works that new collectors are bidding up right now.

And don't be afraid to wait if you don't find exactly what you want. During the early 1990s slump, says Black, he loaded up on works at rock-bottom prices. "Many collectors figure, given today's stratospheric prices, that a similar buying opportunity can't be far in the future."

COLLECTORS LEE AND TENENBAUM:

Not buying much

That's creating an opening for No.3, Phillips Auctioneers. Backed by its parent, France's LVMH Moët Hennessy Louis Vuitton, Phillips is making a vigorous bid for key consignments, forcing all three auction houses, dealers say, to hike the minimum prices, already high, that they guarantee to sellers to win their business. The auction houses are now stuck with many works that failed to reach those minimums.

ON THE SIDELINES. Many smart buyers are sitting on their wallets. For the second year in a row, Boston money manager Scott Black, a careful collector, failed to buy any paintings at the fall auctions. He bid aggressively on a Monet that eventually sold for \$1.5 million, double the pre-auction estimate, but dropped out when the tab hit \$1.3 million. Thomas Lee and his wife, Ann Tenenbaum, also didn't buy anything at the auctions, but they've been picking up photographs privately. Dealers and other collectors say that brothers Ronald and Leonard Lauder, both major collectors, haven't been buying much either.

But a few collectors are still sniffing out bargains. Eli Broad was outbid on an Andy Warhol portrait of actress Elizabeth Taylor that went for \$4.4 million. But he nailed down an Alexander Calder mobile for \$950,000 at Christie's and privately paid just over \$200,000 for a Roy Lichtenstein that had just failed to sell at auction. He also believes he got a major deal when he nabbed a Joan Miró sculpture for \$350,000 at the sparsely attended first New York



TALL FIGURE: A buyer paid \$14.3 million for Giacometti's *Grande Femme Debout*



GLOBAL MERGERS & ACQUISITIONS

M&A advice that knows no borders

 infiniti	 NTT Communications	 mannesmann
\$13.6 billion Merger with Viacom	¥583 billion Has acquired Verio	€203 billion Has been acquired by Vodafone
Financial Advisor	Financial Advisor	Financial Advisor
Pending	August 2000	May 2000

INDUSTRY TRANSFORMING M&A COMBINATIONS

In the last twelve months, **Deutsche Bank has advised on transactions valued at more than \$300 billion.*** And looking back five years, we've partnered with **over 1700 companies**, bringing focused M&A expertise and execution.

In partnership with our clients, Deutsche Bank identifies the most viable and creative solutions for long-term success. This client-driven approach has allowed Deutsche Bank to become **one of this year's top 10 global M&A advisors.[†]**

Providing strategic insight and **advice on a worldwide basis** – another reason why Deutsche Bank is leading to results.

GLOBAL REACH
leading to results^{TM††}

Deutsche Bank



It's Back to Basics For Stock Investors

Our Scoreboard can help you make wiser choices

BY ROBERT J. ROSENBERG

For years, it seemed just about any stock-picking strategy would do, whether it was index investing, momentum investing, or buying tech stocks. Each approach had its gurus, each yielded good returns, and seemingly the only decision for investors was whether to reach for double- or triple-digit returns. The year 2000 began no different-

ly. At first, the sky seemed the limit. But the winter gave way to spring, and the sky—along with Nasdaq and other markets—began to fall. By December, all that remained was to calculate if those losses were in the single or double digits.

The lesson for investors? It's time to return to basics. BUSINESS WEEK's Investment Outlook Scoreboard can help you make wiser choices, whether you're on the lookout for the next high flier or shopping for bargains. Comprising 9 companies grouped into 24 industries, the Scoreboard offers information on America's biggest companies. Historical data, such as price-earnings ratios and yields, were provided by COMPUSTAT, a product of Standard & Poor's Institutional Market Services. Research firm I/B/E/S, a division of Thomson Financial, provided the earnings-per-share estimates and projected long-term growth rates based on its survey of 5,523 analysts. To narrow your search, we've provided six lists based on popular investment approaches. In 2000, our lists returned 5% on average. This year, we tweaked a few old ones and added new ones.

Conservative investors might wish to begin with dividends in picking stocks, focusing

on large cap companies with a history of paying dividends. We decided to look beyond utilities, which typically dominate lists of high-yielding stocks. Instead, our table features such money-center banks as First Union Corp., yielding 7.6%. For those who fear an economic downturn, food and tobacco giant Philip Morris Cos. yields 5.6% and its dividend seems solid.

FOLLOW THE NEWS. Banks also dominated our list of companies trading at a relatively low book value, another yardstick for value investors. This could reflect jitteriness over the loans on their books. We decided to limit our table to big-cap stocks bearing at least an A- S&P equity rating, such as Norfolk Southern Corp., trading at 94% of book. But undervalued stocks can become more undervalued: Witness Raytheon Co., which fell after saying it would not meet 2001 profit projections.

Value investors focusing on low price-to-book ratios also will want to look at our cheap stocks table. Last year's list has returned 19% as of Nov. 30. One caveat: Cheap stocks can get cheaper. Auto-parts maker Visteon Corp. fell on Dec. 6, when it announced fourth-quarter earnings were below expectations. Follow the news.

Look at our table of stocks with big price increases this year. Generally, shares that do well in one year continue to perform well the next. Of course, the Internet bubble in 2000 was an exception to that rule. This year's list is made up of comeback stars such as Oxford Health Plans Inc., a managed-care insurer on the mend from computer-system and financial-controls problems of a few years ago.

In a year when tech stocks went down like the Titanic, the contrarian in you has

Industry Group Winners & Losers

2000 WINNERS

EARNINGS CHANGE FROM 1999

POLLUTION CONTROL	1067%
HOTEL & MOTEL	694
NONFERROUS METALS	444
COAL, OIL & GAS	266
PERSONAL CARE	195
ALUMINUM	181
GENERAL MANUFACTURING	124
CHEMICALS	104
FOOD DISTRIBUTION	88
SEMICONDUCTORS	87

2001 WINNERS

EST. EARNINGS CHANGE FROM 2000

TEXTILES	900%
PETROLEUM SERVICES	135
TELECOM EQUIPMENT & SVCS.	132
DRUG DISTRIBUTION	90
FOOD RETAILING	80
COMPUTERS & PERIPHERALS	79
NONFERROUS METALS	71
ALUMINUM	66
SEMICONDUCTORS	52
COMPUTER SOFTWARE & SVCS.	52

2000 LAGGARDS

EARNINGS CHANGE FROM 1999

TEXTILES	-88%
TELECOM EQUIPMENT & SVCS.	-75
AIRLINES	-33
TIRE & RUBBER	-27
CARS & TRUCKS	-26
FOREST PRODUCTS	-25
FINANCIAL SERVICES	-20
FOOD RETAILING	-18
PUBLISHING	-18
MACHINE & HAND TOOLS	-13

2001 LAGGARDS

EST. EARNINGS CHANGE FROM 2000

COAL, OIL & GAS	-9%
FOREST PRODUCTS	-8
HOTEL & MOTEL	-3
AUTO PARTS & EQUIPMENT	-2
BUILDING MATERIALS	+1
CARS & TRUCKS	+7
CHEMICALS	+7
ELECTRICAL PRODUCTS	+8
TOBACCO	+9
BANKS-SOUTH & SOUTHEAST	+9

Because of losses in 1999 and estimated losses in 2000 and 2001, earnings gains or losses cannot be calculated on a percentile basis for broadcasters.

DATA: I/B/E/S INTERNATIONAL INC., COMPUSTAT, PROVIDED BY STANDARD & POOR'S INSTITUTIONAL MARKET SERVICES

But any list is only a starting point. For example, one stock that almost made our table of companies where earnings are expected to jump in 2001 is KLA-Tencor Corp. This leader in monitoring equipment for chipmakers is expected to earn \$2.28 in 2001. So get ready to dig into the data. There are other gems to be uncovered. And remember, the sky is no longer falling. □

2001

Investment Outlook Scoreboard

Glossary

MARKET VALUE: Share price on Nov. 30, 2000, multiplied by the latest available common shares outstanding.

RECENT SHARE PRICE: Price for a single share of a company's most widely traded issue of common stock as of the close of trading Nov. 30, 2000.

PRICE CHANGE: Percentage change in the company's most widely traded common-stock issue since Dec. 31, 1999.

EARNINGS GROWTH: Compound annual growth rate, calculated using the 1995 and 1999 restated basic earnings per share (unless noted otherwise).

RETURN ON EQUITY: The latest available net income available for shareholders divided by total equity.

PRICE AS PERCENTAGE OF BOOK VALUE: Share price on Nov. 30, 2000, as a percentage of the latest available book value per share, which is the sum of common stock at nominal balance-sheet value, capital surplus, and retained earnings as shown in company accounts divided by the number of shares outstanding.

P-E RATIO: Price-earnings ratio based on the latest available 12 months earnings and Nov. 30, 2000, stock price.

PRICE-SALES RATIO: Based on the latest available 12 months sales and the Nov. 30, 2000, stock price.

PRICE-EARNINGS TO GROWTH RATE:

The price-earnings ratio based on the 2000 earnings estimate and Nov. 30, 2000, stock price, divided by the long-term earnings growth rate.

DIVIDEND YIELD: Indicated annual dividend as a percent of the Nov. 30, 2000, stock price.

EARNINGS PER SHARE: Diluted earnings per share-net income (including proceeds from certain convertible securities, warrants, and options that are common-stock equivalents, but excluding extraordinary profits or losses) divided by number of common and common equivalent shares.

EARNINGS PER SHARE ESTIMATES: Analysts' consensus estimates for 2000 and 2001 compiled by I/B/E/S International Inc., New York, N.Y.

I/B/E/S is a registered trademark of I/B/E/S International Inc.

VARIATION: The percentage by which two-thirds of the 2001 earnings estimates are above or below the average estimate. The lower this figure is, the more analysts agree on their estimates.

LONG-TERM EARNINGS GROWTH: Median estimate by analysts of the annual growth rate of earnings compiled by I/B/E/S International Inc. For most companies, this is for the next 3-5 years.

S&P EQUITY RANKING: A measure of a company's historical growth of earnings and dividends, using Standard Poor's computerized scoring system based on the most recent 10 year earnings per share and dividends.

EARNINGS PER SHARE

													2001 ESTIMATES FROM ANALYSTS				
COMPANY	STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	I/B/E/S 2000 ANALYST EST.	I/B/E/S CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %	S&P EQUITY RANK
ALL-INDUSTRY AVERAGE		13869.0	108	3	15.0	17.4	383	25	2.2	1.7	1.64	2.79	2.92	3.53	7.8	14.8	
1 AEROSPACE & DEFENSE																	
INDUSTRY AVERAGE		16400.1	55	64	16.4	16.7	347	20	0.9	1.7	1.38	2.74	3.34	3.78	2.5	11.8	
BOEING BA		59056.2	69	67	NM	19.0	486	26	1.1	1.7	0.81	2.49	2.74	3.68	1.4	15.0	
GENERAL DYNAMICS GD		15192.4	76	45	40.7a	24.6	425	17	1.5	1.7	1.36	4.36	4.01	4.49	0.7	11.0	
GOODRICH (B.F.) GR		3857.3	38	38	NA	27.1	333	13	0.7	1.0	2.90	1.53	3.28	3.57	2.0	12.0	
LOCKHEED MARTIN LMT		14663.0	34	56	4.2	-4.5	207	NM	0.6	3.3	1.29	1.92	1.05	1.25	2.4	10.0	
NEWPORT NEWS SHIPBUILDING NNS		1948.2	55	100	20.9a	34.4	744	20	1.0	2.0	0.29	2.72	2.71	2.95	1.7	10.0	
NORTHROP GRUMMAN NOC		6047.4	84	56	9.8	16.3	159	10	0.8	1.0	1.90	6.93	8.84	9.49	2.9	10.0	
PRECISION CASTPARTS PCP (3)		1753.4	35	169	14.6	12.0	214	18	0.9	1.2	0.34	1.74	2.41	2.77	7.6	12.0	
RAYTHEON RTN.B		11917.9	35	32	NA	3.6	111	31	0.7	2.2	2.28	1.34	1.46	1.72	2.9	11.0	
UNITED TECHNOLOGIES UTX		33165.4	71	9	8.2	17.9	447	25	1.3	1.3	1.27	1.65	3.54	4.07	0.7	15.0	
2 AUTOMOTIVE																	
INDUSTRY AVERAGE		5194.7	23	-31	13.7	20.2	115	7	0.2	0.8	2.55	4.09	3.38	3.44	8.7	10.7	
(A) CARS & TRUCKS																	
GROUP AVERAGE		15466.3	38	-10	25.2	23.9	170	9	0.3	1.1	2.55	6.48	4.81	5.13	7.3	9.6	
FORD MOTOR F		43139.4	23	-25	13.7	33.5	236	8	0.3	1.5	5.28	5.86	3.52	3.74	5.3	7.0	
GENERAL MOTORS GM		27985.9	50	-32	11.8	17.3	89	5	0.2	0.8	4.04	8.53	9.22	9.02	10.2	7.0	
NAVISTAR INTERNATIONAL NAV (10)		1924.0	33	-31	52.1	28.1	147	13	0.2	1.4	0.00	8.20	2.58*	4.90	7.4	9.0	
OSHKOSH TRUCK OTRKB (9)		648.8	39	33	NM	16.1	215	13	0.5	0.8	0.89	2.39	2.96*	3.43	1.8	17.0	
PACCAR PCAR		3633.8	48	7	23.1	24.8	161	7	0.4	1.0	2.53	7.41	5.78	4.55	12.1	8.0	
(B) PARTS & EQUIPMENT																	
GROUP AVERAGE		1786.2	19	-38	13.2	20.5	100	5	0.2	0.5	2.05	3.55	3.16	3.10	8.9	11.4	
AMERICAN AXLE & MFG. HOLDINGS AXL		487.5	10	-20	35.6	36.0	133	4	0.2	0.4	0.00	2.34	2.69	2.76	5.1	10.0	
ARVINMERITOR ARM (9)		616.2	13	-49	NA	58.9	167	3	0.1	0.3	6.67	3.75	4.12*	2.82	9.9	10.0	
AUTOLIV ALV		2023.3	21	-30	4.1	11.1	107	10	0.5	1.2	2.14	1.95	2.18	2.33	4.7	8.0	
BORGWARNER BWA		959.5	37	-10	12.5	11.4	89	8	0.4	0.6	1.64	5.07	5.18	5.23	3.1	12.0	
DANA DCN		2476.6	17	-44	2.5	15.3	91	6	0.2	0.6	7.40	3.08	2.83	2.26	11.5	10.0	
DELPHI AUTOMOTIVE SYSTEMS DPH		7732.0	14	-12	-8.6	31.6	216	7	0.3	0.7	2.03	1.95	2.08	2.21	5.0	10.0	
DURA AUTOMOTIVE SYSTEMS DRRA		106.0	6	-66	10.7	11.3	24	2	0.0	0.1	0.00	2.94	3.70	3.83	8.9	15.0	
EATON ETN		4908.8	70	-3	13.5	20.7	171	9	0.5	1.1	2.51	8.36	6.65	7.41	3.8	10.0	
FEDERAL-MOGUL FMO		136.7	2	-90	NM	6.4	8	1	0.0	0.2	0.52	3.59	1.30	0.54	33.3	7.5	

FOOTNOTES: *Actual, not estimated data. NA=not available. NM=not meaningful. NR=not ranked. (a) Four-year compound growth rate. (b) Final year of growth rate calculation is 1999. (c) Pro forma data. Data compiled by COMPUSTAT, a product of Standard & Poor's Institutional Market Services, from such sources such as statistical services, registration statements and company reports that SPIMS believes to be reliable but are not guaranteed by SPIMS or BUSINESS WEEK as to correctness or completeness. This material is not an offer to buy or sell any security. Additional data: I/B/E/S International Inc., New York, N.Y. I/B/E/S is a registered trademark of I/B/E/S International Inc.

EARNINGS PER SHARE

COMPANY	STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	2001 ESTIMATES FROM ANALYSTS					S&P EQUITY RANKING
													I/B/E/S 2000 ANALYST EST.	I/B/E/S CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %		
BANKS - EAST																		
GROUP AVERAGE		1671.1	13	-40	-6.4	8.6	73	11	0.2	1.7	5.81	1.66	1.22	1.44	11.2	8.8		
GOODYEAR TIRE & RUBBER CTB		671.0	11	-41	7.3	12.7	70	6	0.2	0.6	4.54	1.79	1.69	1.88	5.3	9.5	A	
GOODYEAR TIRE & RUBBER GT		2671.3	17	-40	-20.1	4.5	77	17	0.2	2.8	7.08	1.52	0.75	1.00	17.0	8.0	A-	
BANKS - MIDWEST																		
GROUP AVERAGE		14176.7	38	5	13.2	15.9	278	20	2.3	1.3	3.22	2.50	2.69	2.99	2.6	11.6		
BANKS - SOUTH & SOUTHEAST																		
GROUP AVERAGE		11314.5	30	-9	10.5	13.4	217	21	1.8	1.1	4.17	2.46	2.63	2.87	2.7	10.9		
SOUTH BANCORPORATION ASO		5580.2	15	-23	-3.2	5.1	202	43	1.5	1.0	5.65	0.86	1.47	1.45	2.8	10.0	A-	
BANK OF AMERICA BAC		65131.9	40	-20	10.8	17.1	139	8	1.2	0.7	5.61	4.48	5.01	5.47	4.9	11.0	A-	
BT BBT		13277.5	33	22	21.6	12.6	306	22	2.8	1.3	2.76	1.83	2.17	2.46	1.2	12.0	A-	
FLORIDA BANKS CBC		1679.9	42	-5	11.2	10.6	191	16	1.7	1.1	3.23	3.62	3.34	3.69	2.4	11.5	A+	
FLORIDA BANCSHARES CBSS		2387.6	20	-11	12.2	17.7	180	10	1.5	1.0	4.46	1.88	2.02	2.21	2.7	9.5	A+	
FT TENNESSEE NATIONAL FTN		3234.1	25	-11	11.9	17.2	247	15	1.4	1.2	3.49	1.85	1.74	1.97	2.0	12.0	A+	
FT UNION FTU		24773.4	25	-24	11.0	2.3	167	84	1.1	0.9	7.64	3.33	2.97	2.79	6.8	10.0	A	
FLORIDA HIB		1899.7	12	12	3.0	13.3	138	10	1.4	0.8	4.36	1.06	1.30	1.42	2.8	11.0	B	
FLORIDA COMMERCIAL BANCORP. NCBC		4514.1	22	-3	18.9	11.6	349	28	3.6	1.4	2.36	0.99	1.27	1.52	2.0	12.5	A	
FLORIDA FINANCIAL RGBK		5374.1	24	-3	13.1	15.7	160	10	1.5	1.2	4.45	2.35	2.32	2.42	2.9	8.5	A	
FLORIDA TRUST SOTR		5678.3	34	-11	13.7	14.9	178	12	1.5	1.1	2.96	2.63	2.85	3.07	2.6	11.0	A+	
FLORIDA TRUST STI		15131.4	51	-26	10.1	15.5	197	13	1.8	1.0	2.91	3.50	4.39	4.81	1.9	11.5	A+	
FLORIDA FINANCIAL SNV		6287.5	22	11	NA	18.7	468	25	3.4	1.6	1.99	0.80	0.91	1.04	1.0	15.0	A+	
FLORIDA PLANTERS UPC		4581.7	34	-14	3.1	14.4	165	12	1.5	1.4	5.88	2.85	3.00	3.25	3.1	8.0	B+	
FLORIDA WB		10185.8	50	-26	10.1	14.0	167	12	1.4	1.1	4.79	4.90	4.62	5.51	2.0	10.0	A	
BANKS - WEST & SOUTHWEST																		
GROUP AVERAGE		5028.7	32	-13	7.8	15.8	266	17	1.8	1.1	2.82	1.96	2.40	2.78	4.0	13.3		
WEST BWE		2603.7	21	7	4.6	10.7	134	13	1.8	1.3	3.26	1.38	1.73	1.92	1.6	9.5	A-	
WELLS FARGO CENTURY FINANCIAL BOH		1182.6	15	-20	3.3	9.5	95	10	0.9	1.3	4.84	1.64	1.44	1.80	5.6	8.0	A-	
WELLS FARGO FINANCIAL PVN		12844.3	45	-1	NA	33.0	709	22	2.4	0.7	0.27	1.89	2.64	3.38	1.8	25.0	III	
WELLS FARGO BANCAL UB		3762.7	24	-40	11.1	17.6	117	7	1.2	0.8	4.26	2.64	3.32	3.54	9.0	9.0	B+	
WELLS FARGO BANCORPORATION ZION		4750.4	55	-8	12.3	8.1	277	34	2.6	1.3	1.47	2.26	2.85	3.27	1.8	15.0	A	

EARNINGS PER SHARE

												2001 ESTIMATES FROM ANALYSIS					
COMPANY	STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1/B/E/S 2000 ANALYST EST	1/B/E/S CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %	E RANK
CHEMICALS																	
INDUSTRY AVERAGE		4761.7	24	-22	-5.1	44.7	405	18	0.7	1.9	2.92	0.97	1.98	2.12	7.9	10.4	
AIR PRODUCTS & CHEMICALS APD (9)		7346.1	34	3	-25.3	4.7	278	60	1.3	5.2	2.21	2.09	0.57*	2.71	1.5	11.7	A
CABOT CBT (9)		1617.6	24	20	-10.5b	10.0	216	4	1.1	0.3	1.80	1.11	5.71*	2.00	10.0	16.5	B
CROMPTON CK		992.0	9	-35	NM	2.2	132	51	0.3	1.0	2.29	-1.91	0.91	1.05	9.5	10.0	B
CYTEC INDUSTRIES CYT		1389.3	35	50	9.3	24.1	256	11	1.0	1.2	0.00	2.73	2.87	3.14	1.9	10.0	F
DOW CHEMICAL DOW		20734.7	31	-31	-3.8	16.7	225	14	1.0	1.6	3.80	1.98	2.26	2.37	7.6	8.5	B
DUPONT DD		43938.6	42	-36	-47.1	4.6	338	76	1.5	1.5	3.31	0.19	2.80	3.13	3.8	10.0	B
EASTMAN CHEMICAL EMN		3309.8	43	-9	-45.4	11.2	186	17	0.6	1.3	4.08	0.61	3.88	4.28	9.8	8.5	N
FERRO FOF		712.3	21	-6	15.7	24.0	314	11	0.5	0.9	2.80	1.85	1.97	2.16	2.3	12.0	B
FULLER (H.B.) FULL (11)		481.7	34	-39	9.2	12.4	121	10	0.4	0.8	2.46	3.15	3.49	4.11	2.0	12.0	B
GRACE (W.R.) GRA		151.2	2	-84	NM	124.2	134	1	0.1	0.1	0.00	1.76	1.86	2.08	1.4	12.0	B
GREAT LAKES CHEMICAL GLK		1757.4	35	-9	4.6	15.1	197	14	1.1	1.5	0.92	2.41	2.28	2.49	2.8	10.5	A
HERCULES HPC		2041.9	19	-32	-14.0	16.7	237	14	0.6	1.8	0.00	1.62	0.94	1.07	22.4	11.5	A
IMC GLOBAL IGL		1363.2	12	-27	NM	-61.1	124	NM	0.6	1.5	3.00	-5.33	0.93	1.37	12.4	8.5	B
INTL. FLAVORS & FRAGRANCES IFF		1845.3	19	-50	-9.1	24.5	286	12	1.3	1.4	8.13	1.53	1.53	1.40	13.6	9.0	A
LUBRIZOL LZ		1125.9	22	-30	-1.3	15.9	151	10	0.7	1.4	4.82	2.25	1.96	2.15	5.6	8.0	B
LYONDELL CHEMICAL LYO		1587.1	14	6	NM	38.8	135	3	0.4	1.3	6.67	-0.77	1.10	1.19	23.5	9.7	B
MILLENNIUM CHEMICALS MCH		1019.3	16	-20	NM	-28.8	104	NM	0.6	1.1	3.40	-4.71	1.86	1.36	10.3	8.0	N
MONSANTO MON		6466.8	25	NA	NA	1.4	97	NA	1.2	1.4	0.00	NA	1.65	1.77	4.0	11.0	N
POLYONE POL		536.6	6	NA	37.4	4.9	61	6	0.4	0.9	4.50	NA	0.64	0.60	10.0	10.0	N
PRAXAIR PX		5699.9	36	-29	10.0	19.5	237	12	1.2	1.0	1.73	2.72	2.99	3.25	1.9	12.0	N
ROHM & HAAS ROH		6535.5	30	-27	-2.4	10.2	178	18	1.0	1.5	2.69	1.27	1.76	2.15	6.1	11.0	A
SCOTTS SMG (9)		882.3	32	-21	NM	14.0	185	14	0.5	0.9	0.00	2.27	2.25*	2.82	2.8	16.0	B
SOLUTIA SOI		1307.2	13	-18	9.4	800.0	5683	7	0.4	1.1	0.32	1.80	1.20	1.41	10.6	10.0	N
UNION CARBIDE UK		5833.9	43	-35	-23.1	12.7	211	17	0.9	2.2	2.08	2.27	1.99	2.57	10.9	10.1	B
USEC USU (6)		368.2	5	-35	NA	-0.3	40	NM	0.3	15.2	12.06	1.52	0.10*	0.48	10.4	3.0	N
5 CONGLOMERATES																	
INDUSTRY AVERAGE		45942.8	24	-24	11.3	10.5	246	18	1.0	1.2	2.65	1.32	1.82	2.12	4.2	13.2	
ALLEGHENY TECHNOLOGIES ATI		1603.0	20	-11	-5.6	13.2	151	12	0.7	1.0	4.03	1.16	1.94	2.27	4.9	10.0	N
ANIXTER INTERNATIONAL AXE		699.4	19	-10	72.5	14.3	135	10	0.2	0.5	0.00	1.83	2.15	2.46	1.2	18.5	B
GENERAL ELECTRIC GE		491100.0	50	-4	13.8	25.6	1029	40	3.9	2.6	1.10	1.07	1.27	1.49	3.4	15.0	A
HONEYWELL INTERNATIONAL HON		38877.4	49	-15	6.8	15.1	416	28	1.6	1.1	1.54	1.90	3.03	3.42	2.3	14.5	B
IKON OFFICE SOLUTIONS IKN (9)		441.6	3	-56	-35.1	1.8	31	15	0.1	1.7	5.33	0.23	0.20*	0.60	0.0	9.0	B
PALL PLL (7)		2454.7	20	-8	0.9	19.4	322	17	2.0	1.2	3.31	0.41	1.18*	1.45	4.8	14.0	B
TENNECO AUTOMOTIVE TEN		140.4	4	-58	NM	-33.3	39	NM	0.0	1.5	5.08	-1.87	0.52	0.47	17.0	5.0	B
TEXTRON TXT		7219.0	51	-34	30.0	15.5	168	11	0.6	0.8	2.57	4.05	4.66	5.26	0.8	13.5	A
TRW TRW		4126.1	33	-36	6.4	24.1	149	6	0.2	0.8	4.23	3.80	4.15	4.14	5.1	10.0	A
U.S. INDUSTRIES USI (9)		513.9	7	-52	-20.1	4.4	63	16	0.2	1.0	2.99	1.64	0.43*	1.25	4.8	15.0	N
VIAD VVI		2092.7	23	-19	60.7a	19.2	268	14	1.2	0.7	1.59	1.32	1.64	1.91	2.1	20.0	B
WHITMAN WH		2046.0	15	12	-5.6	7.2	176	25	0.8	1.8	0.27	0.35	0.63	0.75	4.0	13.5	B
6 CONSUMER PRODUCTS																	
INDUSTRY AVERAGE		14690.4	33	7	22.3	25.8	510	23	1.4	1.4	2.04	1.51	1.97	2.28	5.8	14.5	
(A) APPAREL																	
GROUP AVERAGE		2749.3	24	18	31.6	8.7	198	22	0.6	0.9	2.78	1.73	1.99	2.33	14.4	13.8	
JONES APPAREL GROUP JNY		3883.3	33	21	28.2	19.1	279	15	1.0	0.7	0.00	1.60	2.50	2.99	1.7	20.0	B
KELLWOOD KWD (1)		482.3	20	4	NA	15.5	110	7	0.2	0.5	3.18	NA	2.64	3.17	1.3	16.0	B
LIZ CLAIBORNE LIZ		2083.2	39	4	16.7	22.9	245	11	0.7	0.9	1.15	3.12	3.59	4.02	0.8	12.3	B
NIKE NKE (5)		11513.0	43	-14	2.1	17.8	349	20	1.3	1.2	1.13	2.07	2.35	2.65	2.3	15.0	A
PHILLIPS-VAN HEUSEN PVH (1)		351.5	13	55	180.6	10.0	134	13	0.3	0.8	1.17	0.62	1.08	1.26	0.8	15.0	B
POLO RALPH LAUREN RL (3)		2029.1	21	23	NA	3.5	279	84	1.0	0.9	0.00	1.49	1.68	1.94	1.0	13.3	N
REEBOK INTERNATIONAL RBK		1215.7	21	160	-44.5	10.3	209	20	0.4	1.4	0.00	0.20	1.37	1.58	4.4	11.0	B
VF VFC		3060.1	27	-10	26.2	15.5	136	9	0.5	1.0	3.27	2.99	2.97	3.26	2.2	9.5	A
WARNACO GROUP WAC		125.6	2	-81	11.8	-36.7	36	NM	0.1	NM	15.16	1.72	-0.29	0.13	115.4	12.5	B
(B) APPLIANCES & HOME FURNISHINGS																	
GROUP AVERAGE		2807.1	24	-17	37.1	26.6	381	15	0.8	0.8	1.07	1.70	1.95	2.24	4.6	18.0	
BED BATH & BEYOND BBBY (2)		5890.6	21	20	34.2	22.7	908	41	2.8	1.4	0.00	0.46	0.58	0.72	1.4	25.0	N
BEST BUY BBY (2)		5345.6	26	-49	NM	25.0	342	14	0.4	0.6	0.00	1.63	1.86	2.21	2.7	25.0	B
CIRCUIT CITY GROUP CC (2)		2606.1	13	72	NA	14.7	118	8	0.2	0.5	0.55	1.60	1.37	1.81	18.8	19.0	A
FURNITURE BRANDS INTL. FBN		784.9	16	-28	34.1	20.3	140	7	0.4	0.4	0.00	2.14	2.15	2.37	3.4	17.0	N
HARMAN INTERNATIONAL INDS. HAR (6)		1173.8	37	30	7.6	17.8	278	17	0.7	1.0	0.27	0.33	2.07*	2.44	1.2	17.0	B
LA-Z-BOY LZB (4)		858.2	14	-15	22.7	13.8	127	9	0.4	0.8	2.53	1.60	1.55	1.74	2.9	11.5	A
LEGGETT & PLATT LEG		3199.6	16	-24	17.7	16.4	179	11	0.8	0.9	2.70	1.45	1.43	1.59	1.3	13.0	A
LINENS 'N THINGS LIN		1096.6	27	-7	NM	14.0	260	19	0.7	0.7	0.00	1.27	1.61	2.00	0.5	25.0	N
MAYTAG MYG		2201.8	29	40	NM	99.8	777	8	0.5	0.6	2.52	3.66	3.33	3.75	5.6	15.0	B
PIER 1 IMPORTS PIR (2)		1064.7	11	74	63.2	17.6	221	13	0.8	0.8	1.45	0.75	0.97	1.05	1.9	14.0	B
RADIOSHACK RSH		8733.9	47	5	16.9	43.1	1201	28	1.9	1.4	0.47	1.43	1.85	2.20	1.8	18.0	B

EARNINGS PER SHARE

COMPANY STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1/B/E/S 2000 ANALYST EST.	2001 ESTIMATES FROM ANALYSTS				S&P EQUITY RANKING
													1/B/E/S CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %		
MIRLPOOL WHR	2603.2	39	-40	15.0	24.9	156	7	0.3	0.7	3.48	4.56	5.60	6.05	10.4	9.7	B+	
WILLIAMS-SONOMA WSM (1)	933.3	17	-64	122.3	16.0	245	16	0.6	0.7	0.00	1.16	0.94	1.19	8.4	25.0	B	
B) BEVERAGES																	
GROUP AVERAGE	35819.3	51	33	8.6	19.7	641	34	2.5	2.1	0.94	1.84	2.28	2.60	2.6	14.6		
NHEUSER-BUSCH BUD	42791.1	47	34	14.7	37.5	1046	28	3.5	2.8	1.39	1.47	1.68	1.90	2.1	10.0	A	
BROWN-FORMAN BF.B (4)	4436.6	65	13	8.3	21.9	423	19	2.3	1.9	1.92	3.18	3.52	3.79	0.5	9.5	A	
COCA-COLA KO	155272.0	63	8	-4.5	19.2	1577	82	7.6	3.1	1.09	0.98	1.45	1.73	2.3	14.0	A	
COCA-COLA ENTERPRISES CCE	9165.8	22	9	-11.3	6.9	323	47	0.6	2.2	0.73	0.13	0.50	0.68	5.9	20.0	B	
CONSTELLATION BRANDS STZ (2)	899.1	49	-4	21.5a	16.3	163	10	0.4	0.6	0.00	4.18	5.13	5.92	2.7	17.5	B+	
DOORS (ADOLPH) RKY	2765.1	75	43	22.1	12.0	302	26	1.3	2.3	0.99	2.46	3.03	3.38	1.8	10.7	B	
EPSI BOTTLING GROUP PBG	5703.1	39	136	6.7	14.2	346	25	0.7	1.2	0.21	0.92	1.50	1.78	3.4	22.0	NR	
PEPSICO PEP	65521.5	45	29	11.7	29.9	951	32	3.3	2.4	1.23	1.37	1.45	1.63	1.8	13.0	A	
C) PERSONAL CARE																	
GROUP AVERAGE	22724.2	40	-16	20.9	31.2	1002	32	2.2	2.3	1.42	0.41	1.21	1.52	2.0	12.7		
JOHN PRODUCTS AVP	9903.3	42	26	3.0	NM	NM	23	1.8	1.7	1.78	1.17	1.87	2.10	1.0	13.0	A-	
PROCTER & GAMBLE CO. CLX (6)	10528.0	45	-11	8.4	22.3	577	26	2.6	2.3	1.88	1.03	1.64*	1.96	1.5	12.0	A	
WILGATE-PALMOLIVE CL	33618.9	59	-10	56.8	64.6	2153	36	3.6	2.7	1.07	1.47	1.69	1.90	0.5	13.0	A	
AL DL	1115.4	12	-52	53.4a	8.9	365	45	0.7	2.4	2.72	1.17	0.50	0.63	6.4	10.0	NR	
COLAB ECL	5520.1	43	11	16.0	26.0	741	30	2.5	1.9	1.11	1.31	1.50	1.71	0.6	15.0	A-	
THE LAUDER EL (6)	10302.2	43	-14	19.9	19.9	888	35	2.3	2.4	0.46	1.03	1.20*	1.35	1.5	15.0	NR	
LETTIE G	35670.4	34	-18	4.4	49.8	1502	29	3.8	2.2	1.92	1.14	1.20	1.35	3.0	13.0	A	
PROCTER & GAMBLE PG (6)	97622.0	75	-32	5.1	27.0	789	30	2.4	2.8	1.87	2.59	2.47*	3.18	1.6	11.0	A	
VLON REV	237.6	5	-42	NM	NM	NM	NM	0.2	NM	0.00	-7.25	-1.16	-0.54	NA	12.0	NR	
D) TOBACCO																	
GROUP AVERAGE	18813.5	27	46	3.2	57.1	509	9	0.9	1.1	6.11	2.17	2.89	3.14	4.4	10.0		
WON DMN (6)	153.3	3	6	-19.0	6.2	38	6	0.1	0.7	5.82	-0.63	0.40*	0.49	10.2	13.0	NR	
WILIP MORRIS MO	85176.6	38	66	10.2	56.1	572	10	1.4	0.9	5.55	3.19	3.69	4.11	1.5	12.0	A	
R. REYNOLDS TOBACCO HOLDINGS RJR	3991.6	39	123	NA	5.9	57	10	0.5	2.0	7.87	1.80	3.88	4.15	3.6	5.0	NR	
UNIVERSAL UVV (6)	877.2	32	39	16.6	21.7	174	9	0.3	0.7	3.92	3.80	3.77*	4.05	4.4	13.0	B+	
W TUST	3869.0	24	-6	5.0	195.7	1702	9	2.5	1.3	7.41	2.69	2.69	2.92	2.1	7.0	A+	
E) CONTAINERS & PACKAGING																	
GROUP AVERAGE	1399.9	19	-38	-1.6	7.1	142	11	0.5	1.6	3.35	1.47	1.70	2.09	12.3	9.7		
F) GLASS, METAL & PLASTIC																	
GROUP AVERAGE	547.1	13	-54	13.1	-1.9	75	12	0.1	0.6	6.54	1.91	2.04	2.29	5.0	9.3		
ILL BLL	1123.2	39	-1	19.8	9.6	173	19	0.3	1.1	1.54	3.15	3.68	4.10	6.3	10.0	B	
OWEN CORN & SEAL CCK	510.3	4	-82	13.1	-0.3	20	NM	0.1	0.7	24.62	1.36	0.81	1.02	4.9	7.0	B	
WENS-ILLINOIS OI	419.8	3	-89	6.5	-15.1	30	NM	0.1	0.2	0.00	1.79	1.55	1.76	5.7	11.0	B	
WILSON HOLDINGS SLGN	135.0	8	-43	NM	NM	NM	4	0.1	0.4	0.00	1.32	2.11	2.26	3.1	9.0	NR	
G) PAPER																	
GROUP AVERAGE	1710.0	21	-31	-6.5	9.5	161	11	0.6	2.0	2.18	1.31	1.58	2.02	14.9	9.9		
WIS BMS	1577.7	30	-15	NA	16.3	197	12	0.8	1.0	3.23	2.18	2.41	2.61	1.5	12.0	A	
WIL-WELL MWL	234.1	5	-65	22.8	12.7	59	5	0.1	0.4	0.00	1.20	1.01	1.27	8.7	12.0	NR	
PACKAGING CORP. OF AMERICA PKG	1554.7	15	NA	-35.5	16.5	267	16	0.8	NA	0.00	0.39	1.25	1.60	26.3	NA	NR	
STIV PTV	1848.6	12	10	NM	-4.1	123	NM	0.6	1.2	0.00	-0.67	0.89	1.06	4.7	11.0	NR	
CLATCH PCH	890.2	31	-30	-21.5	-1.1	105	NM	0.5	8.6	5.56	1.41	0.66	1.14	54.4	5.5	B	
CK-TENN RKT (9)	220.5	7	-56	-9.5ab	-4.1	57	NM	0.2	NM	4.62	1.13	-0.46*	1.14	3.5	11.0	NR	
WALD AIR SEE	2656.8	32	-39	6.2	7.0	392	17	0.9	0.9	0.00	1.68	1.99	2.32	2.2	17.0	NR	
WURFIT-STONE CONTAINER SSCC	3074.7	13	-48	-22.2	18.4	129	7	0.4	1.6	0.00	0.74	1.06	1.51	33.8	7.5	NR	
WOCO PRODUCTS SON	1716.1	17	-24	4.2	20.4	193	10	0.6	1.0	4.64	1.83	1.77	1.95	2.6	10.0	B+	
WAPLE-INLAND TIN	2262.0	46	-30	-8.0	12.0	126	11	0.6	1.5	2.78	3.43	4.27	4.41	15.4	7.0	B	
WTVACO W (10)	2774.5	28	-16	4.9	10.9	119	11	0.8	1.8	3.19	1.11	2.53*	3.19	11.3	6.0	B	
H) DISCOUNT & FASHION RETAILING																	
GROUP AVERAGE	10891.6	22	-18	20.6	15.8	294	17	1.2	1.0	0.68	1.21	1.38	1.69	6.7	17.1		
WERTO-CULVER ACV (9)	2044.5	37	42	13.1	16.2	321	20	0.9	2.2	0.82	1.51	1.83*	1.90	0.5	9.0	A+	
AMZON.COM AMZN	8791.4	25	-68	NM	NM	NM	NM	3.6	NM	0.00	-2.20	-1.21	-0.69	20.3	50.0	NR	
WES DEPARTMENT STORES AMES (1)	58.8	2	-93	NA	1.4	11	9	0.0	NM	0.00	0.66	-1.04	0.75	33.3	15.0	NR	
W OZONE AZO (8)	3136.4	26	-20	15.5	27.0	316	13	0.7	0.9	0.00	1.63	2.00*	2.31	0.4	15.0	B+	
W INES & NOBLE BKS (1)	1741.2	27	32	NM	10.7	218	22	0.4	1.0	0.00	1.81	1.51	1.95	3.1	19.0	NR	
W WHOLESALE CLUB BJ (1)	2431.1	34	-8	28.7	20.5	400	20	0.5	1.1	0.00	1.47	1.78	2.07	4.4	17.0	NR	
WIDERS GROUP BGP (1)	1005.2	13	-21	NM	11.5	127	11	0.3	0.6	0.00	1.13	1.26	1.53	1.3	17.6	NR	
WILKINGTON COAT FACTORY BCF (5)	601.2	14	-2	24.5a	9.7	106	11	0.3	0.6	0.15	1.37	1.57	1.75	NA	15.0	B+	
W V COMPUTER CENTERS CDWC	3996.9	46	17	47.5	25.8	686	28	1.1	1.1	0.00	1.11	1.83	2.34	3.4	23.0	NR	
W SOLIDATED STORES CNS (1)	953.5	9	-47	0.3	12.2	78	8	0.2	0.6	0.00	0.85	0.90	1.03	3.9	15.0	B	
W TCO WHOLESALE COST (8)	14593.1	33	-28	21.8	14.9	344	24	0.5	1.6	0.00	1.11	1.35*	1.50	2.0	15.0	B	
W AUTO CAO (1)	81.8	3	-83	NM	7.0	59	9	0.1	0.1	0.00	0.98	1.30	1.50	0.0	18.0	NR	
WARD'S DDS (1)	1012.0	11	-46	1.2	2.6	37	15	0.1	0.8	1.46	1.55	1.42	1.63	16.0	10.0	A	
W LAR GENERAL DG (1)	4715.1	14	-21	22.9	22.4	469	21	1.1	0.9	0.89	0.65	0.71	0.86	4.7	23.0	A+	
WILLY DOLLAR STORES FDO (8)	3326.5	19	19	30.0	21.6	417	19	1.1	1.0	1.13	0.81	1.00*	1.22	1.6	20.0	A	

EARNINGS PER SHARE

													2001 ESTIMATES FROM ANALYSTS				
COMPANY	TICKER SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1/8/E/S 2000 ANALYST EST.	1/8/E/S CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %	S&P EQU RANK
FEDERATED DEPARTMENT STORES FD (1)																	
		6158.5	31	-40	76.4	-1.1	98	NM	0.3	0.8	0.00	3.62	3.06	4.08	3.2	13.0	N
FOOTSTAR FTS																	
		831.0	43	40	NA	20.6	280	14	0.4	1.0	0.00	2.89	3.15	3.63	0.6	14.0	N
GAP GPS (1)																	
		21186.7	25	-46	36.5	38.9	809	22	1.6	1.1	0.36	1.26	1.12	1.38	8.7	20.0	A-
HOME DEPOT HD (1)																	
		90840.3	39	-43	31.0	18.6	628	34	2.0	1.5	0.41	1.00	1.16	1.40	2.1	23.0	A-
INSIGHT ENTERPRISES NSIT																	
		893.2	22	-19	46.8	21.0	362	18	0.5	0.5	0.00	0.83	1.39	1.73	1.2	30.0	N
INTIMATE BRANDS IBI (1)																	
		7323.4	15	-31	20.6	110.6	1621	15	1.5	0.8	1.87	0.91	1.08	1.25	0.8	17.0	N
KMART KM (1)																	
		2640.5	6	-45	NM	-1.8	45	NM	0.1	0.9	0.00	1.22	0.62	0.70	27.1	10.0	B
KOHL'S KSS (1)																	
		17680.9	54	48	34.2	15.6	880	57	3.2	2.2	0.00	0.78	1.04	1.26	1.6	23.0	N
LANDS' END LE (1)																	
		754.9	25	-28	15.8	10.3	248	24	0.6	1.3	0.00	1.56	1.28	1.75	13.7	15.0	B
LIBERTY MEDIA GROUP LMG.A																	
		34935.5	14	-52	NA	4.5	89	20	27.4	NM	0.00	NA	0.00	-0.30	0.0	15.0	N
LIMITED LTD (1)																	
		8272.3	19	-10	-6.0	24.1	394	17	0.8	1.1	1.54	1.00	1.19	1.37	0.7	15.0	B-
LOWE'S LOW (1)																	
		15338.2	40	-33	25.0	15.3	287	19	0.9	0.8	0.35	1.75	2.21	2.67	2.3	22.0	A-
MAY DEPARTMENT STORES MAY (1)																	
		8348.6	28	-13	10.7	24.3	247	11	0.6	1.0	3.31	2.60	2.57	2.88	2.8	11.0	A-
MICHAELS STORES MIKE (1)																	
		919.0	26	-11	NM	11.2	132	11	0.4	0.4	0.00	2.01	2.45	2.95	2.7	25.0	B-
NEIMAN MARCUS GROUP NMG.A (7)																	
		1430.1	30	8	NA	17.5	173	11	0.5	0.8	0.00	1.93	2.75*	3.06	3.6	14.5	B-
NORDSTROM JWN (1)																	
		2074.3	16	-39	10.1	12.3	180	15	0.4	0.9	2.24	1.46	1.23	1.41	9.2	15.0	A-
OFFICE DEPOT ODP																	
		1980.2	7	-40	7.6	17.0	112	7	0.2	0.6	0.00	0.69	0.73	0.79	3.8	15.0	B-
OFFICEMAX OMX (1)																	
		268.2	2	-56	-46.0	-2.4	25	NM	0.1	NM	0.00	0.09	-0.28	0.14	57.1	11.0	N
PAYLESS SHOESOURCE PSS (1)																	
		1479.4	67	42	34.4	32.2	380	13	0.5	0.9	0.00	4.35	5.32	6.05	1.2	13.8	FI
PENNEY (J.C.) JCP (1)																	
		2512.1	10	-52	-24.2	-2.5	38	NM	0.1	3.4	5.20	1.16	0.35	0.84	17.9	8.0	B
PEP BOYS-MANNY, MOE & JACK PBY (1)																	
		207.6	4	-55	-19.3	-9.8	31	27	0.1	1.2	6.65	0.58	0.22	0.48	10.4	15.0	A-
PETSMART PETM (1)																	
		298.7	3	-53	NM	-3.7	98	NM	0.1	0.6	0.00	-0.28	0.19	0.40	2.5	25.0	C
ROSS STORES ROST (1)																	
		1260.8	15	-14	39.4	34.9	295	9	0.5	0.6	0.98	1.64	1.80	2.01	2.5	15.0	B-
SAKS SKS (1)																	
		1193.0	8	-46	NM	6.3	54	9	0.2	0.7	0.00	1.36	0.99	1.14	12.3	12.0	B
SEARS, ROEBUCK S																	
		10922.6	32	7	10.6	25.5	170	7	0.3	0.7	2.84	3.81	4.52	4.97	3.2	10.0	B
SHOPKO STORES SKO (1)																	
		174.0	6	-74	33.0a	6.6	25	4	0.1	0.4	0.00	3.70	1.07	1.70	2.4	15.0	B-
SPIEGEL SPGLA																	
		663.4	5	-28	NM	17.4	86	5	0.2	0.2	3.18	0.65	0.94	1.13	4.4	25.0	B-
SPORTS AUTHORITY TSA (1)																	
		58.6	2	-9	NM	NM	45	NM	0.0	1.7	0.00	-5.19	0.11	0.24	8.3	10.0	N
STAPLES SPLS (1)																	
		5602.8	12	-42	23.9	15.6	301	20	0.6	0.8	0.00	0.66	0.64	0.81	2.5	25.0	B-
TALBOTS TLB (1)																	
		3281.1	53	137	0.8	18.7	630	35	2.2	2.0	0.53	0.93	1.67	1.94	2.1	15.8	N
TARGET TGT (1)																	
		27151.6	30	-18	40.9	20.7	457	22	0.8	1.4	0.73	1.27	1.40	1.60	3.1	15.0	A
TIFFANY TIF (1)																	
		4964.2	34	-23	34.7	22.3	581	27	3.0	1.4	0.47	0.98	1.34	1.56	2.6	18.0	B-
TIJ TJX (1)																	
		7225.6	26	25	82.7	48.4	659	14	0.8	0.9	0.62	1.66	1.88	2.16	0.9	15.0	B-
TOYS 'R' US TOY (1)																	
		3864.1	19	32	20.5	11.3	112	12	0.3	1.3	0.00	1.14	1.52	1.69	3.0	10.0	B
VALUE CITY DEPARTMENT STORES VCD (1)																	
		226.6	7	-55	24.4	8.0	65	8	0.1	0.8	0.00	1.02	0.61	0.77	22.1	14.0	B
VENATOR GROUP Z (1)																	
		1852.2	13	92	-12.3	9.3	160	17	0.4	1.0	0.00	0.13	0.80	1.00	6.0	17.0	B-
WAL-MART STORES WMT (1)																	
		233106.3	52	-25	20.1	21.2	797	37	1.3	2.4	0.46	1.25	1.45	1.65	1.8	15.0	A-
ZALE ZLC (7)																	
		846.3	24	-50	25.4	14.4	111	8	0.5	0.4	0.00	2.21	3.11*	3.76	0.8	20.0	N
9 ELECTRICAL & ELECTRONICS																	
INDUSTRY AVERAGE		18313.3	46	-6	12.6	15.2	472	39	5.8	1.5	0.72	1.16	1.74	2.26	5.6	22.4	
(A) ELECTRICAL PRODUCTS																	
GROUP AVERAGE		7209.4	45	-7	9.1	19.6	290	15	1.2	1.1	2.80	2.75	3.19	3.44	1.6	13.1	
AMERICAN POWER CONVERSION APCC																	
		2287.2	12	-55	9.3	18.5	218	12	1.6	0.5	0.00	1.05	1.12	1.21	2.5	23.0	B-
COOPER INDUSTRIES CBE																	
		3809.0	41	1	21.9	19.1	207	11	0.9	1.1	3.43	3.50	3.81	4.18	1.9	10.0	A-
EMERSON ELECTRIC EMR (9)																	
		31129.3	73	27	10.1	22.2	486	22	2.0	1.8	2.10	3.00	3.30*	3.69	1.1	12.0	A-
HUBBELL HUB.B																	
		1546.4	26	-5	4.9	17.5	197	12	1.1	1.0	5.10	2.21	2.42	2.68	1.1	11.0	B-
NATIONAL SERVICE INDUSTRIES NSI (8)																	
		839.5	21	-30	3.8	14.9	126	8	0.3	0.8	6.42	3.03	2.45*	2.44	2.1	10.0	A
ROCKWELL INTERNATIONAL ROK (9)																	
		7498.6	40	-16	21.2	23.8	281	12	1.1	1.1	2.53	3.00	3.35*	3.12	2.2	11.0	B
SPX SPW																	
		3356.0	106	31	-7.6	21.5	515	24	1.3	1.2	0.00	3.46	5.89	6.77	0.6	15.0	B-
(B) ELECTRONICS																	
GROUP AVERAGE		23156.9	46	-9	20.9	6.4	376	41	4.5	2.1	0.24	1.14	1.49	1.88	13.5	22.6	
HARRIS HRS (6)																	
		2065.1	31	15	-25.4a	-1.6	168	NM	1.1	4.1	0.65	0.63	0.34*	1.36	2.9	22.0	B-
HUGHES ELECTRONICS GMH																	
		28168.5	22	-32	NA	-5.9	280	NM	4.1	NM	0.00	NA	-0.33	-0.24	66.7	27.5	B-
L-3 COMMUNICATIONS HOLDINGS LLL																	
		2148.9	65	55	NA	11.3	326	30	1.2	1.4	0.00	1.75	2.32	2.81	2.5	20.0	N
LITTON INDUSTRIES LIT (7)																	
		2737.2	60	21	10.6	14.7	183	13	0.5	1.2	0.00	2.58	4.80*	4.90	1.4	11.0	B
MOTOROLA MOT																	
		43822.8	20	-59	-21.0	7.4	212	29	1.2	1.1	0.80	0.44	0.96	1.18	2.5	20.0	A
QUALCOMM QCOM (9)																	
		59999.0	80	-54	119.6	12.2	1088	94	18.8	2.7	0.00	0.31	0.85*	1.28	4.7	35.0	B
(C) INSTRUMENTS																	
GROUP AVERAGE		8575.6	57	24	6.1	19.0	605	40	3.4	2.0	0.23	1.15	2.03	2.42	2.8	18.9	
AGILENT TECHNOLOGIES A (10)																	
		19831.4	52	-33	3.8	14.4	377	31	1.8	1.6	0.00	1.35	1.66*	2.24	2.2	20.0	N
APPLIED BIOSYSTEMS GROUP ABI (6)																	
		17382.2	83	37	NA	21.2	1793	87	11.9	4.8	0.21	0.72	0.86*	1.05	1.0	20.0	B
BECKMAN COULTER BEC																	
		2275.8	77	51	20.8	39.7	745	19	1.2	1.5	0.89	3.57	4.02	4.46	1.6	13.0	B
DANAHER DHR																	
		9247.6	65	35	NA	16.8	499	30	2.6	1.8	0.12	1.79	2.21	2.56	2.3	16.5	B-
KLA-TENCOR KLAC (6)																	
		5115.1	28	-51	3.5	17.8	285	17	2.9	0.8	0.00	0.21	1.32*	2.28	2.6	25.0	B
PERKINELMER PKI																	
		4275.7	89	114	-0.8	11.6	630	56	2.6	2.1	0.63	0.61	2.62	3.03	1.3	16.5	B-
TERADYNE TER																	
		5267.5	30	-54	3.4	27.5	305	11	1.9	0.4	0.00	1.07	2.87	2.94	7.8	25.0	B
THERMO ELECTRON TMO																	
		5209.3	29	93	NA	3.0	203	64	2.1	2.9	0.00	-0.11	0.66	0.79	3.8	15.0	B

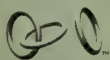


Copyright © 2000 3Com Corporation. All rights reserved. 3Com is a registered trademark and the 3Com logo is a trademark of 3Com Corporation.

Your business survived
the blizzard of '96.

The flu epidemic of '98.

But will it survive a network
upgrade in '01?



3COM

Simple sets you free.

3Com SuperFast Ethernet

Business is booming. But your network's about to bust. Fortunately, there's 3Com's new line of SuperFast Ethernet Switches. All engineered to give any network a boost by providing massive bandwidth to relieve increasing network demand, as well as exploit the Internet to its fullest. (And not a moment too soon.) Just talk to your 3Com reseller or click 3Com.com. Home. Office. Beyond.

EARNINGS PER SHARE

													2001 ESTIMATES FROM ANALYSTS				
COMPANY	STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1999/2000 ANALYST EST.	1999/2000 CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %	S&P EQU RANK
(D) SEMICONDUCTORS & OTHER COMPONENTS																	
GROUP AVERAGE		23587.0	43	-15	13.9	14.8	504	46	8.2	1.3	0.39	0.69	1.29	1.96	5.6	26.2	
ADVANCED MICRO DEVICES	AMD	4919.7	15	5	NM	30.8	170	6	1.1	0.3	0.00	-0.30	2.51	2.45	7.8	18.5	C
AMKOR TECHNOLOGY	AMKR	2423.2	16	-44	-3.9	10.5	191	18	1.1	0.4	0.00	0.63	1.58	2.21	4.5	23.5	N
ANALOG DEVICES	ADI (10)	17730.4	50	7	32.2	26.4	770	31	6.9	1.3	0.00	0.55	1.59*	2.56	3.1	25.0	B
ATMEL	ATML	4501.5	10	-35	-9.1	11.9	251	21	2.5	0.7	0.00	0.20	0.54	0.88	5.7	25.0	B
AVX	AVX (3)	3274.8	19	-25	3.5	31.7	266	8	1.5	0.3	0.75	0.90	3.43	3.99	3.3	16.0	B
BROADCOM	BRCM	22932.3	98	-28	NM	4.9	993	224	25.0	1.9	0.00	0.36	1.01	1.45	6.2	50.0	N
CONEXANT SYSTEMS	CNXT (9)	4602.9	20	-69	NA	-6.6	158	NM	2.2	NM	0.00	0.06	-0.90*	0.67	9.0	26.5	N
INTEL	INTC	256157.3	38	-8	19.5	27.7	679	25	7.7	1.1	0.21	1.06	1.68	1.76	4.6	20.0	A
JABIL CIRCUIT	JBL (8)	5945.3	31	-14	40.1	11.5	468	40	1.7	1.3	0.00	0.49	0.78*	1.17	1.7	30.0	B
JDS UNIPHASE	JDSU (6)	48136.5	50	-38	NM	-7.5	200	NM	24.2	NM	0.00	-0.54	-1.27*	0.81	2.5	49.5	C
LINEAR TECHNOLOGY	LLTC (6)	14978.4	47	32	19.9	22.8	1029	47	19.0	2.2	0.25	0.61	0.88*	1.35	3.0	25.0	A
LSI LOGIC	LSI	5742.2	18	-47	-13.2	11.3	241	22	2.2	0.7	0.00	0.51	1.24	1.77	5.1	20.0	B
MAXIM INTEGRATED PRODUCTS	MXIM (6)	14535.0	51	8	18.6	26.5	1222	52	15.0	2.1	0.00	0.64	0.88*	1.28	2.3	28.0	B
MICRON TECHNOLOGY	MU (8)	17869.9	32	-19	17.6	23.4	278	12	2.4	0.6	0.00	-0.13	2.56*	3.49	26.7	20.0	B
MOLEX	MOLX (6)	8029.6	41	-9	11.2	14.0	466	34	3.4	2.4	0.24	0.91	1.12*	1.40	2.9	15.0	A
NATIONAL SEMICONDUCTOR	NSM (5)	3315.0	19	-57	28.0	39.3	180	5	1.4	0.4	0.00	3.27	2.41	2.70	9.6	18.0	C
PMC-SIERRA	PMCS	14733.6	92	15	31.4	8.2	1914	239	27.1	2.2	0.00	0.60	1.03	1.70	4.7	40.0	B
SANMINA	SANM (9)	11521.4	76	53	11.5a	11.6	677	60	3.0	2.0	0.00	0.82	1.27*	2.70	1.9	30.0	N
SCI SYSTEMS	SCI (6)	3910.1	27	-35	18.5	14.5	275	19	0.5	0.8	0.00	1.00	1.34*	1.74	2.9	25.0	B
SDL	SDLI	15889.1	182	67	NM	-4.8	474	NM	41.0	3.0	0.00	0.37	1.50	2.48	3.2	40.0	N
SOLECTRON	SLR (8)	16940.0	28	-41	28.3	13.2	446	35	1.2	1.2	0.00	0.61	0.80*	1.19	3.4	30.0	B
TEXAS INSTRUMENTS	TXN	64547.8	37	-23	7.1	23.0	519	23	5.7	1.2	0.23	0.84	1.26	1.58	4.4	25.0	B
THOMAS & BETTS	TNB	848.1	15	-54	6.9	-14.0	85	NM	0.4	NM	7.66	2.56	-0.23	1.12	11.6	12.0	E
VISHAY INTERTECHNOLOGY	VSH	2603.2	19	-10	-4.3	24.8	156	6	1.1	0.3	0.00	0.65	3.90	4.62	5.4	16.0	B
10 FOOD																	
INDUSTRY AVERAGE		6510.5	31	10	9.2	60.6	924	22	0.9	1.6	1.67	1.41	1.65	1.96	4.0	12.4	
(A) FOOD DISTRIBUTION																	
GROUP AVERAGE		4444.3	30	35	13.4	8.7	331	22	0.3	1.5	1.74	0.89	1.67	1.94	1.9	13.2	
FLEMING FLM		467.9	12	15	NM	-18.5	98	NM	0.0	1.6	0.68	-1.17	1.50	1.73	2.3	5.0	E
INTERNATIONAL MULTIFOODS	IMC (2)	362.0	19	46	12.6	9.8	142	15	0.2	0.8	4.14	1.31	1.55	1.78	1.7	15.0	B
PERFORMANCE FOOD GROUP	PFGC	638.4	45	86	13.6	12.0	308	26	0.3	1.2	0.00	1.35	1.82	2.18	1.4	20.0	B
SUPERVALU	SVU (2)	2398.3	18	-9	11.4	13.8	128	10	0.1	0.7	3.03	1.87	2.12	2.36	2.1	12.0	E
SYSCO	SYY (6)	18354.9	55	40	16.1	26.2	979	37	0.9	2.9	0.87	1.09	1.36*	1.63	1.8	14.0	A
(B) FOOD PROCESSING																	
GROUP AVERAGE		6284.5	33	8	11.6	82.0	1183	22	1.2	1.7	1.76	1.62	1.88	2.08	4.5	11.9	
ARCHER DANIELS MIDLAND	ADM (6)	8073.6	13	10	-19.2	6.1	131	22	0.6	2.3	1.57	0.43	0.47*	0.74	12.2	12.0	B
CAMPBELL SOUP	CPB (7)	14317.9	33	-14	3.9	533.6	11186	21	2.3	2.3	2.70	1.63	1.65*	1.63	1.8	9.0	A
CONAGRA FOODS	CAG (5)	13561.9	25	12	19.3	11.8	349	27	0.5	1.4	3.54	0.86	1.87	2.09	2.9	10.0	A
CORN PRODUCTS INTERNATIONAL	CPO	852.8	24	-26	-14.1	5.3	86	17	0.5	1.3	1.65	2.06	1.77	2.20	9.1	11.0	N
DEAN FOODS	DF (5)	986.3	28	-30	NM	15.5	146	10	0.2	0.8	3.24	2.77	3.05	3.61	3.6	12.0	E
DEL MONTE FOODS	DLM (6)	411.3	8	-36	48.8	774.9	2405	3	0.3	0.2	0.00	0.68	2.50*	1.01	2.0	15.0	N
DOLE FOOD	DOL	726.0	13	-20	-19.4	8.1	129	16	0.1	0.9	3.08	0.85	1.42	1.82	1.1	10.0	B
EARTHGRAINS	EGR (3)	961.7	23	41	49.6a	7.0	146	20	0.4	1.4	1.06	1.30	1.05	1.73	4.1	15.0	N
FLOWERS INDUSTRIES	FLO	1626.2	16	2	-38.5	10.0	298	30	0.4	2.0	3.26	0.07	0.53	1.00	5.0	15.0	B
GENERAL MILLS	GIS (5)	11630.1	41	15	8.1	NM	NM	20	1.7	2.1	2.68	2.00	1.75	2.03	1.0	11.0	B
HEINZ (H.J.)	HNZ (4)	15824.1	46	15	8.8	54.5	992	19	1.7	1.7	3.44	2.47	2.79	3.07	2.3	9.5	A
HERSHEY FOODS	HSY	8608.1	63	33	18.0	28.8	783	28	2.1	2.7	1.77	3.26	2.37	2.67	2.3	10.0	A
HORMEL FOODS	HRL (10)	2615.0	19	-8	9.3	20.0	308	16	0.7	1.5	1.87	1.11	1.20*	1.38	2.2	10.5	A
IBP	IBP	2369.7	22	25	3.5	13.3	125	9	0.2	1.1	0.45	3.36	2.47	2.65	7.2	8.0	B
INTERSTATE BAKERIES	IBC (5)	965.9	15	-16	39.1	14.5	168	12	0.3	0.9	1.84	1.31	1.67	1.97	15.7	10.0	B
KEEBLER FOODS	KBL	3501.6	41	46	NA	32.2	677	22	1.3	1.6	1.09	1.01	1.86	2.09	2.9	14.0	F
KELLOGG	K	9987.9	25	-20	-7.2	65.5	1099	17	1.4	1.7	4.10	0.83	1.61	1.59	12.6	9.0	E
MCCORMICK	MKC (11)	2549.1	37	25	7.9	38.5	734	20	1.2	1.7	1.07	1.43	1.98	2.17	2.3	11.0	A
QUAKER OATS	OAT	11396.2	87	32	-11.1	109.4	3677	32	2.3	2.6	1.31	3.23	3.37	3.73	1.9	10.0	B
RALSTON PURINA	RAL (9)	7500.5	26	NM	23.5b	112.6	1934	18	2.7	1.6	1.06	1.33	1.50*	1.23	1.6	11.0	B
SARA LEE	SLE (6)	20311.9	24	9	10.5	109.4	1980	19	1.2	1.9	2.42	1.19	1.27*	1.41	0.7	10.0	A
SMITHFIELD FOODS	SFD (4)	1538.8	28	18	29.4	14.5	165	11	0.3	0.6	0.00	1.52	2.92	3.10	3.2	15.5	B
STARBUCKS	SBUX (9)	8510.4	46	88	32.8b	8.5	766	93	3.9	3.7	0.00	0.54	0.49*	0.91	1.1	25.0	B
SUIZA FOODS	SZA	1174.5	43	9	53.3	19.6	208	12	0.2	0.9	0.00	3.11	3.84	4.31	1.2	12.0	N
TYSON FOODS	TSN (9)	3150.0	14	-14	13.8	7.0	145	21	0.4	1.7	1.14	1.00	0.67*	0.63	17.5	12.0	B
WRIGLEY (WM.) JR.	WVY	10246.7	91	9	8.4	29.8	943	32	4.8	2.7	1.54	2.66	2.91	3.20	0.9	11.5	A
(C) FOOD RETAILING																	
GROUP AVERAGE		8536.0	28	1	-5.9	26.1	483	20	0.4	1.2	1.33	1.09	0.89	1.60	3.4	13.5	
ALBERTSON'S	ABS (1)	10761.6	26	-21	-13.2	13.2	185	14	0.3	1.0	2.97	1.00	2.25	2.52	3.6	12.0	A
GREAT ATLANTIC & PACIFIC TEA	GAP (2)	314.0	E	71	-29.5	3.4	37	11	0.0	NM	0.00	0.37	-0.73	0.80	7.5	9.8	B
KROGER	KR (1)	21783.0	27	40	NA	25.5	795	32	0.5	1.2	0.00	0.74	1.36	1.57	1.9	16.0	B

YOU'RE CHANGING JOBS AND HAVE TO ROLL OVER YOUR 401(k), SO YOU:

- ☐ Generously write a check to the IRS for 40% in taxes. It's not like you have big plans for this money.
- ☐ Go to Vegas. The odds are against you, but it's just play money, right?
- ☐ Call the Rollover Specialists at T. Rowe Price. This is serious money. You can't afford to make a mistake.

Invest With Confidence®
T.RowePrice 

Call the Rollover Specialists at 1-800-541-5845

Get our free kit on managing your retirement plan distribution, plus prospectuses for a broad range of no-load mutual funds.
www.troweprice.com/rollover

For more information, including fees, expenses, and risks, read the prospectus carefully before investing. T. Rowe Price Investment Services, Inc., Distributor.

IRAR057408

EARNINGS PER SHARE

													2001 ESTIMATES FROM ANALYSTS				
COMPANY	STOCK SYMBOL (FY)	MARKET VALUE	PERCENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P/E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1/8/E/S 2000 ANALYST EST	1/8/E/S CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %	STOCK RANK
RUDDICK RDK (9)		560.4	12	-22	4.6	10.7	118	11	0.2	0.9	2.97	1.08	1.10*	1.19	3.4	12.0	A
SAFEWAY SAF		29374.7	59	65	26.2	22.1	592	27	0.9	1.6	0.00	1.88	2.26	2.62	1.2	16.0	B
7 ELEVEN ST		884.0	8	-5	-17.5	154.4	1304	9	0.1	0.7	0.00	0.85	0.85	1.01	3.0	14.0	B
WHOLE FOODS MARKET WFMI (9)		1592.6	59	27	NM	8.5	470	36	0.9	1.8	0.00	1.53	1.62*	2.33	1.3	20.0	B
WINN-DIXIE STORES WIN (6)		3017.8	22	-10	NM	29.2	365	NM	0.2	NM	4.72	1.23	-1.57*	0.72	5.6	8.0	B
11 FUEL																	
INDUSTRY AVERAGE		19136.9	41	15	6.9	14.7	249	28	1.3	1.3	2.09	1.00	3.41	3.33	13.0	13.6	
(A) COAL, OIL & GAS																	
GROUP AVERAGE		21761.7	41	19	13.2	18.4	233	14	1.2	0.9	2.53	1.15	4.21	3.83	13.7	12.3	
AMERADA HESS AHC		5425.2	61	8	NM	23.0	153	7	0.5	1.1	0.98	4.85	10.09	7.70	18.3	5.6	B
ANADARKO PETROLEUM APC		14938.1	60	74	8.6	6.2	247	28	8.6	1.0	0.34	0.25	3.88	4.19	16.0	15.0	B
APACHE APA		6453.5	52	41	57.7	15.6	202	11	3.2	0.7	0.27	1.72	5.39	5.43	15.8	13.5	B
ARCH COAL ACI		388.8	10	-10	NM	NM	183	NM	0.3	NM	2.26	-9.12	-0.61	0.23	34.8	NA	N
ASHLAND ASH (9)		2259.0	31	-5	29.4ab	14.9	115	8	0.3	0.9	3.51	3.90	4.10*	4.32	4.2	8.5	B
BURLINGTON RESOURCES BR		8789.2	41	23	NM	8.3	254	31	3.4	1.1	1.35	0.00	2.41	2.49	20.9	15.0	B
CHEVRON CHV		52548.8	82	-5	21.9	23.8	278	12	1.2	1.0	3.18	3.14	7.58	6.22	13.5	10.5	B
COASTAL CGP		15761.9	73	107	16.3	14.1	361	26	1.4	1.9	0.34	2.30	2.91	3.37	5.1	13.5	B
CONOCO COC.B		15614.7	25	1	-2.6	32.8	305	9	0.5	1.2	3.03	1.17	2.76	2.52	17.1	7.5	N
CONSOL ENERGY CNX (6)		1497.9	19	91	-0.9a	42.5	634	15	0.7	1.2	5.88	1.37	1.35*	1.57	1.9	12.0	N
EXXON MOBIL XOM		305904.6	88	9	NA	19.6	449	23	1.6	2.0	2.00	2.25	4.52	4.29	8.9	10.0	A
KERR-McGEE KMG		5736.3	61	-2	NA	28.4	243	9	1.5	0.5	2.96	1.69	8.69	7.06	13.7	13.5	B
MURPHY OIL MUR		2466.7	55	-5	NM	23.3	208	9	0.8	0.6	2.74	2.66	6.63	5.94	16.7	13.0	B
OCCIDENTAL PETROLEUM OXY		7987.7	22	0	17.5	38.1	177	5	0.7	0.7	4.62	1.58	3.52	2.82	12.1	9.1	B
PENNZOIL-QUAKER STATE PZL		929.4	12	16	NM	-34.7	102	NM	0.3	0.4	6.35	-4.12	0.71	1.00	7.0	40.0	N
PHILLIPS PETROLEUM P		16000.1	57	20	7.7	25.2	294	11	0.8	0.8	2.41	2.39	6.88	6.15	15.3	10.0	B
SUNOCO SUN		2359.3	28	18	NM	18.7	150	8	0.2	0.9	3.60	1.07	3.96	3.56	7.3	8.0	B
TESORO PETROLEUM TSO		290.8	9	-18	NM	2.8	60	29	0.1	0.7	0.00	0.62	1.34	1.38	18.1	10.0	B
TEXACO TX		31942.6	58	7	13.5	17.5	249	14	0.7	1.5	3.10	2.14	4.91	4.14	15.2	8.0	B
TOSCO TOS		4151.0	29	6	44.0	23.7	169	8	0.2	0.8	0.98	2.83	2.99	3.40	11.5	12.5	B
ULTRAMAR DIAMOND SHAMROCK UDS		2396.5	28	21	11.2	20.3	139	7	0.2	0.4	3.99	2.00	4.75	3.89	16.7	13.3	N
UNOCAL UCL		8290.2	34	2	-5.9	24.0	320	14	1.0	1.1	2.34	0.46	3.09	2.80	16.4	10.0	B
USX-MARATHON GROUP MRO		8233.4	26	7	NA	17.2	155	9	0.3	0.8	3.49	2.11	3.91	3.26	14.1	9.0	N
VALERO ENERGY VLO		1915.6	31	58	-34.2	18.2	133	7	0.2	0.4	1.02	0.25	5.22	4.20	9.3	15.0	N
(B) PETROLEUM SERVICES																	
GROUP AVERAGE		10137.5	40	1	-14.8	2.6	306	81	1.9	2.5	0.59	0.50	0.68	1.60	10.3	18.5	
BAKER HUGHES BHI		10977.3	33	57	-24.4	2.1	357	174	2.3	3.4	1.39	0.16	0.60	1.20	7.5	16.0	B
COOPER CAMERON CAM		2925.4	54	11	NM	5.3	349	67	2.2	1.7	0.00	0.78	1.56	2.44	5.7	20.0	N
HALLIBURTON HAL		14918.6	33	-17	-10.7	6.1	319	52	1.2	2.9	1.50	0.67	0.78	1.39	10.8	15.0	B
SCHLUMBERGER SLB		35498.2	62	10	-15.2	6.8	437	65	3.9	2.5	1.21	0.58	1.26	1.96	6.6	20.0	B
SMITH INTERNATIONAL SII		2889.1	58	17	-9.0a	6.7	366	54	1.1	2.0	0.00	1.15	1.42	2.51	6.0	20.0	B
TRANSMONTAINE TMG (6)		93.0	3	-57	NM	-12.4	58	NM	0.0	NM	0.00	-0.01	-1.52*	0.14	28.6	NA	N
WEATHERFORD INTERNATIONAL WFT		3660.7	33	-17	NM	3.7	259	71	2.2	2.5	0.00	0.16	0.68	1.54	7.1	20.0	B
12 HEALTH CARE																	
INDUSTRY AVERAGE		30115.4	48	64	17.7	15.0	693	40	3.6	1.9	0.43	0.94	1.52	1.84	4.6	17.1	
(A) DRUG DISTRIBUTION																	
GROUP AVERAGE		9645.6	33	59	29.7	6.3	436	33	0.5	1.6	0.45	0.63	0.70	1.33	6.2	17.0	
AMERISOURCE HEALTH AAS (9)		2542.2	49	224	23.9a	35.1	901	26	0.2	1.4	0.00	1.38	1.90*	2.25	0.9	18.0	N
BERGEN BRUNSWIG BBC (9)		2029.5	15	81	-6.8ab	-66.5	281	NM	0.1	NM	0.27	0.71	-3.58*	0.75	8.0	13.0	A
BINDLEY WESTERN INDUSTRIES BDY		1113.5	32	109	13.0	5.4	251	51	0.1	1.3	0.25	1.05	1.29	1.52	0.7	19.5	B
CARDINAL HEALTH CAH (6)		27894.6	100	109	NM	17.3	659	39	0.9	2.0	0.12	1.68	2.39*	3.10	0.7	21.0	A
CAREMARK RX CMX		2404.8	11	115	48.3	NM	NM	28	0.6	1.0	0.00	0.29	0.43	0.60	1.7	25.0	N
CVS CVS		22248.7	57	43	72.4	17.3	584	32	1.1	1.9	0.40	1.55	1.80	2.11	1.0	17.0	B
D&K HEALTHCARE RESOURCES DKWD (6)		53.4	13	-13	68.4a	17.4	114	7	0.0	0.4	0.00	1.58	1.84*	1.86	0.5	18.0	N
LONGS DRUG STORES LDG (1)		743.0	20	-23	11.1	9.0	110	13	0.2	1.2	2.82	1.76	1.46	1.62	2.5	11.0	A
McKESSON HBOC MCK (3)		9334.8	33	46	22.8	5.4	255	48	0.2	1.8	0.73	0.66	1.01	1.29	6.2	18.0	N
OMNICARE OCR		1508.7	16	36	24.8	4.7	142	30	0.8	1.5	0.55	0.63	0.71	0.92	9.8	15.0	A
RITE AID RAD (2)		829.8	3	-78	NA	NM	NM	NM	0.1	NM	0.00	-4.34	-1.63	-0.90	41.1	11.0	B
WALGREEN WAG (8)		45044.1	45	52	19.3	18.4	1064	59	2.1	3.5	0.31	0.62	0.76*	0.86	1.2	17.0	A
(B) DRUGS & RESEARCH																	
GROUP AVERAGE		99271.6	66	36	19.3	31.3	1521	58	11.1	2.7	0.82	0.89	1.60	1.83	3.3	19.8	
ABBOTT LABORATORIES ABT		85149.4	55	52	10.9	32.4	1024	32	6.3	2.6	1.38	1.57	1.79	2.02	3.0	12.0	A
ALLERGAN AGN		12162.1	93	87	25.6	26.7	1553	59	7.6	2.9	0.35	1.39	1.58	1.90	1.6	20.0	B
AMERICAN HOME PRODUCTS AHP		78625.1	60	53	NM	55.5	1242	23	5.8	2.3	1.53	-0.94	1.90	2.19	0.9	13.8	B
AMGEN AMGN		65724.6	64	6	20.4	30.6	1663	57	18.2	3.3	0.00	1.02	1.07	1.23	1.6	18.0	B
BRISTOL-MYERS SQUIBB BMY		135750.4	69	8	23.9	44.6	1483	34	7.2	2.5	1.41	2.06	2.34	2.59	2.3	12.0	A
GENENTECH GNTA		35723.4	68	1	NM	-3.7	631	NM	23.6	4.1	0.00	-2.23	0.60	0.77	3.9	28.0	N
IMMUNEX IMNX		19342.6	37	2	NM	22.2	3540	162	25.0	2.7	0.00	0.08	0.27	0.30	16.7	50.5	B
LILLY (LLI) LLY		105612.0	94	41	16.5a	50.7	1742	33	10.0	2.4	1.11	2.30	2.65	2.85	2.1	15.0	A



e-business

**BY USING LOTUS,
STATE STREET
INCREASED THEIR CLIENT BASE
BY 400%.
AND NO, THEY'RE NOT
A DOT-COM
STARTUP.**

Make that 447%, to be exact. They did it simply by providing better customer relationship management. State Street, one of the world's largest financial services providers, created OnCourse, a powerful suite of integrated applications using Lotus Notes® and Domino™ R5. This unified system gives employees shared access to data on their clients. Employees use this data to provide customized solutions to fit their clients' needs. It's just one of the ways super.human.software helps e-business people work together.

To learn more, visit www.lotus.com/superhumansoftware

SUPER.HUMAN.SOFTWARE

Lotus.

An IBM Company

2001 ESTIMATES FROM ANALYSTS

COMPANY	STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1999 ANALYST EST.	1999 CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %	STOCK RANK
MLRCK MLL		212971.6	93	38	16.8	49.0	1575	33	5.6	2.7	1.47	2.45	2.90	3.19	2.2	12.0	A
PFIZER PFE		279566.1	44	37	22.3	20.2	1729	73	10.8	2.1	0.81	0.82	1.02	1.29	2.3	21.0	A
PHARMACIA PHA		78668.6	61	72	18.1a	6.5	659	95	4.9	2.1	0.79	0.77	1.44	1.77	1.1	20.0	E
SCHERING-PLOUGH SGP		81962.6	56	32	19.3	40.6	1412	35	8.4	2.3	1.00	1.42	1.64	1.90	1.6	15.0	A
(C) HEALTH-CARE SERVICES																	
GROUP AVERAGE		4674.2	46	100	9.9	6.8	344	38	0.9	1.8	0.01	0.97	1.80	2.03	5.6	16.3	
BEVERLY ENTERPRISES BEV		570.3	6	26	NM	-6.4	90	NM	0.2	1.4	0.00	-1.31	0.34	0.41	12.2	12.0	C
COVENTRY HEALTH CARE CVTY		1261.0	21	215	NM	9.8	240	25	0.5	1.7	0.00	0.69	0.85	1.00	3.0	15.0	E
DAVITA DVA		863.2	11	58	NM	-45.1	261	NM	0.6	1.7	0.00	-1.81	0.38	0.69	4.4	16.3	N
EXPRESS SCRIPTS ESRX		2884.3	75	17	62.9	13.7	432	33	0.5	1.1	0.00	4.25	2.40	3.03	1.3	27.5	N
HCA-THE HEALTHCARE CO. HCA		22908.7	41	41	-7.7	5.4	424	83	1.4	1.7	0.19	1.11	1.60	1.82	1.1	15.0	E
HEALTH MANAGEMENT ASSOCS. HMA (9)		5173.8	21	59	17.7	16.3	502	31	3.3	2.1	0.00	0.59	0.68*	0.79	1.3	15.0	E
HEALTH NET HNT		2877.9	24	136	-5.9	15.3	284	19	0.3	1.2	0.00	1.21	1.32	1.53	2.0	15.0	N
HEALTHSOUTH HRC		5384.5	14	159	-15.4	1.7	158	93	1.3	1.4	0.00	0.18	0.71	0.81	1.2	14.5	E
HUMANA HUM		2011.0	12	47	NM	-26.7	152	NM	0.2	1.6	0.00	-2.28	0.53	0.66	7.6	14.0	C
LABORATORY CORP. OF AMERICA LH		4908.5	142	285	NM	6.9	589	51	2.7	1.7	0.00	1.20	3.22	4.85	1.4	26.0	E
MANOR CARE HCR		1744.2	17	6	NM	-14.8	176	NM	0.8	1.4	0.00	-0.51	0.82	0.95	3.2	15.0	N
MID ATLANTIC MEDICAL SERVICES MME		1041.3	21	156	-16.7	18.1	529	23	0.7	1.5	0.00	0.64	0.93	1.10	4.6	15.0	E
OXFORD HEALTH PLANS OXHP		3493.2	41	220	44.3	73.3	1086	9	0.9	1.4	0.00	3.26	1.88	2.43	3.3	15.0	E
PACIFICARE HEALTH SYTEMS PHY		440.7	13	-76	14.1	10.8	22	2	0.0	0.2	0.00	6.23	4.22	1.06	46.2	15.0	E
QUEST DIAGNOSTICS DGX		5181.8	112	268	NM	6.3	526	86	1.5	2.0	0.00	-0.04	2.23	2.95	2.7	25.0	N
QUORUM HEALTH GROUP QHGI (6)		1045.5	15	57	-5.1	-1.2	167	NM	0.6	1.4	0.00	0.52	0.72*	0.89	1.1	15.0	N
SIERRA HEALTH SERVICES SIE		80.2	3	-56	NM	NM	97	NM	0.1	0.5	0.00	-0.17	0.45	0.38	15.8	14.5	E
TENET HEALTHCARE THC (5)		13446.5	43	81	-10.7	8.5	313	37	1.2	1.4	0.00	1.08	2.10	2.40	1.7	14.5	E
TRIAD HOSPITALS TRIH		1035.1	30	98	NM	-7.5	177	NM	0.9	8.3	0.00	-3.12	0.24	0.49	8.2	15.0	N
TRIGON HEALTHCARE TGH		2693.3	72	143	NA	12.0	272	23	1.1	1.5	0.00	0.49	3.26	3.80	1.6	15.0	N
UNITEDHEALTH GROUP UNH		18704.1	117	121	19.3	18.7	511	29	0.9	1.7	0.03	3.20	4.11	4.87	1.9	16.5	A
UNIVERSAL HEALTH SERVICES UHS		3045.1	102	185	18.0	12.8	441	36	1.4	2.2	0.00	2.43	3.14	3.64	2.2	15.0	E
WELLPOINT HEALTH NETWORKS WLP		6712.5	108	64	14.4	22.4	454	21	0.8	1.4	0.00	4.38	5.23	6.05	1.0	15.0	E
(D) MEDICAL PRODUCTS																	
GROUP AVERAGE		30216.7	50	18	12.0	23.0	767	32	4.2	1.8	0.93	1.36	1.81	2.03	1.5	15.9	
BAUSCH & LOMB BOL		2337.5	44	-36	NA	10.2	224	23	1.3	1.1	2.37	1.75	2.59	2.70	0.7	15.5	E
BAXTER INTERNATIONAL BAX		25426.5	87	38	23.4	23.8	865	37	3.8	2.2	1.35	2.64	3.06	3.43	0.9	13.0	E
BECTON, DICKINSON BDV (9)		8609.6	34	26	8.8	19.9	446	23	2.4	1.8	1.09	1.04	1.49*	1.64	0.6	12.5	A
BOSTON SCIENTIFIC BSX		5218.1	13	-41	NM	21.7	270	13	1.9	0.8	0.00	0.90	1.04	1.17	4.3	16.0	E
GUIDANT GDT		16591.4	54	15	38.8	40.3	1451	36	6.7	1.7	0.00	1.11	1.61	1.89	2.1	20.0	N
JOHNSON & JOHNSON JNJ		139035.6	100	7	13.9	25.2	752	30	4.8	2.3	1.28	2.94	3.40	3.82	0.5	13.0	A
MEDTRONIC MDT (4)		63846.8	53	46	18.3	25.1	1347	54	11.9	2.7	0.38	0.90	1.08	1.27	2.4	18.0	A
OWENS & MINOR OMI		462.8	14	57	NM	15.8	227	15	0.1	1.0	1.79	0.82	0.94	1.07	1.9	15.0	E
STRYKER SYK		10422.5	53	53	-31.3	25.0	1316	54	4.7	2.4	0.12	0.10	1.10	1.32	0.0	20.0	E
13 HOUSING & REAL ESTATE																	
INDUSTRY AVERAGE		1740.9	28	11	20.8	16.8	148	10	0.5	0.7	1.55	2.81	3.34	3.62	7.9	12.6	
(A) BUILDING MATERIALS																	
GROUP AVERAGE		2437.3	25	-18	11.2	16.8	162	10	0.7	0.8	2.67	2.85	2.70	2.74	6.1	12.3	
AMERICAN STANDARD ASD		2905.5	42	-9	16.9	NM	NM	10	0.4	0.6	0.00	3.63	4.36	5.02	2.0	15.0	N
JOHNS MANVILLE JM		1486.5	10	-28	21.1	21.9	157	7	0.7	0.6	2.39	1.68	1.50	1.49	4.0	12.0	E
LAFARGE LAF		1449.7	20	-29	19.0	14.9	78	5	0.5	0.5	3.04	3.77	3.65	3.92	3.3	10.0	E
LENNOX INTERNATIONAL LII		400.7	7	-24	15.5	8.9	54	6	0.1	0.5	5.43	1.81	1.04	1.23	11.4	13.0	N
MARTIN MARIETTA MATERIALS MLM		1843.0	39	-4	16.4	14.6	217	15	1.4	1.1	1.42	2.68	2.62	2.99	4.0	13.5	N
MASCO MAS		8618.5	19	-24	23.1	20.6	245	12	1.2	0.8	2.69	1.28	1.57	1.67	2.4	15.5	E
PPG INDUSTRIES PPG		7035.0	42	-33	-3.7	20.9	224	11	0.8	1.2	3.84	3.23	3.91	4.22	7.1	9.0	A
RPM RPM (5)		956.4	9	-8	-14.8	9.6	146	16	0.5	1.2	5.33	0.38	0.81	0.90	2.2	10.0	A
SHERWIN-WILLIAMS SHW		3507.2	22	4	11.3	17.9	196	11	0.7	0.9	2.48	1.80	1.96	2.18	2.3	11.9	A
TECUMSEH PRODUCTS TECUA		774.6	41	-13	6.5	8.2	78	10	0.5	0.9	3.13	7.00	4.37	4.56	15.4	10.0	E
USG USG		794.5	18	-61	NM	38.2	80	2	0.2	0.4	3.28	8.39	6.40	3.41	9.4	8.0	N
VALSPAR VAL (10)		1177.3	28	-34	12.1	19.8	269	14	0.8	0.9	1.88	1.87	2.00*	2.19	4.1	15.0	A
VULCAN MATERIALS VMC		4329.6	43	7	11.1	17.2	297	17	1.8	1.4	1.96	2.35	2.53	3.03	7.3	12.0	A
WATSCO WSO		287.0	11	-7	NA	9.9	91	10	0.2	0.5	0.93	0.99	1.13	1.30	4.6	18.0	A
YORK INTERNATIONAL YRK		993.8	26	-5	NM	12.7	129	10	0.3	0.8	2.30	1.93	2.58	3.04	12.5	12.0	E
(B) CONSTRUCTION & REAL ESTATE																	
GROUP AVERAGE		994.9	30	41	32.4	16.7	134	9	0.4	0.5	0.34	2.76	4.03	4.57	9.9	13.0	
BEAZER HOMES USA BZH (9)		265.3	31	63	23.9	16.1	98	6	0.2	0.5	0.00	4.15	5.05*	5.95	1.0	13.0	N
CENTEX CTX (3)		2088.7	35	43	46.6	15.7	137	9	0.3	0.7	0.45	4.22	4.19	4.92	6.1	12.0	A
CHAMPION ENTERPRISES CHB		147.6	3	63	-2.3	1.3	33	24	0.1	NM	0.00	1.02	0.21	0.14	92.9	6.0	L
CLAYTON HOMES CMH (6)		1383.9	10	10	9.4	12.9	130	10	1.1	0.6	0.64	1.06	1.03*	0.99	7.1	16.5	A
HORTON (D.R.) DHI (9)		1250.9	19	46	25.3	19.8	129	7	0.3	0.4	0.86	2.29	2.81*	3.15	1.9	16.0	A
KAUFMAN & BROAD HOME KBH (11)		1234.8	31	30	52.1	29.3	180	7	0.3	0.5	0.96	3.08	4.14	4.62	4.1	15.0	E
LENNAR LEN		1982.9	32	95	27.6a	16.1	178	11	0.5	0.6	0.16	2.74	3.37	3.88	1.6	15.0	A



AMNESTY

INTERNATIONAL KNOWS THE PEN

IS MIGHTIER

THAN THE SWORD.

LOTUS KNOWS

THE MOUSE IS
FASTER THAN THE PEN.

With Lotus and Interliant, a Lotus Business Partner, Amnesty International can now respond to cases of human rights violations in record time via the Urgent Action Network.

Instead of waiting days for reports, members receive them in seconds, so they can take lifesaving action even faster. Plus, Amnesty International can now share case updates among members through a worldwide knowledge base. It's just one of the ways

Lotus helps people work together. To learn more, visit www.lotus.com/superhumansoftware

SUPER.HUMAN.SOFTWARE

Lotus.

An IBM Company

COMPANY	STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1999 ANALYST EST.	1999 CONSENSUS	VARIATION %	LONG TERM GROWTH RATE %	S. EQUITY RANK
M.D.C. HOLDINGS	MDC	590.4	28	79	NA	25.1	134	6	0.4	0.4	0.86	3.95	5.40	5.61	2.1	13.0	E
NVR	NVR	804.5	91	91	77.8	51.2	303	7	0.4	0.5	0.00	9.01	13.19	15.10	0.6	15.0	N
PULTE	PHM	1571.7	39	72	46.3	17.8	138	8	0.4	0.7	0.41	4.07	4.95	5.43	4.6	11.8	E
RYLAND GROUP	RYL	459.1	35	52	NM	16.8	109	7	0.2	0.6	0.46	4.30	5.78	6.28	1.0	10.0	E
TOLL BROTHERS	TOL (10)	1451.3	40	114	17.2	17.5	210	12	0.9	0.7	0.00	2.75	3.66	4.22	1.0	15.0	E
WEBB (DEL)	WBB (6)	445.8	24	-3	NM	15.4	89	6	0.2	0.4	0.00	3.11	4.00*	4.28	0.7	15.0	E
WYNDHAM INTERNATIONAL	WYN	251.1	2	-49	NA	-20.7	13	NM	0.1	NM	0.00	-7.14	-0.88	-0.65	13.9	8.0	N

14 LEISURE TIME INDUSTRIES

INDUSTRY AVERAGE	7043.3	23	-5	13.9	14.4	228	24	1.1	1.1	1.29	1.12	1.50	1.72	13.0	15.3	
------------------	--------	----	----	------	------	-----	----	-----	-----	------	------	------	------	------	------	--

(A) EATING PLACES

GROUP AVERAGE	6725.6	27	24	22.8	15.1	282	17	1.1	1.2	0.22	1.48	1.60	1.81	23.8	14.4	
BRINKER INTERNATIONAL EAT (6)	2676.6	41	69	41.4	16.2	344	22	1.2	1.5	0.00	1.25	1.75*	2.10	1.9	15.5	E
CBRL GROUP CBRL (7)	1359.1	22	124	-0.7	7.3	161	20	0.8	1.4	0.09	1.16	1.02*	1.36	2.2	15.0	A
CKE RESTAURANTS CKR (1)	123.1	2	-59	NM	-14.3	23	NM	0.1	NM	0.00	-0.57	-0.33	-0.04	200.0	10.0	E
DARDEN RESTAURANTS DRI (5)	3150.1	26	46	30.9	19.2	324	18	0.8	1.2	0.30	1.34	1.60	1.81	1.7	13.5	N
JACK IN THE BOX JBX (9)	1034.8	27	31	49.8	37.1	383	11	0.6	0.6	0.00	1.95	2.55*	2.26	0.9	17.5	N
MCDONALD'S MCD	41797.7	32	-21	9.8	20.9	475	22	3.0	1.8	0.68	1.39	1.50	1.68	2.4	12.0	A
OUTBACK STEAKHOUSE OSI	2088.7	27	5	18.0	17.9	267	15	1.1	0.8	0.00	1.57	1.87	2.17	0.9	17.5	E
TRICON GLOBAL RESTAURANTS YUM	5256.0	36	-7	NA	NM	NM	13	0.7	0.8	0.00	3.92	2.96	3.23	2.2	15.0	N
WENDY'S INTERNATIONAL WEN	3044.4	27	29	10.2	16.3	283	18	1.4	1.3	0.89	1.32	1.50	1.69	1.8	14.0	A

(B) ENTERTAINMENT

GROUP AVERAGE	14859.6	24	-8	14.2	5.1	144	34	1.5	1.5	0.12	0.58	0.92	1.15	15.6	18.4	
BLOCKBUSTER BBI	1618.8	9	-31	NM	-1.0	27	NM	0.3	0.7	0.87	-0.44	0.65	0.80	8.8	20.0	
FOX ENTERTAINMENT GROUP FOX (6)	11585.0	16	-36	-28.1	1.8	149	84	1.4	4.2	0.00	0.33	0.20*	0.33	24.2	19.0	N
HARRAH'S ENTERTAINMENT HET	3268.5	28	6	22.6	14.4	225	16	1.0	1.1	0.00	1.71	1.64	2.05	2.4	15.4	E
MANDALAY RESORT GROUP MBG (1)	1511.6	20	-1	-14.5	10.7	146	14	0.6	0.8	0.00	0.70	1.64	1.91	5.2	15.0	E
MGM MIRAGE MGG	4551.3	29	14	14.0	5.9	195	28	1.8	1.0	0.00	0.79	1.66	1.87	3.7	17.0	E
PARK PLACE ENTERTAINMENT PPE	4012.6	13	8	1.1	4.4	105	25	0.9	1.3	0.00	0.45	0.69	0.79	2.5	15.0	N
VIACOM VIA.B	77469.7	51	-15	89.9	-0.5	161	NM	4.4	NM	0.00	0.51	-0.01	0.29	62.1	27.5	E

(C) HOTEL & MOTEL

GROUP AVERAGE	4009.2	22	9	12.3	11.8	183	15	0.7	1.0	0.72	0.18	1.43	1.39	2.9	15.7	
CRESTLINE CAPITAL CLJ	375.8	24	16	NA	9.8	93	11	0.1	1.4	0.00	1.91	2.36	NA	NA	7.5	N
HILTON HOTELS HLT	3456.0	9	-2	9.5	16.5	244	14	1.1	1.1	0.85	0.66	0.69	0.79	3.8	13.0	E
MARRIOTT INTERNATIONAL MAR	9944.4	41	31	15.2a	13.9	328	25	1.0	1.4	0.58	1.51	1.91	2.17	0.9	16.0	N
MERISTAR HOTELS & RESORTS MMH	82.9	2	-35	NA	9.2	85	9	0.1	0.3	0.00	0.24	0.28	0.36	5.6	25.0	N
STARWOOD HOTELS & RESORTS HOT	6187.0	32	36	NM	9.5	166	18	1.4	1.0	2.16	-3.41	1.92	2.23	1.4	17.0	N

(D) OTHER LEISURE

GROUP AVERAGE	4221.5	19	-29	7.1	19.9	258	28	1.1	0.9	2.89	1.53	1.75	2.06	6.7	14.0	
AMERICAN GREETINGS AM (2)	584.4	9	-61	-2.9	9.4	50	6	0.3	0.7	4.35	1.37	1.30	1.50	10.7	10.0	A
BRUNSWICK BC	1501.3	17	-23	-26.3	3.9	144	36	0.4	0.5	2.91	0.41	2.72	3.01	0.7	13.0	E
CARNIVAL CCL (11)	13260.5	23	-53	20.8	17.7	230	13	3.6	0.9	1.85	1.66	1.63	1.81	3.3	15.0	A
EASTMAN KODAK EK	12607.1	42	-37	4.5	44.6	333	8	0.9	0.9	4.19	4.33	5.07	5.44	4.8	9.0	E
FLEETWOOD ENTERPRISES FLE (4)	409.3	13	-39	13.4	0.7	76	89	0.1	NM	6.08	2.41	-0.33	0.93	NA	14.0	E
HARLEY-DAVIDSON HDI	13769.4	45	42	24.0	24.3	1018	43	4.8	2.1	0.22	0.87	1.09	1.28	2.3	19.5	E
HASBRO HAS	1992.4	12	-39	5.3	6.3	134	24	0.5	2.2	2.08	0.93	0.43	0.68	13.2	12.5	E
MATTEL MAT	5356.8	13	-4	NM	3.6	410	115	1.1	1.6	2.85	-0.21	0.67	0.84	7.1	12.0	E
MUSICLAND STORES MLG	208.6	7	-23	NM	61.8	220	4	0.1	0.3	0.00	1.60	1.68	1.67	6.6	15.0	N
POLARIS INDUSTRIES PII	873.0	37	2	9.0	42.0	458	11	0.6	0.7	2.39	3.07	3.45	3.85	0.3	15.0	A
POLAROID PRD	338.9	8	-60	NM	18.8	88	5	0.2	0.6	8.00	0.20	1.24	1.51	16.6	11.0	E
ROYAL CARIBBEAN CRUISES RCL	3583.9	20	-60	16.4	13.1	104	8	1.3	0.5	2.62	2.06	2.30	2.46	6.1	18.0	A
TRANS WORLD ENTERTAINMENT TWMC (1)	394.1	8	23	NM	12.9	84	7	0.3	0.3	0.00	1.15	1.53	1.79	8.9	17.5	E

15 MANUFACTURING

INDUSTRY AVERAGE	7308.5	31	-14	12.9	17.8	235	15	0.9	1.1	1.73	1.85	2.23	2.79	7.5	13.3	
------------------	--------	----	-----	------	------	-----	----	-----	-----	------	------	------	------	-----	------	--

(A) GENERAL MANUFACTURING

GROUP AVERAGE	8954.0	39	-2	18.2	18.9	317	19	1.4	1.1	1.89	1.77	2.62	2.95	2.5	14.3	
AVERY DENNISON AVY	6078.3	55	-25	12.6	35.7	766	19	1.6	1.5	1.96	2.13	2.87	3.17	2.5	13.0	A
CARLISLE CSL	1280.2	42	18	22.1	19.8	237	12	0.7	0.8	1.89	3.13	3.62	4.08	0.7	15.0	A
CORNING GLW	51643.8	59	36	NM	7.9	658	80	7.9	1.9	0.41	0.65	1.17	1.42	2.1	27.0	B
ENERGIZER HOLDINGS ENR (9)	1845.3	19	NA	NA	25.5	261	13	1.0	1.0	0.00	1.56	1.49*	1.87	1.6	13.0	M
EXIDE FX (3)	230.3	9	9	NA	NM	NM	NM	0.1	1.2	0.88	6.40	0.61	0.93	3.2	12.0	N
FORTUNE BRANDS FO	4498.7	29	-13	NM	13.0	175	14	0.8	1.0	3.33	5.35	2.32	2.58	2.3	12.0	B
HARSCO HX	850.7	21	-33	16.4	14.8	130	9	0.5	0.7	4.41	2.21	2.45	2.87	4.2	12.0	A
HILLENBRAND INDUSTRIES HB (11)	3187.6	51	61	10.2	15.4	387	26	1.6	1.7	1.57	1.87	2.44	2.74	1.8	12.0	A
JOHNSON CONTROLS JCI (9)	4733.6	55	-3	20.3	18.9	212	11	0.3	0.7	2.03	4.48	5.09*	5.53	2.2	15.0	A
MINNESOTA MINING & MFG. MMM	39394.0	100	2	9.0	29.5	612	21	2.4	1.9	2.32	4.34	4.76	5.27	1.3	11.0	A
NEWELL RUBBERMAID NWL	5181.8	19	-33	NA	16.8	218	13	0.8	0.8	4.32	0.34	1.71	1.83	2.2	15.0	A

If This City Is Unfamiliar,
Chances Are You Need
NTT Communications.

There are a lot of cities in Asia just waiting for your business. But there's only one right way to connect with them. NTT Communications. As Japan's largest telecommunications company, NTT Communications can provide your business with everything it needs to stay ahead of the competition. Including our one-stop network solutions service: **Arcstar**. Currently serving 25 major cities around the world and available in 53 countries, Arcstar can develop the network solution that's right for you. And with special focus on IP (Internet Protocol), Arcstar offers top quality, high-speed and secure access to the Internet. So when it comes to connecting to Shanghai, or anywhere else in the world, connect with NTT Communications. **Your trusted partner in Network Solutions.**

Global Connections From East to West.



www.ntt.com/world

Tokyo / Osaka / Seoul / Beijing / Shanghai / Taipei / Hong Kong / Hanoi / Bangkok / Manila / Kuala Lumpur / Singapore / Jakarta / Sydney / London / Brussels / Paris / Geneva / Düsseldorf / Frankfurt / Milan / New York / Washington D.C. / Virginia / San Francisco / Los Angeles / Rio de Janeiro / São Paulo

NTT Communications Group in the Americas: NTT America New York Head Office +1-212-661-0810 / Washington D.C. Office +1-202-312-1444 / Virginia Office +1-703-103 / New England Office +1-978-392-4764 / Chicago Office +1-773-693-0080 / Mountain View Office +1-650-940-1414 / Seattle Office +1-425-254-0900 / Los Angeles Office +1-310-516-2111 / NTT do Brasil Telecomunicacoes Ltda., São Paulo Head Office +55-11-253-0108 / Rio de Janeiro Office +55-21-553-7297

EARNINGS PER SHARE

COMPANY	TICKER SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	2001 ESTIMATES FROM ANALYSTS					S&P EQU RANK
													1999 ANALYST EST.	1999 CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %		
PARKER HANNIFIN PH (6)		4505.3	39	-25	11.6	17.5	188	10	0.8	1.0	1.76	2.83	3.31*	3.67	1.1	11.8	A	
TELEFLEX TX		1515.9	40	27	15.8	16.0	230	15	0.9	0.9	1.51	2.47	2.82	3.18	1.6	16.0	A	
TOWER AUTOMOTIVE TWR		410.3	9	-41	45.4	14.4	50	4	0.2	0.3	0.00	2.10	1.97	2.12	8.0	15.0	N	
(B) MACHINE & HAND TOOLS																		
GROUP AVERAGE		1607.5	26	-22	7.5	27.2	219	10	0.6	0.9	2.16	3.06	2.66	3.07	3.4	12.2		
BLACK & DECKER BDK		2980.2	36	-31	9.6	44.8	388	9	0.6	0.6	1.33	3.40	4.00	4.42	2.0	15.0	B	
KENAMETAL KMT (6)		884.1	29	-15	-10.0	6.7	113	17	0.5	1.4	2.37	1.31	1.71*	2.49	6.8	12.0	B	
SNAP-ON SNA		1509.2	26	-2	4.3	16.1	184	11	0.7	1.1	3.70	2.16	2.44	2.75	3.6	10.0	B	
STANLEY WORKS SWK		2315.6	27	-11	26.1	27.3	330	12	0.8	1.2	3.42	1.67	2.23	2.44	2.1	10.0	B	
TEREX TEX		348.4	13	-53	NM	40.9	78	2	0.2	0.3	0.00	6.75	2.94	3.25	2.5	14.0	B	
(C) SPECIAL MACHINERY																		
GROUP AVERAGE		10007.5	32	-18	8.7	16.2	216	13	0.9	1.2	1.65	2.17	2.58	2.94	12.4	13.2		
AGCO AG		580.9	10	-27	NM	-4.1	75	NM	0.3	3.6	0.41	-0.20	0.27	0.70	32.9	10.0	N	
APPLIED MATERIALS AMAT (10)		32800.7	40	-36	4.9a	29.1	462	17	3.4	0.7	0.00	0.88	2.40*	3.11	8.7	25.0	B	
BRIGGS & STRATTON BGG (6)		801.8	37	-31	17.1	26.9	206	8	0.6	0.8	3.34	4.52	5.97*	4.28	2.8	8.0	A	
CATERPILLAR CAT		13513.6	39	-16	-1.8	18.5	244	13	0.7	1.4	3.46	2.63	2.90	3.40	7.1	10.0	B	
CUMMINS ENGINE CUM		1352.5	35	-27	-6.9	10.5	93	9	0.2	1.1	3.40	4.13	4.09	4.14	8.0	8.0	B	
DEERE DE (10)		9545.1	41	-6	-9.9	11.2	219	20	0.7	2.0	2.16	1.02	2.06*	2.66	5.3	10.0	B	
DOVER DOV		8314.3	41	-10	9.2a	22.4	359	16	1.6	1.1	1.22	1.92	2.58	2.94	2.0	14.5	A	
FMC FMC		2067.8	68	18	12.9	24.8	284	12	0.5	1.1	0.00	6.67	6.48	7.31	2.1	10.0	B	
ILLINOIS TOOL WORKS ITW		17013.1	56	-17	14.3	17.7	322	18	1.7	1.3	1.42	2.76	3.30	3.75	1.1	13.0	A	
INGERSOLL-RAND IR		6460.8	40	-27	21.5	17.1	190	11	0.8	0.9	1.69	3.29	3.75	4.12	3.6	12.0	A	
ITT INDUSTRIES ITT		2928.6	33	0	67.0a	22.5	254	12	0.6	0.8	1.80	2.53	2.91	3.30	1.2	14.0	N	
LAM RESEARCH LRCX (6)		1866.2	15	-60	4.1	34.8	264	8	1.3	0.5	0.00	-0.98	1.53*	2.12	3.3	20.0	C	
MCDERMOTT INTERNATIONAL MDR		542.9	9	-1	NA	-2.5	68	NM	0.3	2.7	0.00	NA	0.22	0.60	10.0	15.0	B	
MILACRON MZ		523.8	15	-1	9.3	15.1	110	8	0.3	0.6	3.15	1.89	2.04	2.22	1.4	12.0	B	
PENTAIR PNR		1367.8	28	-27	11.8	12.2	132	11	0.5	0.8	2.41	2.33	2.35	3.37	3.9	15.0	A	
TIMKEN TKR		806.5	13	-34	-13.5	6.6	80	12	0.3	1.1	5.36	1.01	1.18	1.29	10.1	10.0	B	
TORO TTC (10)		425.4	33	-10	-3.2a	13.6	131	10	0.3	0.8	1.44	2.64	3.43	3.92	0.8	12.0	B	
TYCO INTERNATIONAL TYC (9)		89005.5	53	35	NA	29.4	579	24	3.1	1.2	0.10	1.53	2.18*	2.74	2.2	20.0	B	
UNOVA UNA		225.0	4	-69	2.5	3.0	31	10	0.1	NM	0.00	0.54	-0.62	-0.10	130.0	12.0	N	
(D) TEXTILES																		
GROUP AVERAGE		764.0	14	-19	20.9	11.8	132	15	0.3	0.8	1.33	1.53	0.19	1.90	7.2	12.4		
BURLINGTON INDUSTRIES BUR (9)		68.9	1	-67	NM	NM	73	NM	0.0	NM	0.00	-0.57	-10.12*	0.00	NA	10.5	C	
INTERFACE IFSIA		427.7	46	-6.9	4.0	118	30	0.3	0.9	2.14	0.45	0.60	0.76	10.5	15.0	B		
MOHAWK INDUSTRIES MHK		1255.7	24	-10	88.1	22.4	172	8	0.4	0.6	0.00	2.61	3.08	3.40	3.2	14.0	B	
SHAW INDUSTRIES SHX		2331.5	19	21	36.7	16.4	291	19	0.6	0.8	1.06	1.62	1.58	1.88	4.3	15.0	B	
SPRINGS INDUSTRIES SMI		488.4	27	-32	0.7	9.8	60	6	0.2	0.8	4.84	3.80	4.00	4.51	5.3	9.0	A	
UNIFI UFI (6)		460.8	9	-30	-14.0	6.3	77	13	0.4	1.7	0.00	0.97	0.65*	0.75	12.0	8.0	B	
WESTPOINT STEVENS WXS		315.3	6	-64	NM	NM	NM	0.2	0.3	1.26	1.84	1.52	1.98	8.1	15.0	N		
16 METALS & MINING																		
INDUSTRY AVERAGE		2281.6	15	-44	-9.8	4.4	138	29	0.4	3.6	2.42	0.53	1.08	1.69	29.7	10.9		
(A) ALUMINUM																		
GROUP AVERAGE		12382.2	17	-35	6.6	37.7	378	12	0.7	1.6	0.89	0.37	1.04	1.73	30.0	11.8		
ALCOA AA		24381.5	28	-32	6.6	13.0	223	16	1.2	1.2	1.77	1.41	1.85	2.57	19.1	12.5	B	
KAISER ALUMINUM KLU		382.9	5	-37	NM	62.5	533	8	0.2	2.0	0.00	-0.68	0.22	0.88	40.9	11.0	C	
(B) STEEL																		
GROUP AVERAGE		737.2	13	-52	-10.5	-1.0	73	21	0.2	1.2	2.93	0.80	1.16	1.68	40.7	9.1		
AK STEEL HOLDING AKS		982.2	9	-52	-45.3	8.3	75	9	0.2	0.9	5.48	0.62	1.37	1.70	14.1	7.8	N	
BETHLEHEM STEEL BS		298.1	2	-73	NM	-6.3	24	NM	0.1	NM	0.00	-1.72	-0.86	-0.64	76.6	4.9	B	
COMMERCIAL METALS CMC (8)		322.7	25	-28	1.9	11.0	77	11	0.1	1.5	2.12	3.22	3.25*	3.20	4.4	5.0	A	
NATIONAL STEEL NS		72.3	2	-76	NM	-9.1	9	NM	0.0	NM	0.00	-1.04	-2.62	-0.46	176.1	10.0	B	
NUCOR NUE		2705.9	35	-37	-2.8	15.9	131	9	0.6	0.6	1.73	2.80	3.63	4.00	11.8	15.0	A	
RYERSON TULL RT		185.8	8	-61	5.9	0.3	27	94	0.1	2.5	2.67	1.56	0.34	0.80	21.3	9.0	B	
TEXAS INDUSTRIES TXI (5)		468.8	22	-48	-2.2	11.0	65	6	0.3	0.7	1.35	3.15	3.38	4.29	9.3	10.0	B	
USX-U.S. STEEL GROUP X		1264.9	14	-57	-39.3	7.0	61	9	0.2	1.5	7.02	0.48	1.37	1.92	40.6	6.9	N	
WALTER INDUSTRIES WLT (5)		283.3	6	-43	NM	-59.9	145	NM	0.1	0.9	1.96	-2.15	0.65	0.70	NA	10.0	N	
WORTHINGTON INDUSTRIES WOR (5)		787.9	9	-45	8.3	12.3	117	10	0.4	0.7	6.97	1.06	1.10	1.30	12.3	12.5	A	
(C) OTHER METALS																		
GROUP AVERAGE		1601.9	17	-34	-12.1	2.6	166	49	0.6	7.1	2.14	0.18	0.98	1.68	15.6	13.1		
ENGELHARD EC		2515.7	20	4	11.6	24.3	279	12	0.5	1.0	2.03	1.47	1.73	1.81	2.8	12.0	B	
FREEPORT-McMORAN COPPER & GOLD FCX		1197.1	11	-62	-10.8	3.8	NM	73	0.6	1.8	0.00	0.61	0.21	0.99	26.3	21.0	B	
GENERAL CABLE BGC		168.7	6	-25	7.9	-35.6	142	NM	0.1	0.4	3.52	0.95	1.37	1.53	2.6	10.0	N	
NEWMONT MINING NEM		2628.1	16	-36	-37.0	1.3	180	142	1.8	37.0	0.77	0.15	0.02	0.62	43.6	21.1	B	
OLIN OLI		780.8	17	-13	-32.3	21.9	225	10	0.5	1.4	4.62	0.36	1.86	2.41	5.0	6.5	B	
PHELPS DODGE PD		3866.1	49	27	NM	-6.1	123	NM	0.9	7.5	4.07	-4.13	1.09	3.42	28.7	6.0	B	
SUPERIOR TELECOM SUT		56.9	3	-81	NA	8.5	48	6	0.0	0.3	0.00	1.86	0.60	1.00	0.0	15.0	N	

You know
now everyone says it's lonely
at the top?

They lied.

- the future

www.acxiom.com

Truth is, it can be a lot of fun.

Especially when you're creating breakaway opportunities. The kind that transforms companies and launches careers. At Acxiom, we help you invent exciting new ways to build more meaningful customer relationships every day.

We do it through innovative data services and technologies such as Solvitur⁴, InfoBase[®], the Acxiom Data NetworkSM and our exciting, new AbiliTecTM. The Customer Data Integration software that gives your entire organization the most accurate picture of your customer ever assembled.

Join us in a very bright future.

One where we reach the top together and just keep climbing.

**Acxiom. Innovations through
Customer Data Integration.**

ACXIOM

COMPANY	STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1/B/E/S 2000 ANALYST EST	1/B/E/S CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %	S.E. RANK
17 NONBANK FINANCIAL																	
INDUSTRY AVERAGE		18276.2	889	27	21.3	12.6	261	20	1.5	1.6	1.53	16.59	13.73	17.29	5.7	13.4	
(A) FINANCIAL SERVICES																	
GROUP AVERAGE		27497.9	2167	20	29.3	19.2	379	24	1.8	1.5	1.13	37.83	30.17	38.37	5.3	15.4	
ADVANCE PARADIGM ADVP (3)		832.8	33	54	138.5	21.5	773	37	0.4	1.4	0.00	0.85	0.81	1.46	2.1	30.0	N
AMERICAN EXPRESS AXP		73012.6	55	-1	14.8	24.4	651	27	2.9	1.9	0.58	1.81	2.07	2.36	0.9	13.8	E
BEAR STEARNS BSC (6)		4904.3	46	7	NA	16.5	119	NA	NA	0.7	1.31	NA	5.81	6.15	20.8	12.0	A
BERKSHIRE HATHAWAY BRK.A		100497.5	65900	17	11.2	3.8	169	44	3.7	6.9	0.00	1025.00	852.00	1095.67	8.8	11.3	E
BLOCK (H&R) HRB (4)		3212.0	35	-20	20.5	27.8	385	15	1.2	0.8	3.41	2.55	2.92	3.41	2.4	15.0	A
CAPITAL ONE FINANCIAL COF		10979.7	56	16	30.2	24.7	618	27	2.2	1.0	0.19	1.72	2.25	2.89	1.4	25.0	N
CIT GROUP CIT		4205.2	17	-20	11.9	9.5	72	8	0.8	0.6	2.38	2.22	2.38	2.73	3.7	12.0	N
CITIGROUP C		223750.6	50	19	16.5	22.7	431	19	2.4	1.3	1.12	2.15	2.76	3.09	2.9	14.0	A
COUNTRYWIDE CREDIT INDS. CCR (2)		4255.3	37	47	16.2	12.0	136	11	1.3	0.9	1.08	3.52	3.11	3.50	2.9	14.0	A
DUN & BRADSTREET DNB		1883.2	23	NA	29.6	NM	NM	16	1.2	1.5	6.38	NA	1.43	1.61	9.3	11.0	N
E*TRADE GROUP EGRP (9)		2481.0	8	-69	4.7	1.0	134	133	1.3	4.7	0.00	-0.20	0.06*	0.22	27.3	28.5	C
EDWARDS (A.G.) AGE (2)		3622.7	45	40	23.3	24.7	223	10	1.2	NA	1.43	4.08	4.29	4.43	4.1	NA	A
EQUIFAX EFX		4473.1	33	41	15.6	72.2	1458	21	2.3	1.2	1.11	1.55	1.70	2.01	1.5	16.0	A
FANNIE MAE FNM		78707.7	79	27	17.3	21.2	468	19	2.0	1.3	1.42	3.73	4.28	4.86	0.6	14.0	A
FIDELITY NATIONAL FINANCIAL FNF		1629.2	24	67	50.0	7.7	158	18	0.7	0.9	1.67	2.27	1.89	2.34	5.1	14.5	E
FIRST AMERICAN FAF		1382.3	22	75	128.8	5.8	165	29	0.5	2.1	1.10	1.34	1.01	1.25	11.2	10.5	E
FRANKLIN RESOURCES BEN (9)		8818.9	36	13	15.1	19.0	297	16	3.8	1.1	0.66	1.69	2.28*	2.38	2.9	14.0	A
FREDDIE MAC FRE		41779.7	60	28	20.3	17.3	418	18	1.5	1.2	1.13	2.95	3.38	3.87	0.8	14.5	A
GOLDMAN SACHS GROUP GS (11)		37939.8	82	-13	NA	25.1	299	13	1.2	1.0	0.58	5.57	6.31	6.68	5.7	13.0	N
HELLER FINANCIAL HF		2549.2	26	32	4.5a	11.9	120	9	1.3	0.7	1.51	2.74	2.68	3.05	1.3	15.0	N
HOUSEHOLD INTERNATIONAL HI		23540.3	50	34	20.8a	21.2	312	15	2.1	0.9	1.52	3.07	3.55	4.05	1.0	15.0	A
KANSAS CITY SOUTHERN INDS. KSU		490.0	8	NM	12.0	6.9	77	4	0.5	1.0	0.00	5.58	0.56	0.78	10.3	15.5	E
LANDAMERICA FINANCIAL GROUP LFG		405.1	30	63	13.7	3.9	70	17	0.2	1.3	0.67	2.79	1.76	2.34	3.0	13.5	N
LEGG MASON LM (3)		2961.1	46	26	30.7	18.6	346	18	2.0	1.6	0.79	2.33	2.46	2.80	2.1	11.5	A
LEHMAN BROTHERS HOLDINGS LEH (11)		11906.0	50	17	37.7a	21.0	178	8	0.5	0.7	0.44	4.08	6.24	6.40	5.9	11.5	N
MARSH & McLENNAN MMC		31608.4	115	20	10.7	18.8	632	35	3.2	2.0	0.70	2.62	4.11	4.75	1.5	14.0	A
MERRILL LYNCH MER		46701.6	58	39	23.8	21.2	279	14	1.1	1.1	1.11	3.09	4.08	4.15	4.3	13.5	A
MORGAN STANLEY DEAN WITTER MWD (11)		71081.3	63	-11	38.3	31.3	391	12	1.7	0.9	1.26	4.10	5.02	5.44	7.4	14.0	N
SCHWAB (CHARLES) SCH		38298.8	28	9	33.5	18.6	948	51	5.6	2.2	0.16	0.47	0.63	0.76	5.3	20.0	A
TD WATERHOUSE GROUP TWE (10)		5032.2	13	-20	NA	9.5	226	24	3.2	1.2	0.00	0.28	0.55*	0.66	7.6	20.0	N
USA EDUCATION SLM		9495.0	58	37	NA	37.3	811	19	2.4	1.3	1.21	3.06	2.88	3.53	1.7	15.0	A
(B) INSURANCE																	
GROUP AVERAGE		13367.3	49	28	14.0	7.5	186	18	1.3	1.8	1.75	2.62	2.92	3.44	6.4	12.1	
AETNA AET		9514.6	67	21	NA	5.9	84	14	0.3	1.3	1.19	4.72	4.20	4.55	6.2	12.0	E
AFLAC AFL		18660.5	70	49	15.7	15.2	455	31	1.9	2.0	0.48	2.07	2.41	2.78	1.4	15.0	A
ALLMERICA FINANCIAL AFC		3307.9	62	12	NA	8.9	140	16	1.1	0.9	0.40	6.21	5.57	6.22	3.1	12.0	N
ALLSTATE ALL		28113.8	38	59	12.5	12.4	167	14	1.0	1.6	1.78	3.38	2.61	3.00	4.3	9.0	N
AMERICAN FINANCIAL GROUP AFG		1120.0	19	-28	-10.7	3.9	83	21	0.3	1.2	5.25	2.44	1.11	1.81	9.4	14.0	E
AMERICAN GENERAL AGC		18869.4	75	-1	14.0	13.7	272	20	1.7	1.2	2.35	4.40	5.17	5.83	1.2	12.0	E
AMERICAN INTERNATIONAL GROUP AIG		224465.3	97	34	16.4	14.9	614	42	5.5	2.8	0.15	2.15	2.45	2.81	1.4	14.0	A
AON AOC		7954.8	31	-22	4.1	12.4	250	20	1.1	1.3	2.83	1.33	2.04	2.34	5.1	12.0	E
AXA FINANCIAL AXF		24492.9	56	66	8.1	12.1	383	33	2.8	1.8	0.18	2.39	2.05	2.65	11.3	15.0	N
BERKLEY (W.R.) BKLY		911.7	36	72	NM	-3.7	147	NM	0.5	2.4	1.45	-1.34	1.24	2.49	9.6	12.0	E
CHUBB CB		14233.6	82	45	-0.5	10.6	212	20	2.0	1.7	1.62	3.66	3.96	4.69	2.8	12.0	E
CIGNA CI		20223.9	132	64	-2.1	18.6	376	22	1.0	1.3	0.94	3.54	6.78	7.63	1.3	15.0	E
CINCINNATI FINANCIAL CINF		5881.7	37	17	3.3	3.8	107	29	2.6	3.3	2.08	1.52	1.40	1.79	5.6	8.0	A
CNA FINANCIAL CNA		6821.0	37	-4	-53.5	7.6	73	10	0.4	2.5	0.00	0.19	1.90	2.49	4.4	8.0	E
CONSECO CNC		2338.3	7	-60	-2.4a	-18.2	58	NM	0.3	0.9	0.00	1.79	0.51	1.07	23.4	15.0	E
EVEREST RE GROUP RE		2756.6	60	170	324.9	11.9	187	16	2.0	1.2	0.40	3.25	4.00	4.55	2.9	12.8	E
FREMONT GENERAL FMT		188.2	3	-64	NM	-62.5	39	NM	0.1	0.3	5.95	-0.64	0.73	0.98	13.3	11.0	A
HARTFORD FINANCIAL SVCS. GROUP HIG		15930.5	71	49	12.5	13.7	236	17	1.1	1.4	1.41	3.79	4.26	4.77	1.1	11.5	N
JEFFERSON-PILOT JP		7035.0	68	0	17.1	16.9	234	14	2.3	1.5	2.17	4.42	4.27	4.74	1.1	11.0	N
JOHN HANCOCK FINANCIAL SERVICES JHF		9925.7	32	NA	NA	7.1	177	24	1.3	0.9	0.95	NA	2.36	2.59	1.5	14.5	N
LIBERTY FINANCIAL L		2031.1	42	83	3.3	8.5	154	18	1.6	1.6	0.95	2.07	2.65	2.84	4.2	10.0	N
LINCOLN NATIONAL LNC		8657.3	45	13	11.6	11.2	191	17	1.3	1.0	2.57	2.30	3.61	3.94	3.3	12.0	A
LOEWS LTR		9319.0	95	56	-24.8	11.0	88	8	0.5	0.7	1.06	4.80	10.90	13.33	4.4	13.0	T
MERCURY GENERAL MCY		2087.3	39	73	10.4	11.8	212	18	1.6	1.6	2.49	2.44	2.02	2.30	4.8	12.0	A
METLIFE MET		22722.4	30	NA	NA	6.2	149	24	0.8	1.2	0.00	NA	1.96	2.24	1.3	13.0	N
MONEY GROUP MNY		1956.6	42	45	NA	18.2	97	6	1.4	0.8	1.06	5.24	5.32	2.62	6.1	10.0	N
NATIONWIDE FINANCIAL SERVICES NFS		5284.7	41	47	NA	15.1	187	12	1.7	0.8	1.17	2.96	3.51	3.96	1.5	15.0	N
OHIO CASUALTY OCAS		493.8	8	-49	6.6	-5.9	46	NM	0.3	NM	5.84	1.73	-1.25	0.60	28.3	11.0	E
OLD REPUBLIC INTERNATIONAL ORI		3070.0	26	91	0.0	10.9	132	12	1.5	1.2	2.15	1.75	2.16	2.45	11.0	10.0	A
PROGRESSIVE PGR		6858.1	94	28	4.7	0.1	245	NM	1.0	12.6	0.30	3.96	0.53	3.16	21.8	14.0	E
PROTECTIVE LIFE PL		1548.3	24	-25	15.0	15.4	151	10	0.9	0.8	2.17	2.32	2.37	2.37	0.8	12.0	A
REINSURANCE GROUP OF AMERICA RGA		1767.1	36	29	-8.8a	11.6	213	18	1.1	0.9	0.67	1.15	2.54	2.90	2.1	15.0	A



We have gone to great lengths (and depths)
to bring you the fastest Internet.

From East to West, the Internet has taken off, and the world's demand for high bandwidth data transmission is growing exponentially. The companies that optimize the Internet best are the companies that will go the farthest. And the technology partner that can create an advantage is Alcatel. We hold world records in DWDM terrestrial and submarine transmission. We were the first to demonstrate DWDM transmission at 40 Gbits/s on 128 channels. When it comes to end-to-end solutions, there is no area where Alcatel doesn't excel. And that's something you can never get enough of. **Alcatel, world leader in intelligent optical networking.**



ARCHITECTS OF AN INTERNET WORLD

EARNINGS PER SHARE

2001 ESTIMATES FROM ANALYSTS

COMPANY	STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1/8/E/S 2000 ANALYST EST	1/8/E/S CONSENSUS	VARIATION %	LONG TERM GROWTH RATE %	ST. DEV. RANK
SAFECO	SAF	3421.2	27	8	-12.0	3.5	80	23	0.5	5.8	5.52	1.90	0.46	1.41	19.9	10.0	B
ST. PAUL SPC	STP	10927.3	50	49	NA	14.6	156	11	1.3	1.8	2.16	3.19	2.78	3.22	2.5	10.0	B
STANCORP FINANCIAL GROUP	SFG	1383.2	43	72	NA	11.1	154	14	1.1	1.2	0.65	NA	3.02	3.42	0.9	12.1	N
TORCHMARK TMK	TMK	4797.5	38	31	6.4	16.1	228	15	2.0	1.3	0.95	1.93	2.85	3.16	1.0	10.0	A
TRANSATLANTIC HOLDINGS	TRH	3311.0	95	22	9.0	9.9	184	19	1.7	1.6	0.57	5.37	5.48	5.98	3.3	11.0	A
UNITRIN UNIT	UNIT	2440.3	36	-4	10.4	7.4	146	21	1.3	NA	4.17	2.74	1.45	1.90	18.4	NA	B
UNUMPROVIDENT UNM	UNM	6503.2	27	-16	NM	10.6	126	12	0.7	1.0	2.19	-0.77	2.38	2.71	3.3	12.0	B

(C) SAVINGS & LOAN

GROUP AVERAGE		6473.2	33	45	20.4	12.9	185	14	1.6	0.9	2.04	2.45	2.76	3.10	3.3	12.1	
ASTORIA FINANCIAL ASFC	ASFC	2243.4	45	47	25.4	16.0	165	10	1.4	0.9	2.32	4.37	4.28	4.38	3.4	11.5	N
CHARTER ONE FINANCIAL CF	CF	4985.2	24	32	24.7	14.8	214	15	2.0	1.0	3.00	1.46	2.09	2.31	2.2	12.0	B
DIME BANCORP DME	DME	2727.2	25	64	36.6	8.1	169	19	1.3	1.0	1.61	2.17	2.39	2.74	2.6	11.0	B
GOLDEN STATE BANCORP GSB	GSB	3422.9	26	48	-1.1	17.8	177	11	0.8	1.0	1.57	2.29	2.43	2.67	3.8	11.0	N
GOLDEN WEST FINANCIAL GDW	GDW	9260.2	59	75	21.5	14.8	265	18	2.6	1.4	0.43	2.87	3.38	4.11	4.4	12.0	A
GREENPOINT FINANCIAL GPT	GPT	3078.5	30	28	19.1	12.0	148	11	2.0	0.9	3.29	2.23	2.80	3.15	3.2	12.0	N
SOVEREIGN BANCORP SVRN	SVRN	1573.0	7	-9	10.7	-0.5	83	NM	0.7	0.4	1.47	1.01	1.20	1.32	3.8	14.0	A
WASHINGTON MUTUAL WM	WM	24494.8	45	76	26.7	19.9	263	13	1.6	1.0	2.64	3.16	3.50	4.11	3.2	13.0	B

18 OFFICE EQUIPMENT & COMPUTERS

INDUSTRY AVERAGE		30247.9	37	-11	22.7	17.9	838	61	9.0	2.5	0.52	0.90	0.93	1.37	8.1	23.7	
------------------	--	---------	----	-----	------	------	-----	----	-----	-----	------	------	------	------	-----	------	--

(A) BUSINESS MACHINES & SERVICES

GROUP AVERAGE		2465.5	26	1	17.7	23.5	291	14	0.9	1.0	2.47	1.99	1.95	2.32	2.4	14.6	
DELUXE DLX	DLX	1689.0	23	-15	23.2	36.9	333	9	1.0	0.8	6.35	2.64	2.64	2.63	4.9	11.0	B
DIEBOLD DBD	DBD	2068.1	29	23	13.8	15.1	227	15	1.3	1.0	2.14	1.85	1.99	2.21	1.8	14.0	A
HON INDUSTRIES HNI	HNI	1463.6	24	11	21.1	18.9	259	14	0.7	0.9	1.81	1.44	1.89	2.16	2.8	15.0	A
MILLER (HERMAN) MLHR (5)	MLHR	1819.1	24	3	39.9	48.7	631	13	0.9	0.8	0.61	1.74	2.02	2.35	1.3	15.0	B
NCR NCR	NCR	4550.2	47	25	NM	18.9	268	14	0.8	1.0	0.00	3.35	2.41	2.90	1.7	20.0	N
PITNEY BOWES PBI	PBI	7327.6	29	-40	17.9	48.6	544	12	1.6	0.9	3.92	2.42	2.45	2.70	1.1	13.0	A
REYNOLDS & REYNOLDS REY (9)	REY	1441.8	19	-18	11.3b	15.8	258	17	1.6	NA	2.37	1.09	1.11*	1.33	3.0	NA	A
STEELCASE SCS (2)	SCS	2020.2	14	13	10.9	12.8	126	10	0.5	0.8	3.26	1.21	1.46	1.61	4.4	12.0	N
TECH DATA TECO (1)	TECO	1642.1	31	13	44.3	14.9	150	11	0.1	0.5	0.00	2.34	3.01	3.63	1.1	20.0	B
WALLACE COMPUTER SERVICES WCS (7)	WCS	633.2	16	-6	-23.4	4.1	115	29	0.4	2.6	4.24	1.80	0.55*	1.68	1.8	11.0	A

(B) COMPUTERS & PERIPHERALS

GROUP AVERAGE		31892.7	27	-27	26.2	18.8	657	60	3.6	2.4	0.23	0.47	0.61	1.13	14.1	20.8	
APPLE COMPUTER AAPL (9)	AAPL	5538.7	17	-68	NM	19.1	137	8	0.7	0.5	0.00	1.81	2.18*	1.12	6.3	15.0	B
COMPAQ COMPUTER CPQ	CPQ	36657.5	22	-21	-13.3	12.2	282	24	0.9	1.1	0.47	0.34	1.05	1.48	2.7	19.5	B
DELL COMPUTER DELL (1)	DELL	49973.0	19	-62	64.6	37.0	825	23	1.7	0.8	0.00	0.61	0.92	1.11	2.7	25.0	B
EMC EMC	EMC	162733.8	74	36	35.6	19.0	2169	117	20.0	3.2	0.00	0.46	0.77	1.02	2.9	30.0	B
GATEWAY GTW	GTW	6139.9	19	-74	22.7	21.0	241	12	0.7	0.4	0.00	1.32	1.85	2.28	2.2	25.0	N
HEWLETT-PACKARD HWP (10)	HWP	62535.0	32	NM	15.1	25.1	440	18	1.3	1.2	1.01	1.49	1.73*	1.97	2.5	15.0	A
INTERNATIONAL BUSINESS MACHINES IBM	IBM	165904.5	94	-13	23.8	38.3	860	23	1.9	1.6	0.56	4.12	4.43	5.03	2.2	13.0	B
IOMEGA IOM	IOM	1299.0	5	42	NM	35.9	276	8	0.9	0.6	0.00	-0.38	0.39	0.44	20.5	20.0	C
LEXMARK INTERNATIONAL GROUP LXX	LXX	5844.2	46	-49	62.8	44.3	785	19	1.6	1.2	0.00	2.32	2.32	2.70	3.3	16.0	N
MAXTOR MXTR	MXTR	689.6	6	-18	NM	10.3	231	24	0.3	1.0	0.00	-0.48	0.23	0.42	52.4	25.0	N
MICRON ELECTRONICS MUEI (8)	MUEI	513.7	5	-52	-3.2	8.2	101	12	0.3	0.6	0.00	0.38	0.43*	0.62	17.7	22.0	B
NETWORK APPLIANCE NTA (4)	NTAP	15605.0	49	19	49.5	13.0	2394	210	18.5	2.5	0.00	0.21	0.41	0.58	3.5	47.5	N
PALM PALM (5)	PALM	20458.7	36	NA	NM	5.1	1934	402	16.0	6.9	0.00	0.09	0.14	0.23	26.1	37.5	N
QUANTUM DLT & STORAGE SYS. DSS (3)	DSS	2011.0	14	-11	NA	29.0	361	13	1.4	1.1	0.00	0.86	1.20	1.38	6.5	10.0	N
QUANTUM HARD DISK DRIVE HDD (3)	HDD	693.2	9	26	NA	4.8	111	26	0.2	14.6	0.00	-1.26	0.03	0.25	64.0	20.0	N
SILICON GRAPHICS SGI (6)	SGI	765.2	4	-59	NM	NM	133	NM	0.4	NM	0.00	0.28	-4.52*	-0.46	15.2	13.0	C
STORAGE TECHNOLOGY STK	STK	927.4	9	-51	NM	-6.5	103	NM	0.5	2.8	0.00	-0.75	0.22	0.67	22.4	15.0	B
SUN MICROSYSTEMS SUNW (6)	SUNW	122459.1	38	-2	NA	25.2	1473	61	7.0	3.1	0.00	0.32	0.55*	0.71	2.1	22.0	B
UNISYS UIS	UIS	3851.4	12	-62	NM	16.1	177	11	0.6	0.7	0.00	1.63	1.06	1.36	4.4	17.0	B
WESTERN DIGITAL WDC (6)	WDC	518.5	3	-22	NM	NM	NM	NM	0.3	NM	0.00	-5.51	-2.89*	-0.63	4.8	17.0	C
XEROX XRX	XRX	4627.7	7	-69	4.8	-0.1	114	NM	0.2	1.8	2.88	1.96	0.33	0.70	31.4	12.0	B

(C) COMPUTER SOFTWARE & SERVICES

GROUP AVERAGE		37198.9	48	-5	23.3	15.8	1098	78	14.6	2.9	0.14	0.84	0.83	1.26	6.1	27.9	
ADOBE SYSTEMS ADBE (11)	ADBE	15231.7	63	88	31.4	45.4	2261	53	12.8	2.6	0.08	0.92	1.07	1.29	1.6	23.0	B
AFFILIATED COMPUTER SERVICES ACS (6)	ACS	2988.3	56	22	26.0	15.3	399	26	1.5	1.4	0.00	1.66	2.07*	2.45	0.4	20.0	B
AMERICA ONLINE AOL (6)	AOL	94727.3	41	-46	NM	21.2	1443	77	12.8	1.7	0.00	0.30	0.48*	0.60	5.0	50.0	B
AMERICAN MANAGEMENT SYSTEMS AMSY	AMSY	767.1	19	-41	16.8	13.5	228	17	0.6	0.6	0.00	1.34	1.52	1.83	4.9	20.0	B
ARIBA ARBA (9)	ARBA	14978.3	62	-30	NM	-22.7	428	NM	53.7	NM	0.00	-0.42	-4.10*	1.18	11.1	55.0	N
AUTOMATIC DATA PROCESSING ADP (6)	ADP	41656.4	66	23	14.5	18.4	883	49	6.4	3.4	0.62	1.10	1.31*	1.53	0.7	15.0	A
BEA SYSTEMS BEAS (1)	BEAS	22256.3	59	67	NM	3.0	4248	NM	31.2	5.0	0.00	-0.06	0.24	0.37	2.7	49.0	N
BMC SOFTWARE BMCS (3)	BMCS	4250.4	17	-78	15.9	9.0	233	27	2.7	1.0	0.00	0.96	0.69	1.09	20.2	25.0	B
BROCADE COMMUNICATIONS BRCD (10)	BRCD	18500.2	168	90	NM	17.4	4733	300	56.2	6.0	0.00	0.02	0.56*	1.04	2.9	50.0	N
CABLETRON SYSTEMS CS (2)	CS	2901.6	16	-39	28.9	20.9	219	11	2.3	11.3	0.00	2.46	0.07	0.57	7.0	20.0	B
CERIDIAN CEN	CEN	3340.5	23	6	31.0	8.5	349	41	2.7	1.4	0.00	1.01	1.01	1.16	11.2	16.0	B
CISCO SYSTEMS CSCO (7)	CSCO	341731.8	48	-11	25.0	11.0	1236	113	15.9	4.1	0.00	0.29	0.36*	0.79	1.3	32.5	B



The moment of truth is when the best price is yours.

At Instinet, we don't hold a position or take a position in any of the securities we handle for clients.

We're neutral. Objective. Yours. So you never worry about us competing with your trades, or taking a position against you or giving you the nonsense about spreads. No ads here.

Our only goal is to help you get the best trade at the best price — and handle all the follow-up automatically. Perhaps that's why thousands of

institutions worldwide use Instinet to electronically access some of the broadest, deepest — most liquid — trading opportunities around the globe.

With all those institutions at your fingertips every day, you have a greater possibility of finding a buyer or seller when you need one.

The fact is, we pioneered electronic brokerage over 30 years ago. Since then, we've helped U.S. pension funds and mutual funds save billions of dollars — three billion last year alone.

For more info, call toll free 1-877-INSTINET or visit www.instinet.com



Instinet

A REUTERS Company

*Nothing comes between you
and the best price.™*

Agency broker. Instinet does not come between its clients and the best price. We do not commit capital, make markets or make profits on securities. © 2000 Instinet Corporation. All rights reserved. INSTINET and the INSTINET mark are registered service marks in the United States and other countries throughout the world. Instinet Corporation is member NASD/SIPC, and Instinet UK Limited is regulated in the U.K. by the SFA.



**If it's part of a focused strategy,
your people embrace it,
your customers buy it and
your technology supports it...**

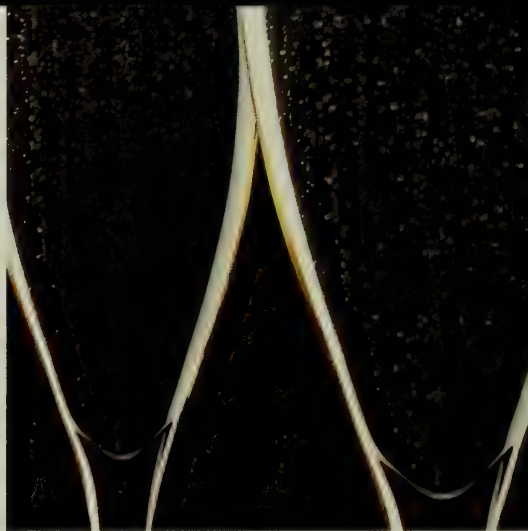
One idea can take you
where you want to go.

**From innovation to execution,
our people deliver.**



dreams made real.

Notice the way the bubbles catch the light? We did. Photonic switching from Agilent can deliver the wide-open speed of an all-optical network by bending light with bubbles. Bottlenecks are broken. Fiber is uncorked. Data flows like, well, you know. Cheers.



Agilent Technologies
Innovating the HP Way

Agilent Technologies is a new company composed of the former Hewlett-Packard test and measurement, chemical analysis, semiconductor components and measurement products businesses. www.agilent.com

EARNINGS PER SHARE

COMPANY STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1999 ANALYST EST.	2001 ESTIMATES FROM ANALYSTS				S&P EQUITY RANKING
													1999 CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %		
MPANY																	
MDISCO CDO (9)	1854.8	12	-67	-14.5b	21.0	153	8	0.5	0.5	0.82	0.44	1.58*	1.85	2.2	15.5	B+	
MPUTER ASSOCIATES INTL. CA (3)	15167.8	26	-63	NM	14.2	226	15	2.4	1.1	0.31	1.25	1.54	2.01	0.5	16.0	B+	
MPUTER SCIENCES CSC (3)	11504.6	68	-28	32.7	13.4	359	27	1.2	1.4	0.00	2.37	2.92	3.44	1.5	17.0	B+	
MPUWARE CPWR (3)	2508.0	7	-82	65.7	16.2	198	13	1.1	0.8	0.00	0.91	0.43	0.80	20.0	20.0	NR	
MPUTRONIC ARTS ERTS (3)	4932.8	36	-15	22.0	1.7	552	264	3.9	9.1	0.00	0.88	0.17	1.02	6.9	23.0	B+	
MPUTRONIC DATA SYSTEMS EDS	24724.2	53	-21	-18.4	17.3	496	29	1.3	1.6	1.13	0.85	2.27	2.65	1.9	15.0	A	
MPUT DATA FDC	20270.5	51	4	NM	38.6	581	16	3.6	1.7	0.16	2.76	2.13	2.43	1.2	14.0	B+	
MPUT FIVS	6911.7	56	46	NM	13.6	562	42	4.3	2.1	0.00	1.09	1.36	1.61	0.6	20.0	B+	
MPUT LILEO INTERNATIONAL GLC	1714.9	19	-36	NA	32.8	370	12	1.1	0.9	1.87	2.21	1.79	1.89	3.7	12.0	NR	
MPUT TECHNOLOGIES ITWO	19286.1	48	-1	41.4	-11.4	218	NM	20.9	5.1	0.00	0.04	0.22	0.34	4.5	43.0	NR	
MPUT RAM MICRO IM	2062.4	14	11	12.2	13.1	112	9	0.1	0.7	0.00	1.21	1.03	1.47	2.7	20.0	NR	
MPUT ROPER NETWORKS JNPR	39301.4	125	120	NA	15.0	6627	470	92.8	5.3	0.00	-0.05	0.47	0.80	2.5	50.0	NR	
MPUT CROSOFT MSFT (6)	305005.5	57	-51	40.1	21.6	673	32	13.1	1.7	0.00	1.42	1.70*	1.92	1.0	20.0	A-	
MPUT VELL NDVL (10)	1732.6	11	-87	-19.1	4.0	139	35	1.5	1.8	0.00	0.55	0.15*	0.28	46.4	20.0	B	
MPUT ACLE ORCL (5)	148332.4	27	-5	80.3	122.2	2762	24	14.3	2.2	0.00	1.05	0.49	0.60	5.0	25.0	B+	
MPUT DPLESOF PSFT	9419.7	33	56	NM	11.0	1076	101	5.9	6.4	0.00	-0.67	0.26	0.55	10.9	20.0	B+	
MPUT BRE HOLDINGS TSG	4607.8	36	-30	21.4a	36.8	626	18	1.8	1.3	0.00	2.54	1.98	2.36	1.3	13.5	NR	
MPUT BEL SYSTEMS SEBL	29433.9	70	66	NA	10.4	2928	358	20.3	3.2	0.00	0.27	0.48	0.67	6.0	45.0	NR	
MPUT NGARD DATA SYSTEMS SDS	6521.1	49	107	NA	14.4	472	33	4.1	1.5	0.00	0.56	1.62	1.93	2.1	20.0	B+	
MPUT OM COMS (5)	4267.3	12	NM	12.4	10.3	103	10	1.1	NM	0.00	1.72	-0.16	0.82	15.9	22.5	B	
MPUT RISIGN VRSN	17075.3	87	-55	NM	-9.2	87	NM	56.0	5.1	0.00	0.03	0.34	0.55	1.8	50.0	NR	
MPUT VITAS SOFTWARE VRTS	39868.5	98	2	NM	-21.5	1286	NM	37.5	3.4	0.00	-1.59	0.58	0.79	2.5	50.0	NR	
MPUT 100 YHOO	22127.5	40	-82	NM	11.2	1156	115	22.1	1.7	0.00	0.10	0.48	0.58	3.5	48.0	NR	

PAPER & FOREST PRODUCTS

INDUSTRY AVERAGE	8085.7	35	-25	-6.7	13.0	181	14	0.8	2.1	2.66	2.29	2.54	3.02	19.7	8.2	
FOREST PRODUCTS																
INDUSTRY AVERAGE	1764.5	15	-38	16.3	12.0	90	8	0.2	1.2	3.51	2.53	1.89	1.74	27.0	10.7	
INDUSTRY PACIFIC GROUP GP	4300.9	25	-50	NA	17.4	106	6	0.2	0.6	1.99	4.07	3.86	3.83	26.1	11.0	B
INDUSTRY PACIFIC LPX	735.7	7	-50	NM	5.4	55	10	0.3	2.5	7.93	2.04	0.36	-0.28	50.0	8.0	B-
INDUSTRY VERSAL FOREST PRODUCTS UFPI	257.0	13	-13	16.3	13.0	108	8	0.2	0.7	0.62	1.48	1.45	1.66	4.8	13.0	NR

PAPER

INDUSTRY AVERAGE	10794.8	44	-19	-10.0	13.4	220	16	1.0	2.5	2.29	2.19	2.81	3.58	16.6	7.1	
INDUSTRY SE CASCADE BCC	1655.4	29	-29	-16.2	12.5	100	8	0.2	5.1	2.08	3.06	1.89	2.59	26.6	3.0	B-
INDUSTRY VATER BOW	2670.9	53	-2	-30.3	7.0	153	23	1.2	2.2	1.50	1.41	3.10	5.80	18.6	8.0	B-
INDUSTRY ERNATIONAL PAPER IP	16307.4	34	-40	-42.6	6.1	130	19	0.6	2.9	2.95	0.48	2.37	3.12	32.1	5.0	B-
INDUSTRY BERLY-CLARK KMB	37318.9	70	7	36.0	32.1	678	22	2.7	1.9	1.54	3.09	3.32	3.70	1.4	11.0	A-
INDUSTRY ID MEA	2659.9	26	-39	5.2a	9.7	108	12	0.7	1.6	2.57	1.99	1.82	2.19	12.8	9.0	B
INDUSTRY IERHAEUSER WY	9586.3	44	-39	-6.6	11.9	139	12	0.6	1.5	3.66	2.98	4.06	4.24	13.0	7.0	B+
INDUSTRY LAMETTE INDUSTRIES WLL	5364.7	49	6	-15.9	14.8	232	16	1.2	2.2	1.71	2.33	3.13	3.39	11.5	7.0	B+

PUBLISHING & BROADCASTING

INDUSTRY AVERAGE	15239.8	62	-14	37.6	10.2	353	34	2.8	2.7	0.79	1.94	1.26	1.57	18.6	16.8	
BROADCASTING																
INDUSTRY AVERAGE	22456.4	36	-25	45.5	1.1	188	47	4.4	3.4	0.07	-0.72	-1.24	-1.04	37.0	23.2	
INDUSTRY LPHIA COMMUNICATIONS ADLAC	3922.0	28	-58	NM	-11.1	102	NM	1.4	NM	0.00	-3.73	-3.68	-3.64	NA	16.4	C
INDUSTRY LEVISION SYSTEMS CVC	13304.2	76	1	NM	NM	NM	NM	3.1	NM	0.00	-5.12	-3.22	-2.48	12.9	15.6	C
INDUSTRY RTER COMMUNICATIONS CHTR	4616.3	20	-10	NA	-14.7	173	NM	1.6	NM	0.00	NA	-3.55	-3.76	4.3	14.0	NR
INDUSTRY AR CHANNEL COMMUNICATIONS CCU	29530.2	51	-43	4.1	1.4	97	56	7.0	NM	0.00	0.26	-0.21	-0.28	82.1	29.5	B
INDUSTRY ICASAT CMCSK	34702.7	38	-24	77.8	7.2	247	37	4.5	NM	0.00	0.95	-0.36	-0.44	40.9	15.8	B-
INDUSTRY COMMUNICATIONS COX	38782.5	40	-23	66.6	20.3	229	12	7.3	NM	0.00	1.51	-0.54	-0.37	37.8	14.5	NR
INDUSTRY VEY (WALT) DIS (9)	61633.5	29	-1	-3.2	5.1	265	51	2.5	3.4	0.73	0.62	0.57*	1.01	3.0	15.0	B+
INDUSTRY OSTAR COMMUNICATIONS DISH	13810.9	29	-40	NM	NM	NM	NM	5.7	NM	0.00	-1.28	-1.38	-0.47	53.2	66.0	NR
INDUSTRY NITY BROADCASTING INF	32982.8	30	-16	82.1	2.6	210	78	9.3	3.4	0.00	0.43	0.36	0.49	8.2	25.0	NR
INDUSTRY NETWORKS USAI	6188.8	17	-39	NM	-2.4	177	NM	1.5	NM	0.00	-0.08	-0.43	-0.44	90.9	20.0	NR

PUBLISHING

INDUSTRY AVERAGE	10428.7	79	-6	33.7	15.1	448	30	1.8	2.6	1.27	3.54	2.92	3.30	7.6	12.5	
INDUSTRY J (A.H.) BLC	1955.0	17	-11	15.1	9.9	144	15	1.3	1.6	1.65	1.50	0.84	0.96	8.3	12.6	A
INDUSTRY JONES DJ	4949.8	57	-17	11.3	42.3	968	24	2.3	1.5	1.77	2.99	3.40	3.63	2.2	11.5	B+
INDUSTRY NETT GCI	14140.5	54	-34	NA	20.0	294	15	2.4	1.2	1.64	3.26	3.67	3.88	2.1	12.0	A
INDUSTRY COURT GENERAL H (10)	4040.7	55	37	NA	22.0	526	24	1.7	1.6	1.52	1.67	2.25	2.47	3.2	15.0	B+
INDUSTRY JINGER INTERNATIONAL HLR	1425.1	14	11	126.1	3.4	179	58	0.6	2.1	3.83	2.13	0.52	0.68	5.9	13.5	NR
INDUSTRY IHT-RIDDER KRI	3792.5	51	-14	38.4	27.8	242	11	1.1	1.3	1.79	3.49	3.71	4.02	1.5	11.0	A
INDUSTRY RAW-HILL MHP ††	10380.6	53	-14	17.5	26.7	550	21	2.4	††	1.77	2.14	††	††	††	††	††
†† Because BUSINESS WEEK is owned by The McGraw-Hill Companies, the Scoreboard does not include forecasts of the company's earnings.																
INDUSTRY YORK TIMES NYT	5822.2	35	-28	26.1	29.0	463	17	1.7	1.4	1.30	1.73	2.08	2.29	2.2	12.0	B
INDUSTRY MEDIA PRM	1271.6	11	-54	NM	-45.3	NM	NM	0.8	NM	0.00	-1.19	-0.84	-0.54	50.0	15.0	NR
INDUSTRY JER'S DIGEST ASSOCIATION RDA (6)	3908.6	38	30	22.2	37.0	822	23	1.5	2.1	0.53	1.15	1.61*	1.93	1.6	11.5	B
INDUSTRY OLASTIC SCHL (5)	1249.0	73	17	11.0	15.2	295	21	0.8	1.2	0.00	2.96	4.22	4.81	2.1	15.0	B
INDUSTRY PPS (E.W.) SSP	4639.9	59	32	NA	13.0	376	29	2.7	2.3	0.95	1.86	2.19	2.49	4.4	12.0	A-



NOTE: CONTENTS MAY SETTLE

RING TRANSPORT.

With over 146 cubic feet of cargo space, a powerful, 210-hp V-6 engine* and room for seven passengers, the Odyssey can help you haul just about anything. Even the most difficult-to-move cargo of all—kids. With its comfortable, roomy, sound-dampened cabin and smooth, quiet ride, the Odyssey creates the ideal conditions for calming even the most active, sugar-addled toddlers. There's good reason for the parents to relax,



too. With 3-point seat belts for each seat, childproof door locks and a Five-Star Safety Rating† the Odyssey is equipped to help ensure your precious cargo arrives safely.

The Odyssey



EARNINGS PER SHARE

2001 ESTIMATES FROM ANALYSTS

COMPANY (TICKER SYMBOL) (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1999 ANALYST EST.	1999 CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %	EST. R.A.
TIME WARNER TWX	82218.2	62	14	NM	9.1	837	95	2.9	12.0	0.29	1.43	0.43	0.82	13.4	12.0	
TRIBUNE TRIB	11185.0	37	-33	62.7	6.2	194	26	2.6	2.2	1.08	5.62	1.31	1.58	5.7	13.0	
WASHINGTON POST WPO	5452.7	577	4	6.8	11.0	381	35	2.3	3.6	0.94	22.30	16.06	17.81	9.9	10.0	
21 SERVICE INDUSTRIES																
INDUSTRY AVERAGE	3175.7	20	-5	18.8	11.4	333	19	0.8	1.0	0.86	1.00	1.41	1.71	4.4	16.4	
(A) CONSTRUCTION & ENGINEERING																
GROUP AVERAGE	816.5	20	-12	17.5	3.9	126	15	0.2	1.0	1.45	0.90	1.48	2.06	3.3	13.1	
ENCOMPASS SERVICES ESR	229.8	4	-66	33.8a	3.9	31	6	0.1	0.3	0.00	1.11	0.93	1.28	3.1	15.0	
FOSTER WHEELER FWC	163.0	4	-55	NM	-31.4	45	NM	0.0	0.4	6.00	-3.53	0.97	1.03	3.9	11.0	
GRANITE CONSTRUCTION GVA	758.9	28	51	16.6	15.8	208	13	0.6	1.0	1.44	1.96	2.10	2.42	2.5	13.0	
JACOBS ENGINEERING GROUP JEC (9)	1136.9	43	33	5.4	10.3	229	22	0.3	1.5	0.00	2.47	1.93*	3.19	1.3	15.0	
MASSEY ENERGY MEE (10)	2761.9	37	-20	-16.4	9.3	168	28	0.3	2.7	2.74	1.37	1.31*	2.88	4.5	10.5	
URS URS (10)	229.7	14	-36	31.3	11.3	97	6	0.1	0.5	0.00	1.98	2.26	2.48	3.2	12.0	
WASHINGTON GROUP INTL. WNG (11)	435.5	8	6	34.6	8.0	105	13	0.2	0.6	0.00	0.91	0.87	1.17	4.3	15.0	
(B) INDUSTRIAL DISTRIBUTION																
GROUP AVERAGE	3786.4	19	-6	12.0	11.1	198	16	0.3	0.9	1.16	1.09	1.53	1.88	4.4	14.6	
AIRGAS ARG (3)	499.8	8	-21	-2.9	6.3	103	16	0.3	1.3	0.00	0.55	0.59	0.65	10.8	10.0	
APPLIED INDUSTRIAL TECH. AIT (6)	353.1	18	7	4.8	10.8	117	11	0.2	1.0	2.70	0.93	1.50*	1.71	2.3	12.0	
ARROW ELECTRONICS ARW	2350.5	24	-6	-11.7	16.6	133	8	0.2	0.5	0.00	1.29	3.56	4.55	4.2	13.8	
AVNET AVT (6)	1625.3	18	-42	-5.0	9.6	78	8	0.2	0.7	1.70	2.43	1.75*	3.28	3.1	15.0	
BRIGHTPOINT CELL	302.8	5	-59	NM	18.6	164	9	0.2	0.4	0.00	-1.48	0.71	0.89	2.3	20.0	
CELLSTAR CLST (11)	99.6	2	-83	29.7	-9.2	48	NM	0.0	0.7	0.00	1.12	0.14	0.30	NA	17.5	
CENTRAL GARDEN & PET CENT (9)	144.8	9	-17	6.7a	2.9	29	13	0.1	0.8	0.00	0.89	1.08	1.27	3.2	10.0	
CRANE CR	1523.9	25	27	NA	19.2	263	14	1.0	1.4	1.58	1.50	1.79	2.07	5.8	10.0	
DYNEGY DYN	13791.9	44	151	3.0	13.9	475	33	0.6	1.6	0.68	0.66	1.35	1.72	4.1	20.0	
ENRON ENE	47844.9	65	46	6.9	10.1	496	47	0.7	2.5	0.77	1.27	1.42	1.66	2.4	18.0	
GENUINE PARTS GPC	3321.0	19	-23	5.9	17.5	150	9	0.4	1.1	5.73	2.11	2.20	2.31	1.7	8.0	
GRAINGER (W.W.) GWW	3435.6	37	-24	1.5	11.5	228	20	0.7	1.6	1.86	1.92	1.86	2.17	4.6	12.0	
HUGHES SUPPLY HUG (1)	343.4	15	-33	12.2	11.4	58	5	0.1	0.4	2.34	2.80	2.75	3.00	1.7	15.0	
METALS USA MUI	91.3	3	-71	4.9	8.3	24	3	0.1	0.3	4.80	1.04	0.58	0.68	2.9	15.0	
PIONEER-STANDARD ELECTRONICS PIOS (3)	271.7	10	-32	7.7	12.5	77	7	0.1	0.5	1.22	1.27	1.46	1.68	4.2	15.0	
PLAINS RESOURCES PLX	324.1	18	45	NM	-7.8	874	NM	0.1	0.8	0.00	-2.02	1.10	2.10	17.6	20.0	
PSS WORLD MEDICAL PSSI (3)	222.1	3	-67	16.2	0.7	50	63	0.1	0.8	0.00	0.31	0.39	0.56	5.4	10.0	
RELIANCE STEEL & ALUMINUM RS	655.1	24	2	21.0	14.7	151	10	0.4	0.7	0.92	2.07	2.27	2.47	2.4	15.0	
SCHEIN (HENRY) HSI	1094.1	26	99	NM	10.8	198	18	0.5	1.1	0.00	1.21	1.64	1.89	3.2	15.0	
UNITED STATIONERS USTR	882.5	26	-10	86.1	20.7	186	9	0.2	0.6	0.00	2.37	2.92	3.35	1.2	15.0	
WESCO INTERNATIONAL WCC	337.7	8	-13	17.5	33.9	263	8	0.1	0.4	0.00	0.75	1.03	1.19	4.2	20.0	
(C) POLLUTION CONTROL																
GROUP AVERAGE	4980.6	14	6	28.3	4.9	216	18	0.7	1.0	0.01	0.09	1.05	1.24	2.8	12.4	
ALLIED WASTE INDUSTRIES AW	2423.1	12	40	NM	3.8	357	36	0.4	0.9	0.00	-1.33	0.89	1.03	4.9	15.0	
IT GROUP ITX	87.6	4	-56	NM	8.4	32	4	0.1	0.5	0.00	1.20	0.80	1.13	3.5	10.0	
REPUBLIC SERVICES RSG	2531.5	15	2	28.3a	13.0	153	12	1.2	0.9	0.00	1.14	1.28	1.42	0.7	13.0	
WASTE MANAGEMENT WMI	14880.3	24	39	NM	-5.4	321	NM	1.2	1.7	0.04	-0.64	1.22	1.39	2.2	11.5	
(D) PRINTING & ADVERTISING																
GROUP AVERAGE	6203.2	40	-16	6.1	24.2	508	21	1.3	1.3	2.06	1.38	2.11	2.36	2.3	14.0	
BANTA BN	562.0	23	1	-23.9	16.1	158	10	0.4	0.9	2.62	0.59	2.31	2.63	1.5	11.5	
DONNELLEY (R.R.) DNY	2730.7	22	-10	NA	26.9	229	9	0.5	0.8	4.11	2.40	2.24	2.50	3.6	13.0	
INTERPUBLIC GROUP IPG	12010.3	39	-32	21.4	16.9	643	37	2.3	1.7	0.97	1.11	1.51	1.73	1.2	15.0	
OMNICOM GROUP OMC	13921.3	79	-21	22.5	38.0	1111	30	2.4	2.1	0.89	2.01	2.38	2.79	2.5	16.0	
TRUE NORTH COMMUNICATIONS TNO	1791.6	36	-20	4.4	23.2	401	17	1.2	1.2	1.68	0.81	2.12	2.16	2.8	14.5	
(E) OTHER SERVICES																
GROUP AVERAGE	2553.3	19	-2	27.4	12.0	461	23	1.2	1.0	0.43	1.01	1.25	1.46	5.2	19.4	
ABM INDUSTRIES ABM (10)	649.5	29	40	16.5	13.9	216	16	0.4	NA	2.17	1.65	1.80	2.08	1.4	NA	
ACNIELSEN ART	1311.6	23	8	NM	10.8	241	23	0.8	0.8	0.00	1.29	1.41	1.68	4.8	21.1	
ADMINISTAFF ASF	934.7	34	125	57.7	14.2	1002	73	0.3	1.8	0.00	0.34	0.57	0.77	2.6	32.5	
AUTONATION AN	2322.5	6	-30	NM	-0.7	60	NM	0.1	0.4	0.00	-0.07	0.91	1.01	4.0	20.0	
CARMAX GROUP KMX (2)	102.5	4	73	NA	6.7	27	17	0.1	0.7	0.00	0.01	0.39	0.42	4.8	15.0	
CASEY'S GENERAL STORES CASY (4)	581.2	12	13	10.5	12.4	173	14	0.3	0.9	0.68	0.76	0.91	1.04	2.9	15.0	
CDI CDI	286.2	15	-38	13.4	14.6	87	6	0.2	0.5	0.00	2.60	2.40	2.62	2.3	13.5	
CENDANT CD	6695.3	9	65	NM	-37.7	249	NM	1.6	0.7	0.00	-0.30	0.92	0.93	5.4	15.0	
CINTAS CTAS (5)	8583.7	51	44	16.0	18.4	786	43	4.4	1.9	0.37	1.14	1.35	1.59	1.3	19.5	
CONVERGYS CVG	6469.1	42	37	NM	16.4	614	38	3.1	1.5	0.00	0.89	1.24	1.53	1.3	22.0	
GROUP 1 AUTOMOTIVE GPI	191.4	9	35	NA	15.7	75	5	0.1	0.2	0.00	1.55	1.87	2.09	3.4	2.5	
IMS HEALTH RX	8222.4	28	3	111.5	76.8	3832	54	5.6	1.7	0.29	0.78	0.85	1.01	2.0	20.0	
KELLY SERVICES KELYA	844.2	24	6	6.7	14.6	140	10	0.2	1.0	4.23	2.36	2.50	2.65	0.0	10.0	
LITHIA MOTORS LAD	173.7	14	22	28.0	13.9	104	11	0.1	0.5	0.00	1.60	1.80	1.99	1.0	16.3	
MAGELLAN HEALTH SERVICES MGL (9)	94.5	3	53	NM	15.8	60	NM	0.1	0.3	0.00	0.70	0.64	0.99	14.1	15.0	
MANPOWER MAN	2456.8	32	-14	3.7	24.7	364	15	0.2	1.0	0.62	1.91	2.20	2.46	2.4	15.0	

INSTRUMENTS FOR PROFESSIONALS

THE PRINCIPLES OF AVIATION

In the demanding world of aeronautics, every single component must be officially approved and certified. We apply the same principle to the manufacturing of our wrist instruments.

Our movements meet all the precision and reliability criteria required to obtain chronometer certification. Moreover, every last detail of our watches is designed for intensive use.

One simply does not become an aviation supplier by chance.

OCTANNER 

418 Main Street
Park City, UT
(801) 940-9470

20 East Temple
Salt Lake City, UT
(801) 532-3222

FOR A CATALOG PLEASE CALL 800/641 7343

www.breitling.com

THE ESSENCE OF BREITLING

CHRONOMAT. Selfwinding chronograph. BREITLING's leader model, created in cooperation with the Italian Freccia Tricolori elite flight team.



BREITLING
1884

We develop new vaccines and combination vaccines.

So that protecting our children

Wouldn't it be wonderful if many illnesses were just a memory? At Aventis, we are working toward this goal. As a world-leading pharmaceutical company in the field of human vaccines, we help protect children around the globe from infectious diseases such as polio, diphtheria, tetanus, pertussis, meningitis and hepatitis B. We can prevent up to six illnesses with a single combination vaccine. However, for a number of diseases, there is still no comprehensive protection. Therefore, our scientists will continue to strive to develop innovative vaccines. So that our children can grow up more carefree.

Aventis, Strasbourg (France), is listed on the stock exchanges in Paris, Frankfurt and New York. www.aventis.com



Health is easier.



Our Challenge is Life



EARNINGS PER SHARE

2001 ESTIMATES FROM ANALYSTS

COMPANY	STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1/8/E/S 2000 ANALYST EST.	1/8/E/S CON-SENSUS	VARIATION %	LONG-TERM GROWTH RATE %
NOVA NIS		1245.0	19	-40	46.8	-0.5	382	NM	0.8	0.6	0.00	1.14	1.25	1.45	2.1	25.0
PANTRY PTY (9)		159.0	9	-38	NM	12.7	145	12	0.1	0.5	0.00	0.65	0.74*	1.10	9.1	25.0
PAYCHEX PAYX (5)		21637.3	58	118	35.8	33.2	3489	105	14.2	2.9	0.62	0.51	0.66	0.85	3.5	30.0
QUINTILES TRANSNATIONAL QTRN		1731.4	15	-20	39.3	-1.1	110	NM	1.0	2.3	0.00	0.63	0.29	0.61	14.8	22.5
RENT-A-CENTER RCI		610.6	25	25	40.7	15.4	215	9	0.4	0.5	0.00	1.74	2.59	2.97	1.0	20.0
ROBERT HALF INTERNATIONAL RHI		5318.1	30	109	35.2	24.6	745	31	2.1	1.3	0.00	0.77	1.00	1.22	1.6	22.5
SERVICE CORP. INTERNATIONAL SRV		510.6	2	-73	NM	-2.6	15	NM	0.2	0.4	0.00	-0.13	0.55	0.62	27.4	8.0
SERVICEMASTER SVM		2966.5	10	-20	8.1	17.4	246	15	0.5	1.3	4.05	0.55	0.63	0.68	2.9	12.0
SONIC AUTOMOTIVE SAH		340.6	8	-18	NA	17.4	77	4	0.1	0.2	0.00	1.27	1.86	2.10	1.0	25.0
SPHERION SFN		656.5	11	-57	13.8	8.5	56	7	0.2	0.4	0.00	1.27	1.52	1.65	3.6	18.0
STAFF LEASING STFF		77.7	4	-62	NM	4.7	100	21	0.0	3.6	0.00	0.97	0.05	0.17	29.4	20.0
UNITED AUTO GROUP UAG		144.9	8	-15	7.7a	7.9	34	7	0.0	0.4	0.00	1.01	1.20	1.32	1.5	15.0
UNITED RENTALS URI		1093.8	16	-9	8.0	12.2	73	8	0.4	0.3	0.00	1.53	2.13	2.54	2.8	22.5
WACKENHUT WAK		188.4	13	-16	21.6	10.9	108	10	0.1	0.4	0.00	1.28	1.36	1.62	2.5	25.0

22 TELECOMMUNICATIONS

INDUSTRY AVERAGE	39123.9	45	-18	24.3	6.9	535	41	5.1	1.8	0.77	1.07	0.63	0.87	19.3	22.5
------------------	---------	----	-----	------	-----	-----	----	-----	-----	------	------	------	------	------	------

(A) EQUIPMENT & SERVICES

GROUP AVERAGE	21302.9	43	-21	32.2	1.8	571	48	5.7	1.8	0.49	0.76	0.19	0.44	24.0	24.6
ADC TELECOMMUNICATIONS ADCT (10)	15550.8	20	11	NA	30.5	534	18	4.7	0.6	0.00	0.12	1.13*	0.71	4.2	30.0
AT&T	73665.3	20	-61	11.4	7.0	67	11	1.1	1.1	4.48	1.74	1.70	0.89	15.7	10.6
AT&T WIRELESS GROUP AWE	6491.7	18	NA	NA	-1.3	30	NA	0.7	NM	0.00	NA	0.01	0.06	200.0	35.5
CENTURYTEL CTL	4948.9	35	-26	17.9	11.8	251	21	2.8	1.6	0.54	1.70	1.60	1.88	2.1	14.0
Ciena CIEN (10)	21758.6	76	164	-30.6	10.1	2687	281	25.3	7.5	0.00	-0.01	0.27*	0.64	6.3	37.5
COMVERSE TECHNOLOGY CMVT (1)	13704.4	86	19	47.9a	22.1	1497	72	13.4	2.0	0.00	1.07	1.41	1.70	0.6	30.0
LUCENT TECHNOLOGIES LU (9)	51969.5	16	-79	NM	7.4	199	27	1.5	1.5	0.51	1.10	0.58*	0.39	38.5	18.5
NEXTEL COMMUNICATIONS NXTL	22506.0	31	-40	NM	-27.2	1048	NM	4.8	NM	0.00	-2.29	-1.49	-0.61	50.8	32.5
SCIENTIFIC-ATLANTA SFA (6)	6502.1	40	45	110.9	18.8	500	28	3.3	1.9	0.10	0.65	0.94*	1.57	3.8	22.5
SPRINT FON GROUP FON	18333.3	23	-66	9.9	13.3	150	13	1.0	1.1	2.17	1.97	1.83	1.66	4.2	11.0
SPRINT PCS GROUP PCS	20956.9	23	-56	NA	-86.5	870	NM	4.0	NM	0.00	NA	-1.94	-1.11	18.9	30.0
TELEPHONE & DATA SYSTEMS TDS	5303.0	90	-28	NA	3.4	121	37	2.5	1.6	0.55	5.02	2.81	3.63	1.1	20.0
TELLABS TLAB	21757.3	53	-17	43.3	27.5	878	32	7.2	1.1	0.00	1.36	1.67	2.17	2.3	30.0
U.S. CELLULAR USM	4852.7	57	-44	29.9	10.0	221	23	3.2	1.0	0.00	3.28	2.13	2.60	11.2	27.0
VOICESTREAM WIRELESS VSTR	25837.1	114	-20	NA	-10.9	331	NM	18.1	NM	0.00	-4.75	-9.66	-8.12	8.6	20.0
WILLIAMS COMMUNICATIONS GRP. WCG	5041.7	11	-62	NM	-14.6	253	NM	2.4	NM	0.00	-0.87	-1.45	-1.95	23.1	NA
WORLDCOM WCOM	42969.7	15	-72	49.5	8.7	78	9	1.1	0.4	0.00	1.35	1.65	1.31	16.8	24.5

(B) TELEPHONE COMPANIES

GROUP AVERAGE	99756.6	50	-8	10.1	24.1	413	24	3.2	1.8	1.73	2.20	2.13	2.35	3.5	15.9
ALLTEL AT	19150.1	61	-26	19.9	38.7	382	10	2.8	1.5	2.09	2.47	2.71	3.09	2.9	14.7
BELLSOUTH BLS	78021.2	42	-11	23.2	25.2	473	19	2.9	1.6	1.82	1.80	2.22	2.39	0.8	11.7
QWEST COMMUNICATIONS INTL. Q	62929.3	38	NA	-8.0	0.5	152	52	4.2	2.5	0.13	NA	0.54	0.60	11.7	27.7
SBC COMMUNICATIONS SBC	185963.5	55	13	5.3	27.8	616	22	3.6	1.7	1.85	1.90	2.27	2.59	1.2	14.0
VERIZON COMMUNICATIONS VZ	152718.8	56	-9	10.1	28.5	443	15	2.7	1.7	2.74	2.66	2.91	3.07	0.7	11.5

23 TRANSPORTATION

INDUSTRY AVERAGE	4575.3	27	-12	19.6	13.4	196	17	0.5	2.2	0.94	2.38	2.16	2.59	8.3	12.2
------------------	--------	----	-----	------	------	-----	----	-----	-----	------	------	------	------	-----	------

(A) AIRLINES

GROUP AVERAGE	3711.2	30	-5	36.1	20.4	200	12	0.5	1.3	0.38	3.73	2.50	3.01	12.4	8.6
ALASKA AIR GROUP ALK	738.8	28	-20	41.2	3.7	83	23	0.3	2.3	0.00	5.06	1.09	3.11	17.0	11.0
AMERICA WEST HOLDINGS AWA	314.9	9	-55	27.2	10.9	44	4	0.1	1.8	0.00	3.03	0.76	1.69	24.9	7.0
AMR AMR	5038.7	33	NM	36.2	13.3	71	6	0.3	0.9	0.00	4.17	4.98	5.29	6.6	7.5
CONTINENTAL AIRLINES CAL	2677.5	46	3	14.6	30.2	172	6	0.3	0.8	0.00	6.64	5.65	6.67	3.5	10.0
DELTA AIR LINES DAL (6)	5840.2	48	-5	95.1	21.7	107	5	0.4	0.4	0.21	7.20	9.90*	NA	NA	11.5
NORTHWEST AIRLINES NWAC	2140.4	25	13	4.4	59.5	598	7	0.2	0.9	0.00	3.26	3.25	4.08	11.3	9.0
SOUTHWEST AIRLINES LUV	15839.4	32	96	25.4	17.6	493	30	2.9	2.0	0.07	0.89	1.15	1.36	4.4	14.0
TRANS WORLD AIRLINES TWA	107.6	2	-45	NM	NM	NM	NM	0.0	NM	0.00	-5.57	-3.23	-1.65	11.5	0.0
UAL UAL	1830.0	35	-55	32.1	6.6	36	16	0.1	1.4	3.56	9.97	3.17	5.32	13.2	8.0
US AIRWAYS GROUP U	2585.0	39	20	48.7	NM	NM	NM	0.3	NM	0.00	2.64	-1.70	1.25	19.2	7.5

(B) RAILROADS

GROUP AVERAGE	8508.3	28	-9	-6.6	7.5	118	25	0.9	1.6	3.45	1.61	2.02	2.68	5.4	10.3
BURLINGTON NORTHERN SANTA FE BNI	10045.7	25	4	44.1	14.0	136	11	1.1	1.1	1.90	2.44	2.52	2.80	2.9	9.0
CSX CSX	5628.4	26	-17	-48.8	1.8	93	51	0.6	2.1	4.63	0.24	1.13	2.10	7.6	11.0
NORFOLK SOUTHERN NSC	5510.2	14	-30	-22.9	3.4	94	28	0.9	2.1	5.57	0.63	0.68	1.24	8.9	10.0
UNION PACIFIC UNP	12848.9	47	6	1.2	10.8	150	13	1.1	1.1	1.72	3.12	3.75	4.56	2.2	11.0

(C) TRANSPORTATION SERVICES

GROUP AVERAGE	1941.9	25	-17	16.8	8.3	198	20	0.5	1.0	0.90	1.83	1.77	2.16	7.1	15.3
AIRBORNE FREIGHT ABF	456.3	10	-57	35.4	5.0	52	11	0.1	1.4	1.68	1.85	0.55	0.72	19.4	12.0
AMERCO UHAL (3)	411.2	19	-26	15.8	6.9	60	8	0.2	0.3	0.00	2.38	2.53	2.74	7.3	22.5
ANC RENTAL ANCX	239.8	5	NA	NA	5.6	26	NM	0.1	0.3	0.00	NA	0.93	1.11	5.4	20.0
AVIS GROUP HOLDINGS AVI	1002.6	32	26	33.4	8.6	135	10	0.2	0.6	0.00	2.61	3.20	4.01	1.3	16.5

2001 ESTIMATES FROM ANALYSTS

STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	1999 ACTUAL	1/B/E/S 2000 ANALYST EST.	1/B/E/S CONSENSUS	VARIATION %	LONG-TERM GROWTH RATE %	S&P EQUITY RANKING
HPANY																
3GET GROUP BD	62.9	2	-81	NA	-17.3	13	NM	0.0	NM	0.00	-1.37	-0.56	0.56	14.3	15.0	NR
3CNF	1263.3	26	-25	20.6	15.4	121	9	0.2	0.7	1.54	3.35	2.81	3.11	3.5	13.0	B
EDITORS INTL. OF WASHINGTON EXPD	2667.5	52	18	33.6	22.3	785	37	1.6	1.7	0.27	1.10	1.50	1.81	5.0	20.0	A-
EX FDX (5)	13630.6	48	17	14.4	14.1	275	20	0.7	1.4	0.00	2.32	2.66	3.05	3.3	13.0	B
FZ FRTZ (5)	242.2	7	-37	-10.0	6.2	87	14	0.2	0.7	0.00	0.47	0.60	0.79	6.3	15.0	B-
X GMT	2242.8	47	39	NA	15.9	256	16	1.6	1.1	2.55	3.01	3.36	3.80	1.1	13.3	B+
ITZ HRZ	3659.5	34	-32	33.8	18.9	191	10	0.7	0.6	0.59	3.10	3.26	3.42	1.5	17.0	NR
3 GROUP HUBG	54.0	7	-65	-2.5	4.9	40	8	0.0	0.6	0.00	1.40	0.74	1.33	13.5	15.0	NR
STON PZB	783.1	15	-31	NA	0.0	105	72	0.2	0.9	0.66	0.77	1.10	1.80	11.1	15.0	B+
INSON (C.H.) WORLDWIDE CHRW	2391.6	57	42	17.8	23.6	839	36	0.9	1.9	0.71	1.29	1.66	1.94	2.1	18.0	NR
ER SYSTEM R	1037.4	17	-29	-5.0	5.5	84	15	0.2	0.9	3.45	1.06	1.89	2.13	4.2	10.5	B
ITY INDUSTRIES TRN (3)	925.5	25	-13	14.2	8.3	94	12	0.4	1.4	2.90	4.15	2.03	2.20	14.1	9.0	B+
TRUCKING & SHIPPING																
UP AVERAGE	8955.8	26	-9	16.1	19.6	227	11	0.4	5.8	0.45	2.08	2.59	2.94	7.7	11.4	
ANSAS BEST ABFS	292.7	15	22	NM	24.7	109	5	0.2	0.6	0.00	2.14	3.08	3.40	2.7	8.5	NR
ISOLATED FREIGHTWAYS CFWY	78.0	4	-54	NM	-5.0	30	NM	0.0	40.3	0.00	0.12	0.01	0.53	22.6	9.0	NR
IT (J.B.) TRANSPORT SERVICES JBHT	461.5	13	-5	NM	7.4	111	15	0.2	1.4	0.00	0.89	0.94	1.25	10.4	10.0	B
DSTAR SYSTEM LSTR	454.8	54	27	25.4	49.1	497	11	0.3	0.6	0.00	4.55	5.22	5.90	3.4	17.5	NR
DWAY EXPRESS ROAD	375.7	19	-10	NM	16.4	119	7	0.1	0.7	1.03	2.39	2.78	3.01	2.7	10.0	NR
ED PARCEL SERVICE UPS	68877.8	61	-12	-4.0	31.0	743	25	2.4	1.7	1.12	0.77	2.40	2.71	2.2	15.0	NR
REIGHTWAYS USFC	675.7	26	-45	27.0	17.0	110	7	0.3	0.6	1.43	3.79	3.68	3.93	4.8	13.0	A-
OW YELL	430.0	18	8	NM	15.9	97	6	0.1	0.9	0.00	2.02	2.60	2.81	12.5	8.0	B-
UTILITIES																
UP AVERAGE	6250.8	35	34	5.7	11.2	219	20	1.3	2.7	4.00	1.90	2.25	2.53	4.9	8.0	
ELECTRIC, WATER & COGENERATION																
UP AVERAGE	6643.1	34	31	5.4	11.4	216	19	1.3	2.8	4.20	2.07	2.31	2.58	4.9	7.5	
AES	23790.0	52	39	15.9	13.9	594	41	4.0	1.3	0.00	0.63	1.49	1.90	4.2	26.0	B+
IGHENY ENERGY AYE	4610.7	42	55	5.2	16.0	269	16	1.3	2.9	4.12	2.45	2.84	3.16	3.2	5.0	A-
ANT ENERGY LNT	2518.5	32	16	4.2	16.7	121	7	1.0	4.1	6.28	2.51	2.22	2.38	2.1	3.5	B+
REN AEE	6088.9	44	36	0.8	12.2	187	14	1.7	4.6	5.72	2.81	3.24	3.36	2.4	3.0	A-
RICAN ELECTRIC POWER AEP	14811.7	46	43	-1.4	7.4	176	21	1.3	4.4	5.22	2.69	2.60	3.42	1.2	4.0	B+
RICAN WATER WORKS AWK	2445.7	25	17	2.1	8.8	147	16	1.8	2.6	3.62	1.40	1.61	1.80	1.1	6.0	A
TA AVA	963.8	20	32	-46.0	-4.9	146	NM	0.1	NM	2.35	0.12	-0.14	0.98	17.4	3.5	B
PINE CPN	19839.2	36	122	50.4	12.4	996	58	13.2	0.9	0.00	0.43	0.97	1.21	3.3	40.0	NR
RGY CIN	5077.1	32	33	3.4	14.3	184	13	0.7	3.2	5.64	2.53	2.53	2.62	2.7	4.0	B
ENERGY CMS	3361.8	28	-11	NA	10.1	146	13	0.4	1.3	5.25	2.32	2.42	2.76	4.7	9.0	B
ECTIV CIV	1744.5	20	17	-10.7	10.7	151	11	0.4	2.3	4.47	1.14	1.87	1.93	3.6	4.5	NR
SOLIDATED EDISON ED	7896.5	37	8	1.8	11.4	142	12	0.9	2.9	5.85	3.13	3.18	3.29	4.0	4.0	A
STELLATION ENERGY GROUP CEG	6124.9	41	40	1.9	8.9	194	21	1.6	2.4	4.13	2.18	2.40	3.09	1.3	7.0	A-
L ENERGY CPL	6892.7	43	42	0.8	15.2	187	12	1.9	2.4	4.77	2.55	3.01	3.31	3.0	6.0	A-
INION RESOURCES D	14333.2	60	53	4.1	5.2	214	37	1.9	2.0	4.30	2.81	3.30	3.79	4.2	9.0	B
DPL	3922.5	31	77	5.5	20.1	508	27	2.8	2.0	3.07	1.35	1.51	1.76	4.0	10.0	A-
DQE	1805.5	35	0	4.8	19.9	213	13	1.4	1.9	4.63	2.62	2.81	3.11	3.5	6.5	A-
ENERGY DTE	5412.0	38	20	4.4	10.8	137	13	1.0	2.3	5.43	3.33	3.30	3.58	2.0	5.0	A-
E ENERGY DUK	33187.1	90	79	-4.2	12.6	334	26	0.8	2.4	2.45	2.25	4.13	4.53	1.8	9.0	A-
ON INTERNATIONAL EIX	7473.5	23	-12	1.9	13.4	153	11	0.6	1.3	4.88	1.79	2.00	2.24	2.2	9.0	B
IGY EAST EAS	2390.1	20	-3	14.2	13.5	138	10	1.0	1.1	4.35	2.11	2.10	2.30	2.2	9.0	B
IRGY ETR	9052.9	41	60	1.4	8.6	128	15	1.0	1.8	3.06	2.25	2.89	3.07	1.0	8.0	B
ON EXC	11295.6	66	91	4.1	34.2	654	18	2.0	2.2	0.96	3.08	3.75	4.33	6.5	8.0	B
TENERGY FE	6709.7	30	30	5.1	10.7	143	11	1.0	2.2	5.09	2.50	2.63	2.77	1.4	5.0	B
GROUP FPL	17181.7	66	55	6.5	12.9	206	15	1.7	2.2	3.26	4.07	4.38	4.69	1.5	7.0	B+
GPU	4269.7	35	18	-0.9	2.9	130	44	0.8	3.7	6.20	3.66	3.16	3.33	1.5	3.0	A-
AIAN ELECTRIC INDUSTRIES HE	1114.9	34	18	1.3	10.8	128	11	0.7	4.7	7.29	2.88	2.88	3.02	2.3	2.5	B+
I ENERGY LGE	3233.9	25	43	10.3	15.0	327	19	1.3	3.6	5.25	1.82	1.72	1.81	1.1	4.0	B
TANA POWER MTP	2515.3	24	-34	30.6	9.0	244	26	2.4	2.2	3.36	1.33	1.26	1.28	9.4	8.5	B+
ARA MOHAWK HOLDINGS NMK	2634.0	16	18	NM	-0.6	97	NM	0.6	22.8	0.00	-0.06	0.09	0.26	69.2	8.0	B
URCE NI	3116.5	26	44	-1.3	12.6	230	17	0.8	1.7	4.20	1.27	1.85	2.02	3.5	8.0	A
HEAST UTILITIES NU	3096.1	22	5	-41.6	5.3	128	22	0.6	2.4	1.86	0.26	1.48	1.72	8.1	6.0	B
HWESTERN NOR	508.6	22	0	10.3	13.5	165	12	0.1	1.0	5.41	1.62	1.80	1.99	1.5	12.0	A
IR NST	2091.5	39	-3	7.4	10.8	158	14	0.8	2.2	5.07	2.76	3.21	3.52	2.0	5.7	NR
ENERGY OGE	1722.7	22	16	6.3	14.1	159	11	0.6	1.9	6.01	1.94	1.96	2.10	1.9	6.0	A-
E PCG	10610.4	27	34	-66.0	2.9	144	43	0.5	1.4	4.37	0.04	2.52	2.72	3.7	8.0	B
ACLE WEST CAPITAL PNW	3944.3	47	52	8.7	12.8	166	13	1.2	1.9	3.22	3.17	3.51	3.63	3.6	7.0	B+
IMAC ELECTRIC POWER POM	2554.5	23	0	32.6	9.3	145	15	1.0	2.6	7.24	1.98	1.76	1.90	2.6	5.0	B
PPL	6038.5	42	83	11.3	25.2	318	12	1.1	1.9	2.54	3.14	2.96	3.23	3.4	7.5	B+
IC SERVICE ENTERPRISE GROUP PEG	9165.9	43	23	6.4	15.9	221	13	1.4	2.4	5.05	3.29	3.58	3.64	1.4	5.0	B+
T SOUND ENERGY PSD	2242.7	26	35	13.1	11.6	161	13	0.8	3.3	7.03	2.06	2.00	2.09	1.0	4.0	B
ANT ENERGY REI	11565.5	39	72	38.2	14.7	201	13	0.5	1.4	3.82	5.82	2.91	2.93	1.7	10.0	B
IA SCG	2952.1	28	5	0.4	9.8	143	14	1.1	2.7	4.08	1.73	2.08	2.25	4.0	5.0	B+

EARNINGS PER SHARE

COMPANY	STOCK SYMBOL (FY)	MARKET VALUE	RECENT SHARE PRICE	2000 PRICE CHANGE %	EARNINGS GROWTH 1995-99 %	RETURN ON EQUITY	PRICE AS % OF BOOK VALUE	P-E RATIO	PRICE-SALES RATIO	P-E TO GROWTH RATE	YIELD %	2001 ESTIMATES FROM ANALYSTS				LONG-TERM GROWTH RATE %	E. RA
												1999 ACTUAL	1999 ANALYST EST	1999 CONSENSUS	VARIATION %		
SIERRA PACIFIC RESOURCES	SRP	1240.5	16	-9	-14.9	-3.9	89	NM	0.6	4.5	6.32	0.83	0.71	1.67	6.0	5.0	
SOUTHERN	SO	20532.5	32	34	2.9	13.6	219	15	1.3	2.5	4.25	1.86	2.07	2.13	6.6	6.0	
SOUTHERN ENERGY	SOE	6630.0	24	NA	127.1	11.6	246	20	1.1	1.2	0.00	1.33	1.01	1.16	4.3	20.5	
TECO ENERGY	TE	3682.4	29	58	-0.6	15.9	249	16	1.7	2.8	4.58	1.53	1.97	2.14	3.7	5.4	
TXU	TXU	10309.3	40	12	NM	13.4	135	10	0.5	1.7	6.01	3.53	3.41	3.69	1.4	7.0	
UTILICORP UNITED	UCU	2749.9	30	52	11.1	12.8	176	14	0.1	1.7	4.07	1.75	2.13	2.39	6.7	8.0	
WESTERN RESOURCES	WR	1591.7	23	35	NM	1.7	81	50	0.7	4.0	5.25	-0.01	1.60	1.84	13.0	3.6	
WISCONSIN ENERGY	WEC	2578.7	21	11	-4.3	7.7	124	16	0.9	3.2	3.75	1.79	1.65	2.14	2.3	4.0	
XCEL ENERGY	XEL	9281.1	27	40	-7.6	8.1	169	18	1.2	2.1	3.20	1.43	2.03	2.19	2.7	6.5	
(B) GAS, OIL & TRANSMISSION																	
GROUP AVERAGE		4550.8	37	45	7.9	10.5	232	26	1.1	2.4	3.12	1.11	1.97	2.33	5.2	10.0	
EL PASO ENERGY	EPG	14034.2	60	55	NM	7.5	409	57	0.8	1.6	1.37	-1.06	2.59	3.13	3.2	15.0	
KEYSPAN	KSE	4151.6	38	64	-9.7a	10.5	150	17	1.0	1.7	4.67	1.62	2.25	2.45	2.5	10.0	
KINDER MORGAN	KMI	4738.6	41	105	32.7	12.1	272	22	2.2	1.7	0.48	1.92	1.25	1.58	3.2	20.0	
MCN ENERGY GROUP	MCN	2463.9	27	15	NM	7.1	259	36	1.0	8.0	3.74	-0.34	0.68	1.11	2.7	5.0	
MDU RESOURCES GROUP	MDU	1950.9	30	52	12.7	11.5	233	19	1.2	1.9	2.90	1.52	1.72	1.95	2.6	9.3	
NATIONAL FUEL GAS	NFG (9)	2233.3	57	22	4.0	13.1	220	18	1.6	2.4	3.37	2.95	3.21*	4.27	2.6	7.5	
NICOR GAS		1760.4	39	19	7.6	6.5	254	41	1.0	2.2	4.31	2.62	2.90	3.06	1.0	6.0	
ONEOK	OKE (8)	1191.6	41	62	NA	8.1	100	NA	NA	2.3	3.04	NA	2.91	3.33	5.7	6.0	
SEMPRA ENERGY	SRE	4997.8	24	41	-0.2	16.3	202	12	0.8	1.5	4.09	1.66	2.12	2.17	2.3	7.5	
UGI	UGI (9)	599.3	22	9	8.4	15.5	224	14	0.3	2.3	6.99	1.74	1.64*	2.01	1.0	6.0	
WESTERN GAS RESOURCES	WGR	785.3	24	84	NM	7.5	209	29	0.3	1.8	0.82	-0.82	1.16	1.59	27.7	12.0	
WILLIAMS	WMB	15703.0	35	16	NA	10.2	253	25	1.5	1.8	1.70	0.36	1.26	1.27	7.9	16.0	

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

A

A&P 10c
 Abbott Laboratories 12b
 ABM Industries 21e
 ACNielsen 21e
 ADC Telecomm. 22a
 Adelphia Communications 20a
 Administaff 21e
 Adobe Systems 18c
 Advance Paradigm 17a
 Advanced Micro 9d
 AES 24a
 Aetna 17b
 Affiliated Computer Svcs. 18c
 AFLAC 17b
 AGCO 15c
 Agilent Technologies 9c
 Air Products & Chemicals 4
 Airborne Freight 23c
 Airgas 21b
 AK Steel Holding 16b
 Alaska Air Group 23a
 Alberto-Culver 8
 Albertson's 10c
 Alcoa 18a
 Allegheny Energy 24a
 Allegheny Tech. 5
 Allergan 12b
 Alliant Energy 24a
 Allied Waste Inds. 21c
 Allmerica Financial 17b
 Allstate 17b
 Alltel 22b
 Amazon.com 8
 Amerada Hess 11a
 Amerco 23c
 Ameren 24a
 America Online 18c
 America West Holdings 23a
 American Axle & Mfg. 2b
 American Electric 24a
 American Express 17a
 American Financial Group 17b
 American General 17b
 American Greetings 14d
 American Home 12b
 American Intl. Group 17b
 American Management Systems 18c
 American Power 9a

American Standard 13a
 American Water Works 24a
 AmeriSource Health 12a
 Ames Dept. Stores 8
 Amgen 12b
 Amkor Technology 9d
 AMR 23a
 AmSouth Bancorporation 3c
 Anadarko Petroleum 11a
 Analog Devices 9d
 ANC Rental 23c
 Anheuser-Busch 6c
 Anixter International 5
 Aon 17b
 Apache 11a
 Apple Computer 18b
 Applied Biosystems 9c
 Applied Industrial Tech. 21b
 Applied Materials 15c
 Arch Coal 11a
 Archer Daniels 10b
 Ariba 18c
 Arkansas Best 23d
 Arrow Electronics 21b
 ArvinMeritor 2b
 Ashland 11a
 Associated Banc-Corp 3a
 Astoria Financial 17c
 AT&T 22a
 AT&T Wireless 22a
 Atmel 9d
 Atoliv 2b
 Automatic Data 18c
 AutoNation 21e
 AutoZone 8
 Avery Dennison 15c
 Avis Group 23a
 Avnet 24a
 Avnet 21b
 Avon Products 6d
 AVX 9d
 AXA Financial 17b

B

Baker Hughes 11b
 Ball 7a
 BankWest 3d
 Bank of America 3c
 Bank of New York 3a
 Bank One 3b
 Banknorth Group 3a

Banta 21d
 Barnes & Noble 8
 Bausch & Lomb 12d
 Baxter International 12d
 BB&T 3c
 BEA Systems 18c
 Bear Stearns 17a
 Beazer Homes USA 13b
 Beckman Coulter 9c
 Becton, Dickinson 12d
 Bed Bath & Beyond 6b
 BellSouth 22b
 Belo (A.H.) 20b
 Bemis 7b
 Bergen Brunswig 12a
 Berkley (W.R.) 17b
 Berkshire Hathaway 17a
 Best Buy 6b
 Bethlehem Steel 16b
 Beverly Enterprises 12c
 Bindley Western Inds. 12a
 BJ's Wholesale Club 8
 Black & Decker 15b
 Block (H&R) 17a
 Blockbuster 14b
 BMC Software 18c
 Boeing 1
 Boise Cascade 19b
 Borders Group 8
 BorgWarner 2b
 Boston Scientific 12d
 Bowater 19b
 Briggs & Stratton 15c
 Brightpoint 21b
 Brinker International 14a
 Bristol-Myers Squibb 12b
 Broadcast 9d
 Brocade Communications 18c
 Brown-Forman 6c
 Brunswick 14d
 Budget Group 23c
 Burlington Coat Factory 8
 Burlington Industries 15d
 Burlington Northern Santa Fe 23b
 Burlington Resources 11a

C

Cabletron Systems 18c
 Cablevision Systems 20a
 Cabot 4
 Calpine 24a

Campbell Soup 10b
 Capital One Financial 17a
 Cardinal Health 12a
 Caremark Rx 12a
 Carlisle 15a
 CarMax Group 21e
 Carnival 14d
 Casey's General Stores 21e
 Caterpillar 15c
 CBRL Group 14a
 CDI 21e
 CDW Computer Centers 8
 CellStar 21b
 Cendant 21e
 Centex 13b
 Central Garden & Pet 21b
 Centura Banks 3c
 CenturyTel 22a
 Ceridian 18c
 Champion Enterprises 13b
 Charter Communications 20a
 Charter One Financial 17c
 Chase Manhattan 3a
 Chevron 11a
 Chubb 17b
 Ciena 22a
 Cigna 17b
 Cincinnati Financial 17b
 CInergy 24a
 Cintas 21a
 Circuit City Group 6b
 Cisco Systems 18c
 CIT Group 17a
 Citigroup 17a
 CKE Restaurants 14a
 Clayton Homes 13b
 Clear Channel Communs. 20a
 Clorox 6d
 CMS Energy 24a
 CNA Financial 17b
 CNF 23c
 Coastal 11a
 Coca-Cola 6c
 Coca-Cola Enterprises 6c
 Colgate-Palmolive 6d
 Colonial BancGroup 3a
 Comcast 20a
 Comdisco 18c
 Comerica 3b
 Commerce Bancshares 3b
 Commercial Metals 16b

Compaq Computer 18b
 Compass Bancshares 3c
 Computer Associates 18c
 Computer Systems 18c
 Computware 18c
 Converse Tech. 22a
 ConAgra Foods 10b
 Conectiv 24a
 Conexant Systems 9d
 Conoco 11a
 Consoco 17b
 Consol Energy 11a
 Consolidated Edison 24a
 Cons. Freightways 23d
 Consolidated Stores 8
 Constellation Brands 6c
 Constellation Energy 24a
 Continental Airlines 23a
 Convergys 21e
 Cooper Cameron 11b
 Cooper Industries 9a
 Cooper Tire & Rubber 2c
 Coors (Adolph) 6c
 Corn Products Intl. 10b
 Corning 15a
 Costco Wholesale 8
 Countrywide Credit 17a
 Coventry Health Care 12c
 Cox Communications 20a
 CP&I Energy 24a
 Crane 21b
 Crestline Capital 14c
 Crompton 4
 Crown Cork & Seal 7a
 CSK Auto 8
 CSA 23b
 Cummins Engine 15c
 CV2 12a
 Cytec Industries 4

D

D&K Healthcare Resources 12a
 Dana 2b
 Danaher 9c
 Darden Restaurants 14a
 DaVita 12c
 Dean Foods 10b
 Deere 15c
 Del Monte Foods 10b
 Dell Computer 18b
 Delphi Automotive 2b

Delta Air Lines 23a
 Deluxe 18a
 Dial 6d
 Diebold 18a
 Dillard's 8
 Dime Bancorp 17c
 DiMon 6e
 Disney (Walt) 20a
 Dole Food 10b
 Dollar General 8
 Dominion Resources 24a
 Donnelley (R.R.) 21d
 Dover 15c
 Dow Chemical 4
 Dow Jones 20b
 DPL 24a
 DOE 24a
 DTE Energy 24a
 Duke Energy 24a
 Dun & Bradstreet 17a
 DuPont 4
 Dura Automotive Systems 2b
 Dynegy 21b

E

E*Trade Group 17a
 Earthgrains 10b
 Eastman Chemical 4
 Eastman Kodak 14d
 Eaton 2b
 EchoStar Communications 20a
 Ecobab 6d
 Edison International 24a
 Edwards (A.G.) 17a
 El Paso Energy 24b
 Electronic Arts 18c
 Electronic Data Systems 18c
 EMC 18b
 Emerson Electric 9a
 Encompass Services 21a
 Energizer Holdings 15a
 Energy East 24a
 Engelhard 18c
 Enron 21b
 Entergy 24a
 Equifax 17a
 Estee Lauder 6d
 Everest Re Group 17b
 Exelon 24a
 Exide 15a
 Expeditors Intl. 23c

Express Scripts 12c
 Exxon Mobil 11a

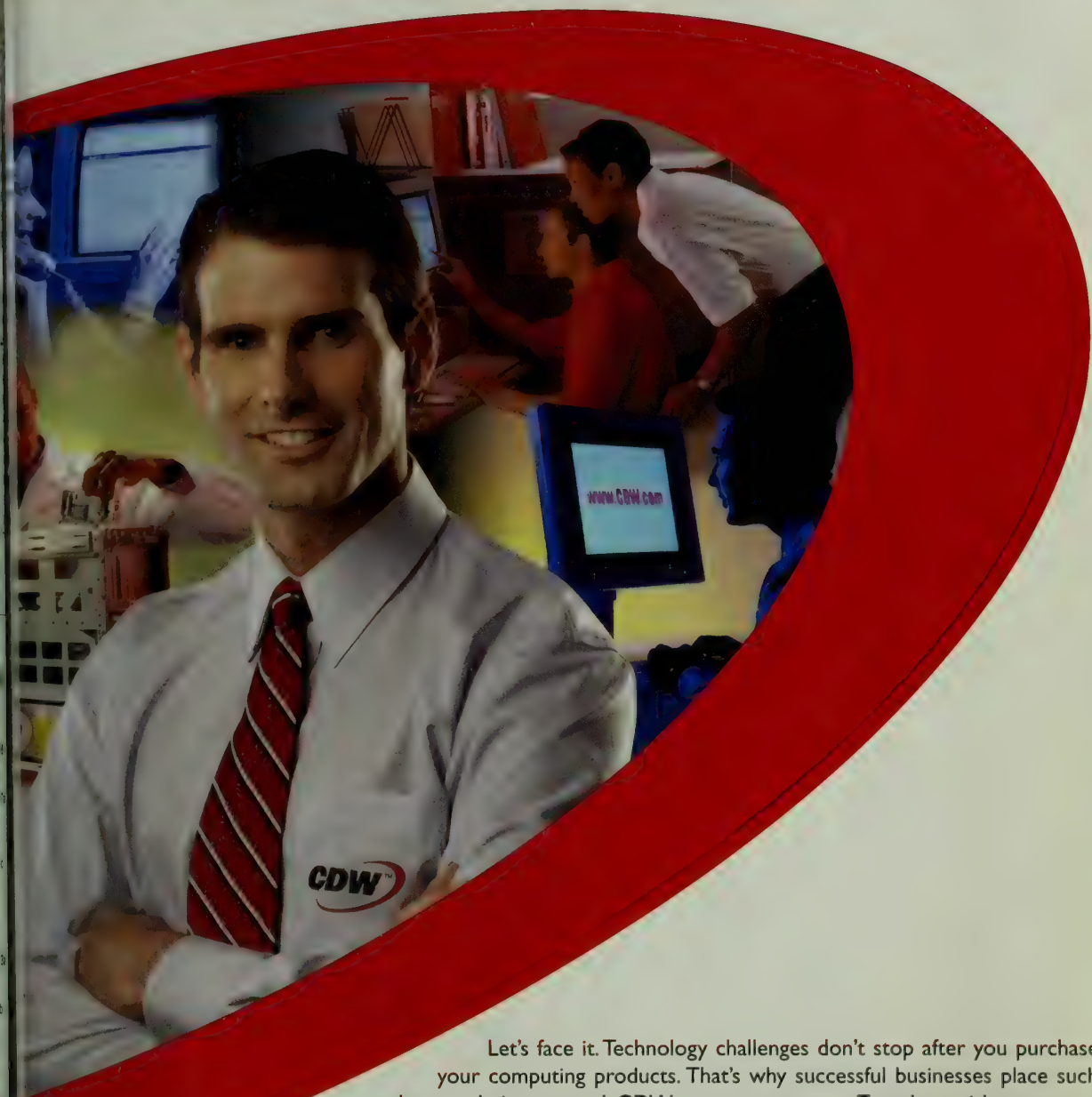
F

Family Dollar Stores 8
 Fannie Mae 17a
 Federal-Mogul 2b
 Federated Dept. Stores 8
 FedEx 23c
 Ferro 4
 Fidelity National Finl. 17a
 Fifth Third Bancorp 3b
 First American 17a
 First Data 18c
 First Tennessee Natl. 3c
 First Union 3c
 Firststar 3b
 FirstEnergy 24a
 FirstMerit 3b
 Fiserv 18c
 FleetBoston Financial 3a
 Fleetwood Entls. 14d
 Fleming 10a
 Flowers Industries 10b
 FMC 15c
 Footstar 2
 Ford Motor 2a
 Fortune Brands 15a
 Foster Wheeler 21a
 Fox Entertainment 14b
 FPL Group 24a
 Franklin Resources 17a
 Freddie Mac 17a
 Freeport-McMoran C&G 1
 Fremont General 17b
 Fritz 23c
 Fuller (H.B.) 4
 Furniture Brands 6b

G

Galileo Intl. 18c
 Gannett 20b
 Gap 8
 Gateway 18b
 GAIX 23c
 Genentech 12b
 General Cable 16c
 General Dynamics 1
 General Electric 5
 General Mills 10b
 General Motors 2a

CDW. Our job is to simplify yours.



Let's face it. Technology challenges don't stop after you purchase your computing products. That's why successful businesses place such value on their personal CDW account manager. Together with a team of experts, your account manager will custom-configure best-of-breed solutions from hundreds of top name brands. Respond to your every need. And save you time and money.

Add CDW.com, our award-winning site, and you have a total computing solutions resource from the industry's only Direct Solutions Provider.TM Call us. We're a trusted Fortune[®] 1000 Company. And we'll give you the 24x7 attention you need to rest easy.

Computing Solutions Built for BusinessTM
1-888-239-8283 www.cdw.com



Announcing...

The Tenth Annual Forum Chief Financial Officers

February 28-March 2, 2001

The Breakers, Palm Beach, FL

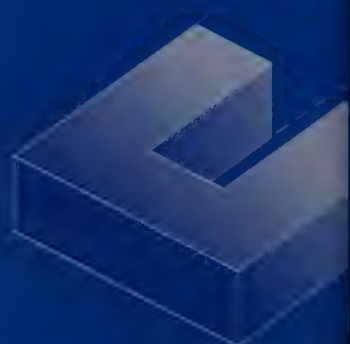
The Premier Corporate Finance Event

CFO as e.biz Architect



From February 28-March 2, 2001, BusinessWeek will gather together America's top Chief Financial Officers in Palm Beach, Florida for the year's most prestigious corporate finance event. ■ This private, invitation-only Forum at The Breakers will focus on the ways in which CFOs can take "e.biz" to the next level, guiding their companies toward utilizing the Net's full potential for speed, efficiency and innovation.

Conducted in a retreat-like setting, the Forum encourages collegial interaction so that participants may gain the well-founded knowledge that is only derived from exchanging ideas, sharing experiences, and engaging in compelling discussions. ■ Topics include: "Finding an E-Business Model that Works", "Supply-Chain Management Comes of Age" and "The Implications of Going Wireless." The Annual BusinessWeek Forum of Chief Financial Officers is an exclusive event reserved for today's elite financial leaders. ■



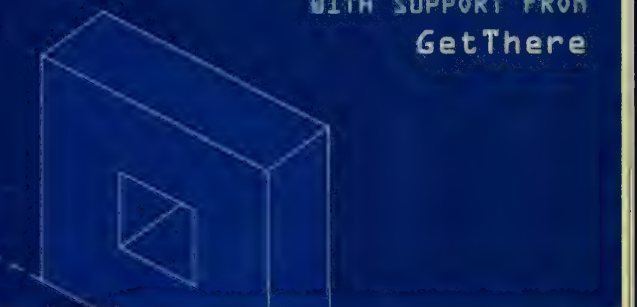
If you have received an invitation, we urge you to RSVP today. If you have not received one, but believe you should attend, please contact us. Simply call 212.512.6673.



IN PARTNERSHIP WITH
Zurich Financial Services

SPONSORED BY
LeapSource
Milliman & Robertson, Inc.
SAS

WITH SUPPORT FROM
GetThere



SPEAKER

ROBERT H. BRUST

Executive Vice President and CFO
Eastman Kodak Company

SPEAKER

HEIDI G. MILLER

Former Chief Financial Officer and SEVP,
priceline.com Incorporated

SPEAKER

WARREN C. JENSON

Senior Vice President and CFO
Amazon.com Inc.

SPEAKER

JAMES A. PARKE

Vice Chairman and CFO
GE Capital

SPEAKER

JERRY M. KENNELLY

Senior Vice President, CFO
and Secretary
Inktomi Corporation

SPEAKER

PATRICK J. SPAIN

Chairman and CEO
Hoover's, Inc.

SPEAKER

THOMAS MALONE

Patrick J. McGovern Professor
of Information Systems
Sloan School of Management, MIT

SPECIAL DINNER SPEAKER

LOU HOLTZ

Head Football Coach
University of South Carolina

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

G Genuine Parts 21b Geopac Pacific Group 19a Gillette 6d Golden State Bancorp 17c Golden West 17c Goldman Sachs Group 17a Goodrich (B.F.) 1 Goodyear Tire & Rubber 2c GPU 24a Grace (W.R.) 4 Grainger (W.W.) 21b Granite Construction 21a Great A&P 10c Great Lakes Chemical 4 GreenPoint Financial 17c Group 1 Automotive 21e Guidant 12d	J Jabil Circuit 9d Jack in the Box 14a	K Kaiser Aluminum 16a Kansas City Southern 17a Kaufman & Broad Home 13b Keebler Foods 10b Kellogg 10b Kellwood 6a Kelly Services 21e Kennametal 15b Kerr-McGee 11a KeyCorp 3b KeySpan 24b Kimberly-Clark 19b Kinder Morgan 24b KLA-Tencor 9c Hartford Financial Services 17b Hasbro 14d Hawaiian Electric 24a Hayes Lemmerz Intl. 2b HCA-The Healthcare Co. 12c Health Management Assocs. 12c Health Net 12c Healthsouth 12c Heinz (H.J.) 10b Heller Financial 17a Hercules 4 Hershey Foods 10b Hertz 23c Hewlett-Packard 18b Hibernia 3c Hillenbrand 15a Hilton Hotels 14c Hollinger International 20b Home Depot 8 HON Industries 18a Honeywell Intl. 5 Hormel Foods 10b Horton (D.R.) 13b Household Intl. 17a Hub Group 23c Hubbell 9a Hughes Electronics 9b Hughes Supply 21b Humana 12c Hunt (J.B.) 23d Huntington Bancshares 3b	L L-3 Communications 9b Laboratory Corp. of America 12c Lafarge 13a Lam Research 15c LandAmerica Financial 17a Lands' End 8 Landstar System 23d La-Z-Boy 6b Lear 2b Legg Mason 17a Leggett & Platt 6b Lehman Brothers Holdings 17a Lennar 13b Lennox International 13a Lexmark International 18b LG&E Energy 24a Liberty Financial 17b Liberty Media 8 Lilly (Eli) 12b Limited 8 Lincoln National 17b Linear Technology 9d Linens 'N Things 6b Lithia Motors 21e Litton Industries 9b Liz Claiborne 6a Lockheed Martin 1 Loews 17b Longs Drug Stores 12a Louisiana-Pacific 19a Lowe's 8 LSI Logic 9d Lubrizol 4 Lucent Technologies 22a Lyondell 4	M M&T Bank 3a M.D.C. Holdings 13b Magellan Health Services 21e Mail-Well 7b Mandalay Resort 14b Manor Care 12c Manpower 21e Marriott Intl. 14c Marsh & McLennan 17a Marshall & Ilsley 3b Martin Marietta Materials 13a Masco 13a Massey Energy 21a Mattel 14d Maxim Integrated Prods. 9d Maxtor 18b	N National City 3b National Commerce 3c National Fuel Gas 24b National Semicond. 9d National Service 9a National Steel 16b Nationwide Financial Svcs. 17b Navistar International 2a NCR 18a Neiman Marcus Group 8 Network Appliance 18b New York Times 20b Newell Rubbermaid 15a Newmont Mining 16c Newport News Shipbuilding 1 Nextel Communications 22a Niagara Mohawk 24a Nicor 24b Nike 6a NiSource 24a Nordstrom 8 Norfolk Southern 23b North Fork Bancorp. 3a Lubrizol 4 Northeast Utilities 24a Northern Trust 3b Northrop Grumman 1 Northwest Airlines 23a Northwestern 24a NOVA 21e Novell 18c NSTAR 24a Nucor 16b NVR 13b	O Occidental Pet. 11a Office Depot 8 OfficeMax 8 OGE Energy 24a Ohio Casualty 17b Old Kent Financial 3b Old Republic Intl. 17b Olin 16c Omnicare 12a	P Omnicon Group 21d Oneok 24b Oracle 18c Oshkosh Truck 2a Outback Steakhouse 14a Owens & Minor 12d Owens-Illinois 7a Oxford Health Plans 12c	R R.J. Reynolds Tobacco 6e RadioShack 6b	Q Quaker Oats 10b Qualcomm 9b Quantum DLT & Storage 18b Quantum Hard Disk Drive 18b Quest Diagnostics 12c Quintiles Transnational 21e Quorum Health Group 12c Qwest Commun. 22b	S Sabre Holdings 18c Safeco 17b Safeway 10c Saks 8 Sanmina 9d Sara Lee 10b SBC Communications 22b Scana 24a Schein (Henry) 21b Schering-Plough 12b Schlumberger 11b Scholastic 20b Schwab (Charles) 17a SCI Systems 9d Scientific-Atlanta 22a Scotts 4 Scripps (E.W.) 20b SDL 9d Sealed Air 7b Sears, Roebuck 8 Sempia Energy 24b Service Corp. Intl. 21e ServiceMaster 21e 7-Eleven 10c Shaw Industries 15d Sherwin-Williams 13a ShopKo Stores 8 Siebel Systems 18c Sierra Health Services 12c Sierra Pacific Resources 24a Silgan Holdings 7a Silicon Graphics 18b Smith International 11b Smithfield Foods 10b Smurfit-Stone Container 7b Snap-on 15b Solutia 4 Sonic Automotive 21e Sonoco Products 7b Southern 24a Southern Energy 24a SouthTrust 3c Southwest Airlines 23a Sovereign Bancorp 17c Spherion 21e Spiegel 8 Sports Authority 8 Springs Industries 15d Sprint FON Group 22a Sprint PCS Group 22a SPX 9a St. Paul 17b Staff Leasing 21e StanCorp Financial Group 17b Stanley Works 15b Staples 8	T Talbots 8 Target 8 TCF Financial 3b TD Waterhouse Group 17a Tech Data 18a Teco Energy 24a Tecumseh Products 13a Teleflex 15a Telephone & Data Sys. 22a Tellabs 22a Temple-Inland 7b Tenet Healthcare 12c Tenneco Automotive 5 Teradyne 9c Terex 15b Tesoro Petroleum 11a Texaco 11a Texas Industries 16b Texas Instruments 9d Tectron 5 Thermo Electron 9c Thomas & Betts 9d 3Com 18c 3M 15a Tiffany 8 Time Warner 20b Timken 15c TJX 8 Toll Brothers 13b Torchmark 17b Toro 15c Tosco 11a Tower Automotive 15a Toys 'R Us 8 Trans World Airlines 23a Trans World Entertainment 14d Transatlantic Holdings 17b TransMontaigne 11b Triad Hospitals 12c Tribune 20b Tricon Global Restaurants 14a Trigon Healthcare 12c Trinity Industries 23c True North Commun. 21d TRW 5 TXU 24a Tyco Intl. 15c Tyson Foods 10b	U U.S. Bancorp 3b U.S. Cellular 22a U.S. Industries 5 UAL 23a UGI 24b Ultramar Diamond Shamrock 11a Unifi 15d Union Carbide 4 Union Pacific 23b Union Planters 3c UnionBanCal 3d Unisys 18b United Auto Group 21e United Parcel Service 23d United Rentals 21e United Stationers 21b	V Valero Energy 11a Valspar 13a Value City 8 Venator Group 8 VeriSign 18c Veritas Software 18c Verizon Communications 2 VF 6a Viacom 14b Viad 5 Vishay Intertechnology 9d Visteon 2b VoiceStream Wireless 22a Vulcan Materials 13a	W Washash National 2b Wachovia 3c Wackenhut 21a Walgreen 12a Wallace Computer 18a Wal-Mart Stores 8 Water Industries 16b Warnaco Group 6a Washington Group Intl. 21 Washington Mutual 17c Washington Post 20b Waste Management 21c Watson 13a Weatherford Intl. 11b Webb (Del) 13b WellPoint Health 12c Wells Fargo 3b Wendy's Intl. 14a WESCO International 21b Western Digital 18b Western Gas Resources 24 Western Resources 24a WestPoint Stevens 15d Westvaco 7b Weyerhaeuser 19b Whirlpool 6b Whitman 5 Whole Foods Market 10c Willamette Industries 19b Williams 24b Williams Communications Williams-Sonoma 6b Winn-Dixie Stores 10c Wisconsin Energy 24a WorldCom 22a Worthington Inds. 16b Wrigley (Wm.) Jr. 10b Wyndham International 13	X Y Z Xcel Energy 24a Xerox 18b Yahoo 18c Yellow 23d York Intl. 13a Zale 8 Zions Bancorporation 3d
--	---	---	--	--	--	--	---	---	--	---	---	---	---	--	--

www.businessweek.com internet

address directory

Reach these Business Week advertisers on the Web:

3Com
www.3com.com

Agilent
www.agilent.com

Alcatel
www.alcatel.com

American Airlines
www.aa.com

**American Express
Financial Advisors**
www.americanexpress.com/
advisors

**American Honda
Motor Co., Inc.**
www.honda.com

Blue Martini Software
www.bluemartini.com

BREITLING WATCHES
www.breitling.com

Cap Gemini Ernst & Young
www.capgemini.com

CDW, Computer Centers, Inc.
www.cdw.com

Charles Schwab
www.schwabwellscome.com

Charles Schwab
www.charlesschwab.com

Comdisco
www.comdisco.com

Compaq
www.compaq.com

Corning
www.corning.com

Crown Publishing Group
www.randomhouse.com

Day Corporation
www.daycorporation.com

Dell Computer Corporation
www.dell.com

Deloitte & Touche
www.us.deloitte.com

Dynegy
www.dynegy.com

Ericsson
www.ericsson.com

Fidelity Investments
www.fidelity.com

Fuqua School of Business
www.fuqua.duke.edu

Goldman Sachs
www.gs.com

Hyundai Electronics
www.hei.co.kr

IBM
www.ibm.com

IBM
www.ibm.com/esserver

IBM Software
www.ibm.com/software/different

Infinium
www.infinium.com

Instinet
www.institet.com

KYOCERA
www.kyocera.com

LeadersOnline
www.leadersonline.com

Lexus Certified Pre-Owned
www.lexuscpo.com

Lincoln
www.lincolnvehicles.com

Lotus
www.lotus.com/superhuman/
software

Mercedes-Benz
www.mercedes-benz.com

Microsoft
www.microsoft.com

MITSUBISHI ELECTRIC
www.mitsubishielectric.com

**NTT Communications
Corporation**
www.ntt.com/world

One World Alliance
www.oneworldalliance.com

Oracle
www.oracle.com

PNC Bank
www.pnc.com

Prudential
www.prudential.com

SAMSUNG Electronics
www.samsungelectronics.com

SAS
www.sas.com

Savin
www.savin.com

Siemens Corporate
www.usa.siemens.com

SmartForce
www.smartforce.com

**Toshiba America
Information Systems**
www.toshiba.com

Toyota and the Environment
www.toyota.com/ecologic

VanKampen Funds
www.vankampen.com

Williams
www.williams.com

WorldCom
www.wcom.com

BusinessWeek

Follow the technology leader...
to the Web & beyond

See and hear from the experts at
www.sas.com/webcast

The Power to Know.

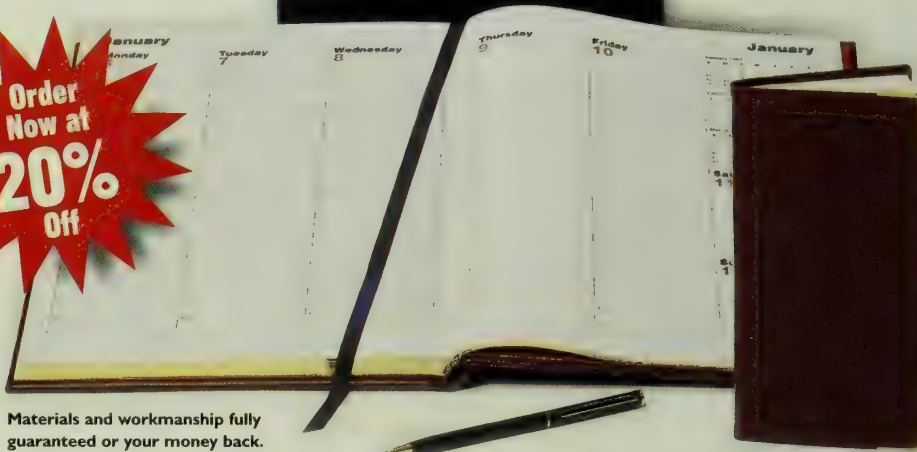
sas.
e-Intelligence

PLAN YOUR FUTURE. ONE DAY AT A TIME.

Prepare for another successful year with the 2001 **Business Week Planner** in desktop and pocket formats.



Materials and workmanship fully guaranteed or your money back.



USA Credit card holders may call

**TOLL-FREE
800-553-3575.**

Ask for Dept BC41.
We honor
AmEx/Diners/Visa/
MasterCard

Available in black or burgundy, the *Business Week Planner* will keep you on schedule with a 13-month calendar, international dialing codes, time conversion charts, and important toll-free numbers. The desktop version also features a 32-page, four-color world atlas; detailed information

about 39 U.S. and international cities; and even a vintage guide.

Whether purchased separately or in a matching skin leather set, the 2001 *Business Week Planner* will ensure that you make the most of each and every day.

Name (Mr./Mrs./Ms) _____

Company _____

Address _____

City _____ State/Country _____

Zip/Postcode _____ Tel _____

Job Title _____

☐ Send me your color brochure and information on quantity discounts and customization options.

Full name for blocking _____

Clip coupon and mail check to BUSINESS WEEK PLANNER, Dept. BC41
P.O. Box 1597, Fort Lee, NJ 07024, USA or Fax 201-461-9808

Item	Code	Regular	Your Price	Quantity	Total US\$
Black Desk & Pocket Planner Set	BW210	US\$48.95	US\$39.00		
Black Desk Planner	BW207	US\$34.95	US\$27.95		
Black Pocket Planner	BW204	US\$17.95	US\$14.50		
Burgundy Desk & Pocket Planner Set	BW226	US\$48.95	US\$39.00		
Burgundy Desk Planner	BW216	US\$34.95	US\$27.95		
Burgundy Pocket Planner	BW218	US\$17.95	US\$14.50		
Personalization US\$4.75 per item					
Handling/Packing (USA) US\$2.50 per item					
Handling/Packing (ex. USA) US\$5.75 per item					
N.J. Residents add 6% Sales Tax					
				TOTAL US\$	

Prices include delivery by surface mail but do not include local duties or taxes. Delivery commences in September 2000.

☐ Check enclosed payable to "Business Week Planner"
☐ Bill my Company (Purchase Order & Company letterhead enclosed)
☐ Charge to ☐ AmEx ☐ Diners Club ☐ Visa ☐ MasterCard

Card No _____

Expiration Date _____ / _____ Signature _____

For customization options and special discounts on larger quantities call Amanda Kane at 201-461-0040, or fax to 201-461-9808.

THINK YOU HAVE AN EQUAL MARRIAGE?



TODD GUTNER

When I logged on to the new Web site for the Institute for Equality in Marriage (www.equalityinmarriage.org), I was skeptical that it would have anything to offer me. After all, I'm happily married in a dual-income household and never doubted that my marriage was a 50-50 partnership. But I printed some questions about money for my husband, Neil, and then sat down with him to see what he thought.

To my surprise, we had one of the most productive conversations about finances of our six-year marriage. We spoke candidly about topics that both of us knew were lurking under the surface but hadn't brought up because we didn't know how. They included how we view financial security, how we feel about each other's spending habits, and whether the assets we each brought to our marriage are joint property.

Thank you, Lorna Wendt. She is the founder of the Institute for Equality in Marriage, a nonprofit organization designed to educate men and women about creating equal partnerships. Wendt became the poster woman for divorcing wives in 1997 when she began a legal battle to get half of her executive husband's estimated \$100 million net worth. Her husband of 32 years, Gary Wendt, then chief of General Electric Capital and now CEO of Conesco, had offered her \$10 million. A court awarded her \$20 million in "hard assets," including a house and car, but she is appealing for a portion of so-called soft assets, such as pension benefits and stock options.

Wendt aims to use the Web site to make it easier for men and women

to talk openly about marriage, money, and relationship equality. Let's face it: Many once-taboo subjects such as AIDS, breast and prostate cancer, and erectile dysfunction now get airtime on national TV and are bandied about at cocktail parties. But engaged and already-married couples still have trouble bringing up financial issues, such as those raised in the following questions: If our marriage ends in divorce, do we agree to divide all marital assets on a 50-50 basis? If one of us becomes a stay-at-home spouse, would we consider that person's contribution equal to that of the wage earner? "We're not here to give answers to these questions," says Wendt. "Whatever people decide to do is fine. We just want to

get people thinking and talking about these things."

Since half of all marriages end in divorce, there seems to be a need to create such a dialogue. "Imagine if someone told you there was a 50% chance you'd get cancer," says Ellen Sabin, executive director of the Manhattan-based institute. "Wouldn't you do everything in your power to educate yourself and take precautions?"

FIRM FOUNDATION. With that in mind, Wendt advises all couples to draft a prenuptial agreement—or a postnuptial one, if you're already married. Even for young couples who haven't built up substantial assets, Wendt suggests writing down what you are saving money for and who will handle the checkbook and long-range financial planning. Unfortunately, many people see these contracts as divisive rather than unifying, with the person who has more money acting to protect what is his or hers. But Wendt thinks these agreements can help create the foundation for an equal partnership and keep both parties financially aware. "It is the ultimate form of trust," says Wendt, who aims to use equalityinmarriage.org to destigmatize pre- and postnups.

The site is geared to men and women in all stages of relationships, but in fact, most of its users are women facing divorce. The divorce section covers 26 areas, from how to avoid a court trial, divide debt, and protect your credit rating to the seven questions to ask about retirement benefits. My biggest criticism is that some suggestions are trite. But Wendt's intentions are sincere, and her message—that open communication about finances is necessary for a true partnership—is a valid one.

Lorna Jorgenson Wendt

BORN

Minot, N.D., 1943

EDUCATION

BA in music education, University of Wisconsin

RESIDENCE

Stamford, Conn.

BIGGEST ACHIEVEMENT

"Raised two wonderful daughters. In tough times, I'm able to deal with problems"

BusinessWeek online

For a Q&A with Lorna Wendt, or to join a discussion in our forum, see hers.online.at www.businessweek.com/investor/

QUESTIONS? COMMENTS? E-mail hers@businessweek.com or fax (212) 512-2538



©2000 New York Stock Exchange, Inc. All rights reserved.

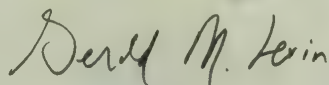
*Helping shape the future
of mass media is challenging.*

*Exploring the possibilities
of the Internet—exhilarating.*

*And working with
the world's most creative people
makes for quite a day at the office.*

*But the thrill of a lifetime?
Ringing the opening bell
at the New York Stock Exchange,
right in the center of the action.*

*After all, we're in the forefront
of the world of media, so
center stage makes us feel right at home.*



Gerald M. Levin
Time Warner Chairman and CEO



NYSE

The world puts its stock in us.®

LOW-PRICED HELP -THAT ISN'T WORTH IT



BY ROBERT BARKER

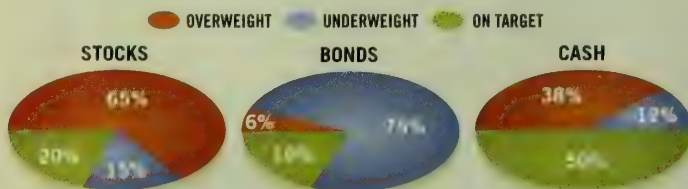
The great thing about being a do-it-yourself investor is never having to talk to a stockbroker. The hell of it is not having anyone to speak with about decisions that easily can affect tens or hundreds of thousands of dollars.

Sensing this hunger for just a bit of advice, T. Rowe Price recently introduced a service it's calling Investment Checkup. The idea is that for \$250, the firm's financial-planning unit will help you understand your portfolio and see if it meets your goals and appetite for risk. "Investment Checkup can give you a valuable second opinion," ads promise. It follows TRP's successful launch last year of a service to help investors in or near re-



Portfolio Checkup

T. Rowe Price looked at 100 client portfolios to see how their asset allocations differed from the firm's recommendations. In this sample, investors are considered to be overweighting or underweighting an asset if their allocation differs by more than five percentage points from the firm's.



DATA: T. ROWE PRICE

**T. Rowe Price's
planners will
assess your
portfolio, but they
don't answer
enough questions**

tirement crack the problem of how much of their savings they can safely spend. For \$500, that has proved to be a true bargain. Unfortunately, I can't say the same about this new service.

To test it out, I created two hypothetical portfolios, one that a young, single dot-commer named Charlie might own, and a second that might be held by an elderly couple, the Vincents. At the same time, to gather a second opinion about the service, I asked Mary Baldwin, a certified financial planner based in Melbourne, Fla., to reach into her files for a real-life case.

For each, we filled out TRP's 12-page questionnaire, which most people could complete within an hour, and sent them off to TRP. In the normal course of things, one of the firm's counselors would've phoned to acknowledge getting it and to

check any incomplete or uncertain details. Since TRP knew we were running this test, it simply analyzed the portfolios and, within a couple of weeks, sent back spiral-bound reports with conclusions and recommendations.

BIG FLAW. Here's where disappointment set in. Dot-Com Charlie's 26-page report, for example, 11 pages restate data from the questionnaire. Another seven present general advice on such things as diversification. Just five pages truly focus on what Charlie owns and what, if anything, he should do with it. Instead of having 91% of his \$322,000 portfolio in stocks, TRP suggested dialing back to 80% and broadening past domestic large-caps to small-cap (6%), mid-cap (10%), and foreign stocks (17%). The remaining 20%, if revised, should be split among investment-grade, high-yield, and foreign bonds. Is there anything wrong with this? No, except that the sort of generic advice available for free at many Web sites, including TRP's.

A major deficiency is the service's unwillingness to dig into common quandaries over how to handle taxable assets. For example, the elderly Vincents' \$424,000 portfolio is not allocated among stocks (45%), bonds (40%), and cash (15%), which the firm generally endorses. But it ignored the big risk: One-third of its equity allocation is in two big-cap stocks. Should they be sold and the money reinvested in mutual funds to spread the risk? Or held to avoid capital-gains taxes that sap wealth-building potential? Much less attempt an answer, the report doesn't even delineate the choices. After viewing the report on her even more commonplace of well-off 40-somethings, Baldwin confirmed my reactions. "Where's the meat?" she asked.

Judith Ward, a TRP-certified financial planner, told me that with complex cases such as one Baldwin posed, the firm is careful to ensure that clients know the service's limits. If it seems they'll be disappointed, it refunds their \$250. Whether to offer more advice on taxable assets, she also noted, was a major point of internal debate among designers of the service. They may one day add it. For now, the firm says many early users are learning their portfolios are out of balance (charts) and are getting the most value from the two to three hours they spend on the phone with a counselor. These CFPS-in-training, supervised by CFPS. Is that help worth \$100 an hour? I don't think so.

BusinessWeek online

For barker.online, go to www.businessweek.com/investor or AOL keyword: BW Daily

QUESTIONS? COMMENTS? E-mail barkerportfolio@businessweek.com or fax (321) 728-1711

Can a \$10 Stock Be More Expensive Than a \$100 Stock?

Recently, investment professionals will refer to a stock as "cheap" or "over-priced." How can a stock with a P/E ratio of 40 be greater than 100, particularly when we've heard the opposite? Investment professionals use a variety of parameters to determine if a stock is "cheap" or "expensive" or "over-priced." Importantly, financial analysis allows investors to apples to apples comparisons.

Investment professionals commonly use a "yardstick" to judge the "value" of a company's stock. The P/E ratio (Price/Earnings ratio) is constructed by dividing the P/E ratio of the company's Earnings per share (EPS) by the company's EPS.

If Company A has a P/E ratio of 40 (\$10/.25) and Company B has a P/E ratio of 40 (\$10/.25). If

constructed by dividing a company's P/E ratio by its growth rate. Let's say Company A was growing 30% per year and that



Westbourne
Capital Management, LLC

Westbourne Capital Management is a privately held, research-based investment management firm. The firm seeks to identify and make long-term investments in growth companies in growth industries. In its Private Client Services division, the firm manages separate accounts for individuals, families, foundations and endowments. The firm's Institutional Services division manages assets for corporate pension (both defined benefit and defined contribution) and retirement accounts. For information, contact Ruthie Bailey at rhbailey@westbourne.com or at 310-284-7800 Ext. 16.

310-284-7800 Ext. 16
www.westbourne.com

Company B was growing 5% per year. Company A has a P/E of 40, and a growth rate of 30%. 40 divided by 30 is 1.33. So Company A has a PEG ratio of 1.33. Company B has a PEG ratio of 4! (20 divided by 5). 1.33 is less than 4; from this analysis, the investment professional can make the statement that Company A is cheaper than Company B.

These two examples show how the same two companies might be viewed differently. From this, you should learn one thing:

"Investment professionals use a variety of valuation parameters to determine if a stock is 'expensive' or 'cheap'."

When an investment professional is stating that something is "cheap" or "expensive," you should always know how he/she is determining that relative price.

Little Known Trust Helps Business Owners Save Taxes

Imagine a trust whereby your company could contribute a virtually unlimited amount just for the benefit of a few select key people on a tax-deductible basis. Imagine further that the money contributed accumulates tax-free, could be distributed tax-free at a later date, and if any of the people died, the money

would go to their heirs both income and estate tax-free. Perhaps the best of all for business owners, imagine that these funds and benefits were secure from the hands of creditors. How much money would you contribute, especially if you knew that you would not have to share this benefit with other employees as you would with a pension plan? In fact, this type of trust is not to be used as a plan of deferred compensation and can be totally selective and discriminatory.

What type of trust is this? It is a special type of Welfare Benefit Trust (WBT), which has a long tradition in the tax code and was a big part of ERISA in 1974. The limitations for all WBTs are found in IRC Code Sections 419 and 419A. To be tax-deductible, the company must make contributions to a specific WBT known as a Multiple Employer Trust (MET) (commonly called a 419 Plan) of more than 10 employers, with no one employer contributing more than 10%, and no experience rating in the Plan. This Tax Code provision, Sec. 419A(f)(6), exempts your company from all of the limitations for WBTs contained in Sec. 419 and 419A; and effectively puts you in a time capsule which allows you to go back to the way the law was prior to

1984, when contributions were unlimited, and Dr. Schneider was allowed to take a tax deduction of \$1.4 million for his firm's contribution to a WBT. More recently, the Booth case in 1997 and the Neonatology case of July 2000 shows it is possible to deduct contributions made to a bona fide MET, as described



BENISTAR

BENISTAR is the nation's largest administrator of Multiple Employer Welfare Benefit Trusts. BENISTAR specializes in the design, installation and administration of all types of tax-advantaged trusts and employee benefit plans such as Employee Stock Ownership Plans (ESOP's), VEBAs, self-funded medical plans, 412(i) pension plans, post-retirement benefit funding and 1031 tax-free exchanges. BENISTAR's goal is to provide the best in sophisticated tax planning, technology and service to small companies as well as large corporations.

1-800-BENISTAR 860-408-7000
www.BENISTAR.com

under Sec. 419A(f)(6), even if those contributions are made for the benefit of just one employee. However, deductions for contributions to a Sole Employer WBT are strictly limited. Thus, through utilizing a properly established 419A(f)(6) MET, you really can make a large tax-deductible contribution, primarily for your benefit, with the money accumulating tax-free, and the benefits distributed income and estate tax-free to your named beneficiaries—while having the benefits being secure from the hands of creditors.

But don't expect this tax benefit to last forever. Treasury officials announced earlier this year that they want to change the rules under IRC Sec. 419(f)(6) on a prospective basis. Any change in the law will be effective only after the bill comes out of Congress next year.



How to Retire in Comfort and Safety

If you're like most people, you want two things in your retirement years: comfort and safety. You need enough income to enable you to live comfortably without having to work and the ability to sleep well at night, knowing you won't run out of money before you run out of time. To do that, you'll need a proven 3-tiered strategy.

This strategy (referenced in the booklet mentioned in the company profile) teaches us how to take advantage of the long term potential of equity investing while securing a safe and predictable current income from our assets. When we retire we typically convert our growth assets into income producing assets. More aggressive investors may remain fully invested and take systematic withdrawals at retirement. Either way there's risk. Living on a fixed income from bonds produces a safe stream of income but each year that income is eroded by inflation. So you go broke slowly. If you are fully invested in a stock portfolio by systematically selling shares of stock or a portion of your mutual funds and the market crashes, you could go broke rather quickly. Many investors watched their dreams go down the drain when the market declined some 45% in 1973-74. This concept allocates your retirement funds into 3 buckets.

Bucket #1 is invested in a short-term account that will be drawn down and spent over the first 5-7 years of retirement. This money is invested in instruments such as CDs, Money Markets, Treasury Bills or Notes with ladder maturities.

Bucket #2 is the mid-term vehicle that grows while Bucket #1 is pouring out income for the first 5-7 years. When Bucket #1 has run its course the contents of Bucket #2 rolls into it and the income stream continues, inflation indexed, for another 5-7

Raymond J. Lucia Companies, Inc.

A financial planner since 1974, Ray hosts a nationally syndicated financial talk show on Business Talk Radio and appears on TV Morning News in Southern California. His firm of 20 planners offers services to professionals, executives and business owners. Ray is a Certified Financial Planner and the author of the booklet, "Buckets of Money: How to Retire in Comfort and Safety", written especially for retirees and those looking to enhance their income while reducing risk. Securities offered through The Advisor's Group, member NASD and SIPC.

San Diego, CA 619-497-5555 or
877-PLANNER
San Jose, CA 408-371-6853

years. Bucket #2 investments can be longer term CDs, Fixed tax deferred annuities, Bond funds, etc.

Bucket #3 is the long-term bucket. Because you can wait approximately 10-14 years before needing to draw on Bucket #3, we can afford to take some risk and invest this money in a well diversified portfolio of growth and value stocks (domestic, international, large and small), in an attempt to achieve the long term results the stock market has returned over many years.

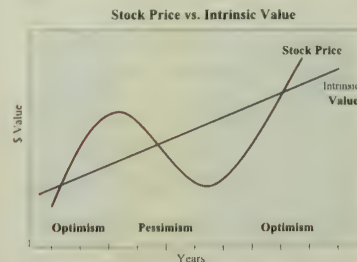
The key to this strategy is to buy enough time with Buckets #1 and #2 to allow Bucket #3 to grow. While no one can guarantee results, I think you'll find this concept gives you an excellent chance of enjoying the comfort and safety you want at retirement.

Investors Benefit from a Contrarian Investment Strategy

Contrarian investing is based on the belief that stock prices oscillate around a company's determinable intrinsic value. By taking advantage of these price swings, investors can achieve profitable long-term results with less risk. Here's why:

A company's real value is rooted in measurable financial characteristics. One can determine this value by carefully analyzing a company's assets, the trends in its return on capital, and the company's probable future earnings.

Stock prices oscillate around this intrinsic value when investors' opinions about a company's future change. When confidence abounds, investors are attracted to a stock, and their buying drives its price above real value. When that optimism abates and pessimism deepens, investors sell the stock, driving its price below intrinsic value. The cycle is often completed when uncertainty passes and the stock appreciates back towards its true value.



There is more at work here than just investor sentiment. Rational business fundamentals that relate to underlying economic principles drive price changes as well. A company's

stock rises during good times when demand is strong, growth is robust, competition is limited, and profits are expanding. Then, the stock falls

VH VAN DEVENTER & HOCH
Investment Counsel

Van Deventer & Hoch, a registered investment adviser, manages over \$1 billion in stock and bond portfolios. For thirty years, the firm has specialized in tailoring its value-oriented investment strategies to the needs of private clients throughout the western U.S. The firm utilizes numerous contrarian techniques in its investment process which is designed to produce favorable long-term returns with comparatively low risk.

Glendale, CA 800-247-5333
www.vdh.com

robust profits attract new investment, add competition, increase supply, eventually eroding profits and growth. The stock will appreciate when demand returns, but when demand falls, profits and growth recede, thus completing the cycle.

Intensive financial analysis provides contrarian investors with the courage to sell when other investors, in an emotional frenzy, are going all in. Similarly, they have the conviction to buy when other investors are despondent, buying at low prices, avoiding loss of capital at one extreme and not overpaying at the other, risk is reduced.

and returns are enhanced. Throughout history, this contrarian approach has delivered profitable results with less risk for conservative investors focused on the long term.

After-Tax Returns: An Investor's Bottom Line

As Ben Franklin once suggested, there are only two certainties in life: death and taxes. Fortunately, just as a healthy diet and exercise can fend off death, so too can smart investment minimize taxes. The bull market of the 90's has earned investors a market return of over 400%. But, is this actually the case? In reality, taxes consume anywhere from 25% to 30% of pretax returns, as the following chart indicates. In fact, evidence suggests that taxes have a much greater impact than most other cost, such as commissions and management fees, in evaluating "net" after-tax returns. In other words, the investor's bottom line. The solution for taxable investors is to refocus their focus on

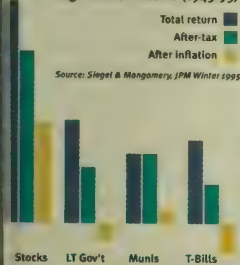
In comparison, most popular investment vehicles such as mutual funds usually assume that the goals, objectives and tax status of each investor are homogenous. This uniform treatment can be detrimental to the taxable investor. Take for example, the impact of short-term capital gains. A mutual

ROXBURY CAPITAL MANAGEMENT, LLC

Founded in 1986, Roxbury Capital Management, LLC provides professional portfolio management for both taxable and nontaxable clients. Roxbury's investment approach focuses on identifying fundamentally strong, industry leading companies with consistent, sustainable earnings growth, selling at prices considered undervalued based on long-term prospects. Roxbury specializes in managing customized, tax efficient portfolios. For information and videos featuring Roxbury's portfolios visit our website.

Santa Monica, CA 800-227-6681
www.roxcap.com

The Impact of Taxes and Inflation
Average Annual Returns (1945-95)



taking into consideration current and projected tax rates, cost basis of existing investments, income needs and investment time horizon. Portfolio managers are able to allocate time and resources to monitor each account, thus minimizing the overall tax impact.

fund may be forced to sell stock and realize a short-term gain when investors redeem their shares. This in turn penalizes the remaining members who are forced to pay taxes on appreciation that may have predated their entrance to the fund. In contrast, a separate account manager has the flexibility to wait for a short-term gain to become long-term, thus reducing the applied tax rate by almost half. *(39.6% vs. 20%)

Clearly, investment advisors and clients alike must depart from standard practice and begin implementing strategies specifically designed to optimize after-tax returns. The investor should be the ultimate beneficiary through superior growth of wealth over time.

(* Maximum short-term capital gains tax is 39.6%. Maximum long-term capital gains tax is 20%.)

Financial Planning Action List for 2001 and Beyond

1. Forget about market timing. As market volatility has increased in recent years, it has become even more tempting to try to time the market. Unfortunately, the time when it's most tempting to sell is usually the best time to buy. If you're confident in your investment strategy, be prepared to ride out market fluctuations.

(Alternative Minimum Tax) on qualified options (ISOs).

2. Practice tax smart investing. Put your high-fliers in taxable accounts. That way, if they score big you can pay taxes at the capital gains rate (versus ordinary tax rates on withdrawals from retirement accounts), and if they crash you can sell them and take a write-off. But remember that your net return after taxes is more important to your net wealth than simply avoiding taxes.

4. Look into a Section 529 Plan for college funding. It may be a better alternative to an UTMA and it can remove assets from your estate. Earnings grow tax deferred until withdrawn for qualified education expenses, at which



Tarbox Equity, Inc. is a fee-only Registered Investment Advisory firm that provides comprehensive, objective financial planning advice and portfolio management. Founder Laura Tarbox is a Certified Financial Planner with more than 20 years of experience in financial planning and investing. Tarbox Equity, Inc. employs a team approach in working with clients who want top-quality advice, service and results. Minimum account size for investment management is \$1,000,000.

Newport Beach, CA 800-4-TARBOX
www.tarboxequity.com

Reduce risk by taking profits on over-weighted positions even if it means paying taxes.

3. Have a plan for optimizing your stock options. Careful planning is required to determine how and when to exercise your stock options. There is a precarious trade-off between minimizing the tax bite on these complicated instruments and minimizing the risk of being left with "under water" options. View any taxes that must be

point they will be taxed at the child's rate. The choices and investment options for such plans have improved greatly over the past year.

5. Keep your estate out of the government's hands. Instead, put together a charitable giving plan. Simple ideas, such as donating appreciated stock instead of cash, are a good starting point. More complex strategies, such as setting up a Charitable Trust or Family Foundation may be appropriate for larger gifts. In any case, don't delay updating your estate planning by waiting for estate tax law changes.

"...remember that your net return after taxes is more important to your net wealth than simply avoiding taxes."

Instead, put together a charitable giving plan. Simple ideas, such as donating appreciated stock instead of cash, are a good starting point. More complex strategies, such as setting up a Charitable Trust or Family Foundation may be appropriate for larger gifts. In any case, don't delay updating your estate planning by waiting for estate tax law changes.

Modernizing Municipal Bonds

The municipal bond market has long been burdened by tradition and a bewildering array of securities, but three significant developments are causing positive, dynamic changes in the municipal bond market.

First, municipal bonds can be purchased online. In a 1997 e-commerce survey by the Bond Market Association there were only three web-based systems being developed for trading municipal bonds. Since then, the number of systems has grown more than ten-fold; there are now estimated to be 31 systems either in place or in development for online municipal bond investments.

Second, bond prices in this over-the-counter market, which were once treated as closely guarded secrets, are now available for the benefit of all market participants. The Bond Market Association is assisting the Municipal Securities Rulemaking Board, the tax-free market's self-regulating body, in reporting daily price information on frequently traded municipal bonds. The daily trade information is made available at the click of a mouse, empowering investors with vital information on the value of tax-free state and local government bonds.

Finally, investor disclosure in the municipal market has rapidly improved. Focused regulatory pressure has forced tax exempt bond issuers to provide

timely and more complete information along with annual updates to keep the market informed of material changes



Stone & Youngberg LLC
buybonds.com

Stone & Youngberg is a full service brokerage firm specializing in tax-exempt and taxable fixed income securities. With a boutique's attention to the individual investor, Stone & Youngberg is California's largest underwriter of local government debt introducing to market approximately 100 new issue tax exempt bonds each year. Established in 1931 with offices in San Francisco, Los Angeles, San Diego and Orlando. Contact info@syllc.com.

800-447-8663
www.buybonds.com

through the life of the security. With more accurate annual financial information and relatively low cost research tools available to anyone with a computer and a phone line, it will be simple for investors to make judgments about tax-exempt bond investments.

Beyond these three important recent developments, in the near future investors can look for municipal issuers to make greater strides in adopting the Securities and Exchange Commission's plain English guidelines that corporate securities' disclosure has been following for almost 3 years.

The consequent combination of online investing and better price information about bonds will expand the municipal market making it easier for the savvy, well-to-do, tax free investor to get the most out of an internet age investment in municipal bonds.

"...there are now estimated to be 31 systems either in place or in development for online municipal bond investments."

The Right "Ride" Through a Volatile Market

Recently we were in Washington D.C. to speak to a group of high-net worth investors on the merits of establishing a team of "best-of-breed" financial professionals to provide guidance in key wealth management areas. Many people have found that as their financial situations become more complex, they require not only sophisticated advice, but close communication among advisors with disparate expertise to meet objectives for themselves and their families, including succeeding generations.

With a break in the conference, I was able to spend a couple hours a few blocks away at the Air and Space Museum. One of the attractions is a "flight simulator" which provides a choice of several programs, ranging from the relatively tame to the wildly adventurous. I took two trips which reminded me of the choices investors face as they cope with turbulent markets.

"Space Canyon" was a wild outer space foray on a futuristic roller-coaster, replete with G-Force impossible twists and turns, and mid-air transits between perilous rock walls. With luck, one was able to return back to the starting point, albeit somewhat shaken for the effort.

"Mission to Mars" had a slower pace, with constant navigational direction from a "mother ship" located above the surface of the planet. The journey was often bumpy, but there was a clear objective to achieve and, when an avalanche of boulders threatened the craft, the guiding ship was there to effect rescue.

Back at the conference, it was clear to me which individuals

had chosen which ride for the market experience. The shocked roller-coaster riders have ridden the bull market of the 1990s with little professional



STEIN ROE & FARNHAM
Private Capital Management

Stein Roe & Farnham PCM employs a national network of seasoned investment analysts providing in-depth research for individualized portfolio construction. Each client relationship is personally overseen by a regional office portfolio manager. The focus of PCM is on the tailored transition of existing assets, close coordination with the client's team of professional advisors and tax-efficient ongoing portfolio management. Each PCM professional serves a limited number of clients to ensure the highest level of communication in this "client-centric" business model.

Contact: Adrian Moravcsik, CFA
San Francisco, CA 800-558-3599

direction and often, with great difficulty, overwhelming a reasonable sense of risk management and family wealth planning. The more serene investors had long established a team of advisors for portfolio management, estate planning, tax planning and specialties that allowed them to enjoy market success without jeopardizing financial independence.

Of particular significance is the effect that coordinated wealth counsel has on the non-investment savvy spouses, children and grandchildren. Without proper education and a joint commitment to an understandable revisited strategy, it is not just portfolios, but even marriages that are vulnerable in a turbulent market.

Most investors begin their financial growth with the guidance of a single "quarterback," a trusted advisor. Building around the individual and insisting on communication between a team of advisors and a group of family members provides the best course for a safe and successful journey through the unknowns ahead.



Earnings Momentum Drives Stock Prices

The theory of momentum investing is similar to one of Newton's Laws which states that once an object is set in motion it stays in motion until acted upon. And when an object is acted upon, it tends to remain in motion until something moves it. In a similar fashion, a corporation having fundamental earnings momentum will probably continue through those problems more than expected.

In a corporation that has experienced faster growth than expected, the factors driving the change in rate of earnings momentum (e.g., change in management, products, competition), factors will result in effect longer than expected.

In a corporation that has momentum from its earnings growth, the stock is following the stock to be surprised as corporate earnings come in above expectations. Therefore, valuations tend to be less important than momentum investing than in the past. Since earnings estimates will constantly be revised. Momentum investing takes advantage of the change in earnings momentum watching the stock involved.

It may cause earnings estimates to be raised (or lowered) in case of a sell or a short. In regard to the timing of purchase or sell, momentum investing waits for a

change in fundamentals to be established. By waiting for the turn, momentum investors are closer to the stock price movement which discounts the turn in fundamentals, resulting in more 'live' money in the portfolio. By the same token, the stock may have already moved somewhat, so the momentum investor will be paying some

Duncan-Hurst MUTUAL FUNDS

Duncan-Hurst Capital Management specializes as a growth equity investment adviser. Founded in 1990 by William H. "Beau" Duncan, Jr., the firm has grown to over \$4.0 billion in assets under management in 10 years. Duncan-Hurst Mutual Funds, a family of no-load mutual funds, was founded in 1999. The Funds offer clients a pure growth investment strategy using a successful and time proven investment process.

Aggressive Growth Fund • International Growth Fund
Large Cap Growth-20 Fund • Technology Fund

For more complete information on the Funds, you may obtain a prospectus by calling:

800-558-9105

www.duncan-hurst.com

Please read the prospectus carefully before investing.

'insurance' to be right a higher percentage of the time. As explained earlier, problems may persist longer than expected, so the price of being early is 'dead' money - a period which many times is longer than expected.

In summary, momentum investors buy late and sell late, but the middle part of the price cycle may be quite extended in price movement and duration. Momentum investing is a dynamic analysis -

looking for changes in growth rates and the factors causing those changes.

"Momentum investing takes advantage of the surprise in earnings to boost the stock price..."

Is It Time to Add Financial Services to Your Portfolio?

After the high tech "spring cleaning", investors are wondering: Is there a way to invest successfully with less volatility? Perhaps the old economy is the place to invest new money in 2001. We believe the financial services sector may represent some of the best values available today.

Leading financial services companies know that consistent increases in earnings per share growth are the true measure of a company's value, and ultimately drive stock prices. Therefore it's important to seek out new fee income channels that are not interest rate sensitive, are relatively immune to credit problems, and act like annuity income over time.

The long anticipated repeal of the Glass-Steagall Act allows banks to participate in the broker/dealer and investment-banking arena in a much bigger way than had been previously possible. The Gramm-Leach Act that took effect in March also promotes mergers across different financial industries. To grow these fee income channels quickly, banks and foreign companies have been acquiring U.S. brokerage firms. Newspaper headlines show that opportunities in this sector have proven irresistible to foreign financial institutions.

Switzerland's UBS AG's agreement in mid-July to buy U.S. brokerage Paine Webber marked the largest ever acquisition of an American financial

services company by a European firm. In August, CS First Boston, another Swiss financial institution, agreed to purchase DLJ. And in America,



Focusing on the financial sector since 1962.

With over \$771 million in assets, and a longer track record than 98% of today's funds, SIFE Trust Fund offers the opportunity to invest in the financial services sector. For 38 years the fund has sought capital growth using stringent investment criteria. Please read the prospectus carefully before investing, for a description of the risks. Because sector investing is more narrowly focused it may result in higher volatility. Call or visit SIFE's web site for a free prospectus.

Walnut Creek, CA 888-673-7433
www.sife.com

Chase Manhattan Bank recently announced it was acquiring investment-banking firm J.P. Morgan.

Top financial institutions have been generating double-digit earnings growth with up to 7% revenue growth, even during six straight interest rate increases. And with Price/Earnings ratios of 10-15, many

"...consistent increases in earnings per share growth are the true measure of a company's value..."

company values are at or near historic lows.

We believe there will be further integration and acquisitions in financial services both in America and abroad. These companies are seeking quality earnings per share growth, and efficient revenue growth through broader product offerings and greater economies of scale. In 2001, expect "new" interest in the "old" economy.

From love performance products with emotional, inspiring design. Consumers everywhere are demanding not only great aesthetics, but a fusion of design and technology to both enhance and simplify their complicated lives. We thank IDSA and *Business Week* for recognizing our passion for creating cars, motorcycles and products that not only move our customers physically as 'the ultimate driving machines,' but move their hearts as well."

—Chris Bangle, Chief of Design, BMW AG, Germany

GOOD

"As a global company that firmly believes in the strategic value of industrial design excellence and its ability to establish our presence as a premium brand with a strong preference by consumers, it is very rewarding to be recognized with an IDSA/*Business Week* IDEA."

—James Lico, President, Fluke Corporation, a Danaher Company

DESIGN

"The Fisher-Price Brand has been built upon 70 years of design innovation and excellence that gives families the best possible start in life. It is an honor to receive multiple IDEAs and we salute IDSA and *Business Week* for recognizing the impact design excellence has on business leadership."

—Neil Friedman, President, Fisher-Price Brands

PAYS

"As a winner of several IDEAs, Motorola recognizes this program as a premier indicator of design excellence. These awards confirm category creators in increasingly competitive markets."

As technologies converge, design becomes more valuable as a key differentiator and strategic tool."

—Bill Werner, Corporate Vice President & General Manager, 'DEN' Subscriber Products Group, Motorola

OFF

**2001
INDUSTRIAL
DESIGN
EXCELLENCE
AWARDS**

Sponsored by *Business Week*
& Presented by the Industrial
Designers Society of America

Apple Computer, Black & Decker, Philips, Sony, Target, Steelcase, GE and Symbol Technologies. These companies, all 2000 IDEA winners, show that good design pays off. It pays off in lower costs, healthier profits, greater customer satisfaction and new product innovation. *Business Week* is again proud to sponsor the Industrial Design Excellence Awards (IDEA) annual competition conducted by the Industrial Designers Society of America. The IDEA is accepting entries from Asia, Europe, Latin America, Canada and other foreign countries for products sold in North America. *Business Week* will publish a major story on the winners in a June, 2001 issue. Designs of business and medical equipment, consumer products, graphic and digital media, heavy machinery, transport packaging, exhibits and furniture are eligible. The deadline for entry is February 12, 2001. For entry information, procedures and fees contact: Industrial Designers Society of America (IDSA), 1142 Walker Road, Great Falls, Virginia 22066. Telephone: (703) 759-0100. Fax: (703) 759-7679. E-mail: idsa@idsa.org. Web: www.idsa.org.

SYST CAN ASSIST



GENE G. MARCIAL

Asyst thrive
t helps world
makers revive?
Mesa Airlines
ts for a buyer
op Northwest.
Technology from
PRWW will speed
new drugs' O.K.

Technology is in a down cycle, so some bulls are going for tech stocks that have niche products and strong earnings growth. One such: Asyst Technologies (ASYT), a small-cap company that assists semiconductor big leaguers to produce low-cost but high-yielding chips.

Asyst's stock has been beaten down as much as other techs—from 43 in June to 12½ on Dec. 13. Yet the "world's largest semiconductor fab [chip-making] automation company is growing faster than the industry," says Michael Kahn, an analyst at New York investment firm A.R. Schneider. Asyst's customers include Applied Materials, IBM, Motorola, Novellus Systems, Texas Instruments, Sony, and Taiwan Semiconductor Manufacturing.

Asyst helps fight contamination by creating ultraclean automation systems and environments in chipmakers' cleanrooms. Asyst's systems isolate semiconductor wafers, track them, and, with the aid of robotic gear, help chipmakers optimize output and boost yield. Asyst does well in tech down cycles because chip-equipment makers try even more to curb costs by upgrading their tools.

The upgrading of chip-making gear, such as converting from 8-in. wafers to the more productive 12-in. ones, is a growing business for Asyst. Outsourcing of Asyst's foundry services also has huge earnings potential. For the year ending Mar. 31, 2001, Kahn expects Asyst to earn \$2 a share, on sales of \$600 million, up from 38¢ on \$225 million in fiscal 2000. In 2002, Kahn expects \$2.50 on \$750 million. He sees the stock zooming to 60 in 18 months.

Analyst Brent Hodges of Merrill Lynch, who rates Asyst a "long-term buy," says the company's recent acquisition of two precision-machining and assembly outfits enhances Asyst's strategy to provide more outsourcing.

MESABA AIRLINES IS SET TO CLIMB HIGHER

When Northwest Airlines, the world's fourth-largest, offered in early November to buy the parent of regional carrier Mesaba Airlines, the shares of Mesaba Holdings (MAIR) soared from 10 to 13½. Northwest already owns 28% of Mesaba, with two seats on its board. The regional carrier has formed a panel to study the offer. Mesaba has yet to accept or reject, and its stock is still hovering around 13.

"But we expect Mesaba to reject the

lowball \$13-a-share offer soon and seek a higher price—from Northwest or elsewhere," says Sven Monberg, a special-situations analyst at Starr Securities. "The offer is cheap—about eight times the estimated March, 2001, earnings of \$1.61 a share—compared with SkyWest Airlines' price-earnings ratio of 20 and Atlantic Coast's 28," he says. With Mesaba's earnings growth and regional routes to 103 cities in 27 states, industry experts estimate that Mesaba is worth \$248 million to \$262 million, or 17 to 18 a share, says Monberg. He thinks Northwest will raise its bid for Mesaba, which has a cash hoard of \$112 million.

A possible white knight is Mesa Air Group: Soon after Northwest made its offer, Mesa sent a letter to Mesaba's board expressing interest in a "business combination" with Mesaba. Mesa already owns 3% of Mesaba. Northwest declined comment. Stay tuned.

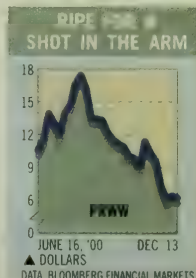
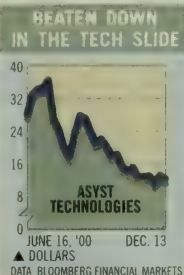
PRWW: A FAST TRACK THROUGH THE FDA

A company that could somehow expedite the process of approval—or rejection—by the Food & Drug Administration could be a gigantic winner, says investment manager Jack Silver, president of SIAR Capital. He thinks such a company exists: PRWW (PRWW), which provides Web-based solutions that streamline the clinical-trial process for drugmakers.

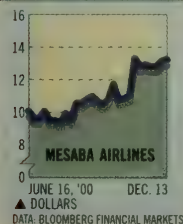
Shares of PRWW shot to 22 in February, up from 10, after investors got wind of its eResearch Technology unit, which developed the software to automate trials, including data-collection and filing for approval of new drugs. But the stock fell back to 5 by Dec. 4, 2000, after PRWW delayed the scheduled initial public offering of eResearch. It has since inched up to 6½.

Silver expects the stock to triple in a year, because he thinks clinical trials are moving from paper-based to electronic systems. Soon, the government will mandate such processing to speed things up, he says.

David Jordon of Axiom Capital Management expects the IPO of eResearch to get under way in the first quarter of 2001. He says nine companies have signed up as eResearch clients, including Millennium Pharmaceuticals, Isis Pharmaceuticals, 3M/Pharmaceuticals, and Breast Cancer International Research Group. Each year, top drugmakers spend \$8 billion on handling data for clinical trials. Less than 1%, says Jordon, is handled electronically.



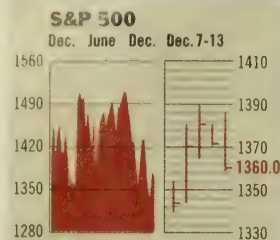
GAINING ALTITUDE FROM A RECENT BID



BusinessWeek online

Read Gene Marcial's Inside Wall Street Online column Tuesday afternoons at www.businessweek.com/today.htm. And see him Fridays at 11:30 a.m. EST on CNNfn.

STOCKS

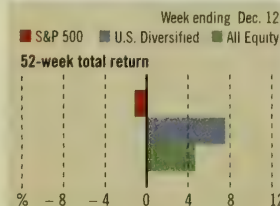
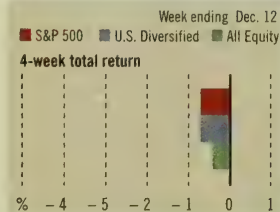


COMMENTARY

So much for an election relief rally. Stocks turned in a mostly tepid performance for yet another week. Even a tech rally on Dec. 8 and 9 didn't do much for the Nasdaq, which eked out a gain of less than 1% for the week. The culprit: more dismal earnings warnings from big tech companies like Intel, Compaq, and Motorola. The Dow finished up 1.2%, the S&P 500 up 0.6%.

Data: Bloomberg Financial Markets
Bridge Information Systems, Inc.

MUTUAL FUNDS



Data: Standard & Poor's

U.S. MARKETS

	Dec. 13	Week	Year to date	Last 12 months
S&P 500	1360.0	0.6	-7.4	-3.9
Dow Jones Industrials	10,794.4	1.2	-6.1	-3.6
Nasdaq Composite	2822.8	0.9	-30.6	-22.8
S&P MidCap 400	508.7	1.4	14.4	21.2
S&P SmallCap 600	211.3	2.9	6.9	13.9
Wilshire 5000	12,545.6	1.2	-9.2	-5.3

SECTORS

			% change	
Business Week 50*	1059.2	0.2	-18.6	-14.4
Business Week Info Tech 100**	694.6	-3.5	NA	NA
S&P/BARRA Growth	745.9	-0.2	-15.9	-12.7
S&P/BARRA Value	624.7	1.5	2.3	5.9
S&P Energy	898.1	2.3	7.6	9.3
S&P Financials	159.6	2.8	19.9	19.2
S&P REIT	86.0	1.5	16.8	24.3
S&P Transportation	685.2	-0.2	14.8	13.4
S&P Utilities	329.1	2.6	44.8	52.6
GSTI Internet	241.7	3.0	-66.1	-67.0
PSE Technology	879.9	-0.6	-9.5	5.7

*Mar. 19, 1999=1000 **Feb. 7, 2000=1000

BEST-PERFORMING GROUPS

	Last month %	Last 12 months %
Instrumentation	40.6	Defense Electronics 141.5
Tobacco	17.6	HMOs 79.3
Gold Mining	15.4	Savings & Loans 77.9
Oil Exploration & Prod.	13.0	Homebuilding 76.6
Genl. Merchandise Chains	12.4	Natural Gas 72.6

EQUITY FUND CATEGORIES

4-week total return	%	52-week total return	%
Leaders		Leaders	
Precious Metals	11.4	Health	66.9
Financial	4.7	Natural Resources	33.8
Real Estate	4.7	Real Estate	31.8
Natural Resources	2.5	Financial	24.7
Laggards		Laggards	
Technology	-6.4	Japan	-25.9
Small-cap Growth	-4.0	Diversified Pacific/Asia	-22.9
Japan	-3.8	Diversified Emerging Mkts.	-20.3
Communications	-3.4	Pacific/Asia ex-Japan	-17.8

EQUITY FUNDS

4-week total return	%	52-week total return	%
Leaders		Leaders	
Monterey OCM Gold	18.5	Schroder Cap. Micro Cap	144.2
Rydex Precious Metals	17.5	Dresdner RCM Biotech. N	140.5
USAA Gold	17.0	Munder Fram. Hlthcare. B	122.2
Amer. Century Global Gold	16.5	Franklin Biotech. Disc. A	101.1
Laggards		Laggards	
Frontier Equity	-23.8	Jacob Internet	-71.7
Jacob Internet	-21.0	Potomac Internet Plus	-66.8
American Heritage	-20.0	Warburg Pinc. Jap. Sm. Co.	-55.7
Potomac Internet Plus	-18.8	ING Internet A	-51.2

GLOBAL MARKETS

	Dec. 13	Week	% change
S&P Euro Plus (U.S. Dollar)	1364.9	-1.7	
London (FT-SE 100)	6403.0	2.1	
Paris (CAC 40)	5962.3	-0.4	
Frankfurt (DAX)	6620.2	0.0	
Tokyo (NIKKEI 225)	15,168.7	1.9	
Hong Kong (Hang Seng)	15,621.7	3.5	
Toronto (TSE 300)	9098.1	-1.4	
Mexico City (IPC)	5699.8	-1.6	

FUNDAMENTALS

	Dec. 12	Wk. ago
S&P 500 Dividend Yield	1.16%	1.16
S&P 500 P/E Ratio (Trailing 12 mos.)	26.2	26.7
S&P 500 P/E Ratio (Next 12 mos.)*	22.2	21.8
First Call Earnings Revision*	-2.62%	-1.72

*First Call Corp.

TECHNICAL INDICATORS

	Dec. 12	Wk. ago
S&P 500 200-day average	1437.9	1437.7
Stocks above 200-day average	52.0%	52.0
Options: Put/call ratio	0.61	0.72
Insiders: Vickers Sell/buy ratio	1.37	1.59

WORST-PERFORMING GROUPS

	Last month %	Last 12 months %
Metal & Glass Containers	-31.7	Metal & Glass Cont.
Conglomerates	-16.5	Long-Dist. Telecom
Photography/Imaging	-15.7	Office Equip. & Supp.
Leisure Time	-14.5	Conglomerates
Computer Systems	-11.5	Photography/Imagin

INTEREST RATES

KEY RATES

	Dec. 13	Week ago
MONEY MARKET FUNDS	6.14%	6.15%
90-DAY TREASURY BILLS	6.03	6.09
1-YEAR TREASURY BILLS	6.81	5.72
10-YEAR TREASURY NOTES	5.25	5.32
30-YEAR TREASURY BONDS	5.47	5.52
30-YEAR FIXED MORTGAGE†	7.40	7.55

†BancQuote, Inc.

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt bonds, assuming a 31% federal tax rate.

	10-yr. bond
GENERAL OBLIGATIONS	4.62%
TAXABLE EQUIVALENT	6.70
INSURED REVENUE BONDS	4.74
TAXABLE EQUIVALENT	6.87

THE WEEK AHEAD

INTERNATIONAL TRADE Tuesday, Dec. 19, 8:30 a.m. EST ► The November U.S. trade deficit for goods and services is expected to narrow to \$33 billion from \$34.3 billion in October, based on the median forecast of economists surveyed by Standard & Poor's MMS, one of The McGraw-Hill Companies.

FOMC MEETING Tuesday, Dec. 19, 9:00 a.m. EST ► The Federal Reserve Board's Open Market Committee will meet to set monetary policy. The S&P MMS economists

unanimously expect the Fed to assume a neutral bias and keep the federal funds rate at 6.5%. The less hawkish stance comes as slower economic growth tempers concerns over inflation.

HOUSING STARTS Wednesday, Dec. 20, 8:30 a.m. EST ► Housing starts in November probably held at an annual rate of 1.53 million.

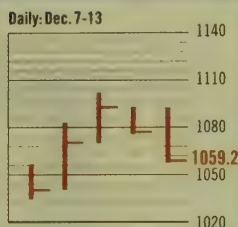
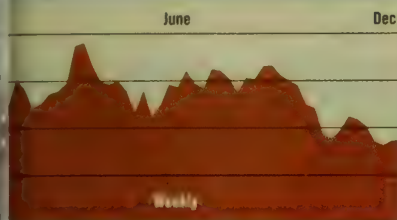
FEDERAL BUDGET Wednesday, Dec. 20, 2:00 p.m. EST ► The S&P MMS survey proj-

ects the November Treasury budget show a deficit of \$25 billion, compared with \$27 billion in November, 1999.

PERSONAL INCOME Friday, Dec. 22, 4 a.m. EST ► Personal income and personal consumption probably grew by 0.4% and 0.3%, respectively, in November.

DURABLE GOODS ORDERS Friday, Dec. 23, 8:30 a.m. EST ► November orders for durable goods likely increased by 0.4% after dropping by 5.5% in October.

BUSINESS WEEK FIFTY



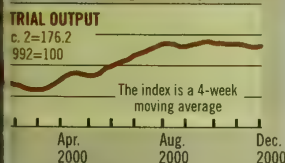
the BW 50, which ended the week up only a quarter of a percentage point. Pushing the index into turf were Lucent, up 31.8% on rumors that Nokia would buy the company and Dell Computer, which a short-lived tech rally during the week. Losers included Sun Microsystems, down 28.2% for the week, questioned its growth prospects. There were also rumors of accounting problems, which Sun denied.

COMPANY PERFORMANCE

any	% change		Rank	Company	% change	
	Week	Since 3/1/00			Week	Since 3/1/00
mer tems	1.0	-37.0	26	Intel	11.8	-38.7
	8.2	-14.0	27	Tribune	7.2	7.1
	-0.6	-22.4	28	Xilinx	8.3	-42.0
	-6.0	-20.6	29	Enron	3.6	8.0
tems lanley Dean Witter	-13.5	32.0	30	Lexmark International	-7.9	-65.5
	-1.8	-73.5	31	Omnicom Group	-3.3	-8.6
	8.4	0.0	32	America Online	8.6	-15.0
	-6.0	-46.9	33	Guidant	-2.1	-23.0
chnologies	31.8	-69.0	34	MBNA	3.6	55.9
Technology	17.4	9.6	35	Pfizer	5.6	43.7
systems	-28.2	-35.2	36	Solection	-4.2	-18.8
chwab iot	-1.3	-49.4	37	Gateway	5.1	-74.7
	3.2	-2.8	38	Wells Fargo	3.1	44.1
	0.3	-18.8	39	General Dynamics	7.7	75.8
puter	13.5	-52.5	40	Texas Instruments	3.6	-41.6
pliance	-4.2	20.3	41	Capital One Financial	-0.4	54.1
	-4.7	-23.4	42	General Electric	-1.7	21.0
	1.9	14.0	43	Kansas City Southern Industries	-5.8	74.3
	1.7	3.2	44	Wal-Mart Stores	-8.2	2.7
re	-1.7	-66.9	45	Paccar	3.1	7.7
aterials	5.2	-53.8	46	PE Biosystems Group	0.0	-17.9
national	-0.4	54.7	47	Merck	2.7	53.3
Associates	-6.0	-61.4	48	Adobe Systems	-1.5	31.9
1	-10.0	-52.8	49	Reliant Energy	8.4	101.8
	-8.1	-34.3	50	Citigroup	6.5	36.9

ODUCTION INDEX

Change from last week: 0.2%
Change from last year: 11.0%



n index moved higher over the latest calculation of the four-week moving average jumped to 177.8 from 176.1. On a seasonal basis, lumber, coal, and rail-freight traffic. Auto production also increased for the month dropped sharply, with steel, truck and crude-oil refining also declining. For the month, the index stood at 175.8, down October.

h of the index components is at www.business-lution.com. Copyright 2000 by The McGraw-Hill Companies, Inc.

ONLINE RESOURCES

BW50 Track the index and the companies in it all day long. Plus: our exclusive Info Tech 100 index.

S&P PERSONAL WEALTH Real-time market coverage, industry analysis, and personalized retirement advice.

MUTUAL FUNDS Search for funds, view BW ratings, and read Q&A's with fund managers.

COLUMNS Hot stocks, takeover plays, and the latest strategies for managing your money.

BusinessWeek online

For more investment data and the components of the production index, visit www.businessweek.com.

WHICH DO YOU WANT MOST?

- a. infinite capacity
- b. infinite availability
- c. infinite trust

How about all of the above?

www.comdisco.com

COMDISCO®

MARKETPLACE

Cruises

REDEEM AND EARN MILEAGE PLUS MILES



1-888-666-8120

WIN A CRUISE - SEE OUR WEBSITE
12 CRUISE LINES - GREAT PRICES

Corporate Gifts/Premiums

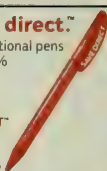
Buy direct. Save direct.

- Custom imprinted promotional pens
- Buy direct, save up to 25%
- Two business day turnaround available

Worldwide Pens DIRECT

Toll free: 877-510-7367

www.worldwidepens.com



Business Opportunities

**OFFSHORE BANK
FOR SALE**

FreeReport

800-733-2191

**MAKE MONEY AS
BUSINESS FINAN
CONSULTANT**

Arrange Business Loans and Equ
Leases from \$1,000 to \$10 million
brokering. Work directly with Na
Lenders. Unlimited earnings potent
residual income.

**FREE 45 minute
video seminar and
information packet**

CALL 1-800-336-39

The Loan Consultants, Inc.

Education/Instruction

**Get Your MBA
Through Distance Learning**



**University of
Leicester**

- Prestigious British University
- World Leader in Distance Learning
- No GMAT required
- Local support center
- Flexible Education Financing available
- Work experience & qualifications considered
- Member of the Association of Business Schools
- Accredited by the Association of MBAs
- Offered under Royal Charter

800-874-5844
email: rdiusa@erols.com
www.rdi.co.uk

rdi

BIRCHAM INTERNATIONAL UNIVERSITY

**Bachelor
Master
Ph.D**

Accredited Distance Learning
College Degrees. Over 100 majors
Credit for Work/Life Experience

www.bircham.org / usa@oxfordnet.edu

CALL NOW! TOLL FREE 1-877-7 BIU USA

**ABSOLUTELY FREE
EVALUATION**

**Bachelor's -- Master's --
Ph.D. Degrees**

Based on life and work experience.
Confidential -- Fast -- Student
Loans. www.arrc.org

800-951-1203

**BUSINESS
PARTNER**

Retired lawyer needs associates to
offer unique financial services to
make clients lawsuit-proof. All the
local appointments you can handle.
State-of-the-art marketing tools.
Huge demand. Extremely high income
with lifetime residuals in multi-
billion dollar market. Candidates
must be bondable, have outstanding
references & good communication
skills. 24-hr. recording.

(800) 653-4497

Vacation Rentals

**Enchanting Bali V
Exclusive Beachfront Loca**

Your Private Home on the Island of Bali... Five
14,000 sq. ft. Five Luxury Suites, Lush Garden
& Tennis. Gourmet Chefs, Masseuse, Car with
Included in Staff of 24. www.ultimatevilla

(813) 506-7041

Education/Instruction

Expand your horizons.



**Earn a top-ranked MBA without
interrupting your career.**

Columbia and London Business Schools join to offer the 20-
month EMBA-Global, a new Executive MBA that drives managers
on a unique route to global leadership. Classes start May 2001 in
New York and London on a convenient, innovative schedule.

To learn more about Columbia's entire Executive MBA portfolio
(EMBA-Global, Friday/Saturday and Friday Programs), attend an
Open House and visit our Web site.

**London
Business
School**

**COLUMBIA
BUSINESS
SCHOOL**



Call us at 212-854-2211 or visit us at www.gsb.columbia.edu/emba

Ad Rates and Information

one: (312) 464-0500 Fax: (312) 464-0512

For more advertiser information, log onto

www.businessweek.com/classifieds

Legal Services

SET PROTECTION

Corporations, Ltd. Partnerships, LLCs
Private Trusts, Corps., Private Banking
4 Jurisdictions • Maximum Privacy
Tax Savings • Estate Planning
Professional - Confidential

John Sears, CPA • Attorney at Law
444-0622 • www.searsatty.com

Business Services

Need a Logo?

Get a Professional
Custom Designed
LOGO TODAY!
Amex
Free: 1-888-869-5646
www.1800mylogo.com

Incorporate.com

Registered agent services
Bank accounts opened
Minute director services
Incorporation Handbook
Business Incorporators, Inc.
0.423.2993

Corporate Gifts

Logo Tattoos!

1000
tattoos
\$189
(plus shipping
& handling)
2"x2"
(image area
1-3/4" x 1-3/4")

2000 tattoos, only \$299
CALICO
225-4269 Fax: 707/446-8273
1: CalicoUSA@Yahoo.com (PC)
1: Calicotattoos@aol.com (Mac)
Website: CalicoUSA.com

Mouse Pads

"Where the Heck is Area Code 978?"

Code Mouse Pad puts up-to-the-
minute U.S. area code info at your
rips! Super-accurate, code-order
story, high quality, hard-top, fast-
clicking pad, Time Zone info too!
Only \$7.99 + \$2.58H
• Bonus Gift while supplies last!

The Product Works
Box 9004 Gaithersburg, MD 20898
www.theproductworks.com

Meeting Planners

Meetings are our Business.

Your comprehensive
outsourcing solution.

Fep, Inc. 1-800-465-7374
www.meetings-events.com

Men's Footwear

MEN: BE TALLER!!

Tired of being
short? Try our
quality footwear
HIDDEN height-
increasing feature
INSIDE shoe. No
OVERSIZED
HEELS! Will make
you 2-3" TALLER depending on style. OVER 100 STYLES AVAILABLE.
Extremely comfortable. Sizes: 5-12 Widths: B-E-E-E. In business
over 15 years. MONEY-BACK GUARANTEE. Call or write for
FREE color catalog.



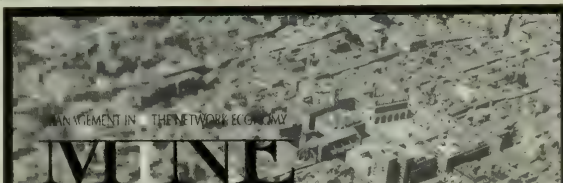
ELEVATORS®
RICHLEE SHOE COMPANY, DEPT BW0D
P.O. BOX 1948 FREDERICK, MD 21705

1-800-290-TALL

Computer Equipment

Ted Dasher Inc.
Hewlett-Packard
Buy • Sell • Trade
LaserJet • ColorPro • DraftMaster • DeskJet
DraftPro • DesignJet • Ruggedwriter
Electrostatic Plotters
HP 9000/3000 Workstations & Personal Computers
Demo & Refurbished Equipment
800-638-4833
Email: sales@dasher.com

Education/Instruction



Log on today for the Master's of tomorrow!

<http://mine.pc.unicatt.it>

MASTER OF MANAGEMENT IN THE NETWORK ECONOMY

Learn how to manage an organization in
the digital age. Be part of an international
group on a small campus in the peaceful
surroundings of historic Piacenza, in Italy.

- Collaboration between the Università Cattolica at Piacenza, Italy and the University of California at Berkeley, USA.
- 11 months of coursework led by professors from top U.S. universities and by Silicon Valley experts.
- 5-month internship in a network-economy-oriented organization.
- Starting date: September 17, 2001
- Applications: March 1 - April 30, 2001



FONDAZIONE
DI PIACENZA E VIGEVANO



<http://mine.pc.unicatt.it>
info.mine@pc.unicatt.it

Aviation/Fractional Ownership

DIRECT FLIGHTS NOW AVAILABLE TO THE MIDDLE OF NOWHERE

www.flexjet.com

With access to over 5,000 airports and schedules designed around your specific business needs, fractional owners of Learjet® and Challenger® business jets can operate from virtually anywhere. We offer the most complete range of latest technology aircraft available today. So while there may be other options to Flexjet, there can only be one choice. Flexjet. For more information on the many affordable benefits of fractional ownership and our unprecedented level of personal service and attention to detail, call 1-800-FLEXJET.

**BOMBARDIER
AEROSPACE**

Flexjet is a Bombardier Aerospace program.



Index to Companies

This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

A

ABC (DIS) 50
Aberdeen Asset Management Asia 104
Abgenix (ABGX) 114
ABN Ameri (ABN) 102
Ace (ACL) 74, 96
Active Voice (ACVC) 90
Advanced Micro Devices (AMD) 58
Advantest 104
Advest (ADV) 74
Agrium 90
Aiful 114
AIM Advisors 84
Allstate (ALL) 84
Amazon.com (AMZN) 98, 112
American Express (AMX) 70
American International Group (AIG) 96
America Online (AOL) 136
Amgen (AMGN) 46, 86
Aon Consulting Worldwide (AOC) 54
Apple Computer (AAPL) 32, 58
Applied Biosystems Group (ABI) 86
Applied Materials (AMAT) 187
ArtFact 132
A.R. Schneider 187
Asahi Bank 104
AstraZeneca (AZN) 114
Asyst Technologies (ASYT) 187
AT&T (T) 60, 80
Atlantic Coast Airlines (ACA) 187
AXA 102
Axiom Capital Management 187

B

Bank Metzler 102
Bank of America (BAC) 60, 74, 96, 128
Bank of New York (BK) 96
Bank One (ONE) 54, 66, 96
Bank United (BNKU) 124
Barclays Bank 102
BCE Enterprises 114
Be (BEOS) 32
Bear Stearns (BSC) 46, 96
BellSouth (BLS) 84
Berkshire Hathaway (BRK) 114
Bindley Western Industries (BDY) 124
BNP Paribas 102, 104
BNP Prime Peregrine Securities 104
Boeing (BA) 84
Borg Warner (BWA) 90
Boston Properties (BXP) 94
Breast Cancer International Research Group 187
Brookstone Stores 16
Buy.com (BUYX) 98

C

Calpine (CPN) 114
Catellus Development (CDX) 114
CDC Asset Management 102
Celera Genomics (CRA) 86
Cell Pathways (CLPA) 86
Century Capital Management 96
Challenger Gray & Christmas 14

Charles Schwab (SCH) 20, 96
Chase Manhattan (CMB) 54
Checkpoint Systems (CKP) 98
Children's Place (PLCE) 108
Chiron (CHIR) 86
Christie's International 132
Cisco Systems (CSCO) 50, 80, 90, 98, 136
Citigroup (C) 60, 112
Citizens Global Equity Fund (WAGEX) 114
Cohen & Steers 94
Colorado Medtech (CMED) 114
Columbia Funds Management 124
Columbia Real Estate Equity Fund (GREEK) 94
Commerce One (CMRC) 114
Compaq Computer (CPQ) 58, 74, 80, 114
Computer Sciences (CSC) 50
Conseco (CNC) 177
Corning (GLW) 60, 114
Credit Lyonnais 66
Credit Suisse First Boston (CSFB) 54, 84, 112
CSM Worldwide (CSMW) 56
CTS (CTS) 90

D

DaimlerChrysler (DCX) 54, 56, 102
Danone 102
Dataquest 58
Dell Computer (DELL) 54
Delphi Automotive Systems (DPH) 54, 56
Delta Electronics 104
Deswell Industries (DSWL) 114
Deutsche Bank (DBK) 74, 128
Donaldson Lufkin & Jenrette (DLJ) 74, 112
Donna Karan (DK) 114
Dresdner RCM Global Investors 80, 86, 104, 114

E

EarthLink (ELNK) 98
Eastman Kodak (EK) 60
eBay (EBAY) 114
Echelon (EIN) 114
Eckpoint Software Technologies (CHPK) 114
Economy.com 66
Elan (ELN) 114
EMC (EMC) 80
E.on 102
Enron (ENE) 60, 84
Equity Office Properties (EOP) 94
eResearch Technology 187
Ericsson (ERICY) 80
Ernst & Young 86
eToys (ETYS) 98
E*Trade Group (EGRP) 98
Evans & Sutherland (ESCC) 114
Everest Re Group (RE) 96
Evergreen Health Care Fund (EHCBX) 124
ExecuNet 54
Exodus Communications (EXDS) 98
Extreme Networks (EXTR) 114

F

Fannie Mae (FNM) 128
Fansteel (FNL) 114
First Call 72, 80, 96
First Tennessee Capital Markets 66
First Union (FTU) 96, 136
Ford (F) 56, 57, 128
Forest City Enterprises (FCEA) 114
Forrester Research (FORR) 84
Frank Russell 90
Franklin Resources 124
Freddie Mac (FRE) 128

G

Gap (GPS) 72
Genentech (DNA) 86, 124
General Electric (GE) 177
General Motors (GM) 54, 56, 57
Generali 102
Geron (GERN) 86
Getty Images (GETY) 98
Global Crossing (GX) 114
Goldman Sachs (GS) 72, 96, 98
Granada Compass 114
Grant Prideco (GRP) 114

H

Handspring (HAND) 32
Hang Seng Bank 104
Health Care Property (HCP) 94
Hewlett-Packard (HPQ) 58
Home Depot (HD) 72
Hon Hai Precision Industry 104
Honda (HMC) 104
HSBC 36, 102, 104
Human Genome Sciences (HGS) 86
Hussman International 90

I

IBM (IBM) 58, 80, 90, 187
ICON Information Tech Fund (ICTEX) 124
Idex Pharmaceuticals (IDPH) 86
Immunex (IMNX) 86
Incyte Genomics (INCY) 86
Infosys Technologies (INFY) 114
ING Barings 104
Ingersoll-Rand (IR) 90
Intel (INTC) 32, 58, 72
Intimate Brands (IBI) 72
Intuit (INTU) 114
Invenys 114
Isis Pharmaceuticals (ISIP) 187
ISS Group (ISSX) 98

J

Janney Montgomery Scott 74
Janus Twenty Fund (JAULX) 124
J.C. Penny (JCP) 128
JDS Uniphase (JDSU) 114
John Hancock Financial Services 66, 96, 98
Johnson Associates 54
Josephthal 74
J.P. Morgan (JPM) 60, 84, 90, 96
Julius Baer 102
Juniper Networks (JNPR) 80
Jupiter (JMXI) 16

K

Kelly Services 54

Kerry Properties 104
Kinetics Mutual Fund (WWWX) 124
King Pharmaceuticals (KG) 114
Kirin 104
KLA-Tencor (KLAC) 136
Komatsu 104
KTB Asset Management 104
Kyocera 104

L

Ladish (LDSH) 114
Lear (LEA) 90
Legg Mason (LM) 96
Lehman Brothers (LEH) 66, 96, 112, 114, 128
Level 3 Communications (LVL) 98
Lexmark International (LXK) 114
Lucent Technologies (LU) 32, 90
Luthai Textile Joint Stock 104
LVMH Moët Hennessy Louis Vuitton (LVMHY) 132

M

Major League Baseball 59
Manitowoc (MTW) 90
Manpower (MAN) 37
Manugistics (MANU) 108
Matrix Advisors Value Fund (MAVFX) 74
McGraw-Hill (MHP) 188
McKinsey 60
Merck (MRK) 114
Merrill Lynch (MER) 54, 57, 72, 84, 90, 96, 98, 112, 114, 187
Mesa Air Group (MESA) 187
Mesaba Holdings (MAIR) 187
MFS Capital Opportunities (MCOFX) 114
MFS Technology Fund 80
Micron Technology (MU) 114
Microsoft (MSFT) 32, 54, 58, 60, 80, 98
Millennium Pharmaceuticals (MLMUN) 187
Misys 114
Monster.com 98
Morgan Stanley Dean Witter (MWD) 54, 70, 96, 104, 112
Morningstar 60, 112
Motion 108
Motorola (MOT) 80, 187
MusicVision 54

N

Nationwide Health (NHP) 94
NBC (GE) 54
Netscape Communications (AOL) 32
Network Appliance (NTAP) 80
Neuberger Berman (NEU) 96
News Corp. (NWS) 54
Nokia (NOK) 80
Norfolk Southern (NSC) 136
Northern Trust (NTRS) 96
Northwest Airlines (NWAAC) 187
Novartis (NVS) 102
Novellus Systems (NVLS) 187
NPD 58
Numico 102
NVIDIA (NVDA) 74

O

Opera Software 32

Oppenheimer Real Asset Fund (ORACK) 124
Oracle (ORCL) 80
Oxford Health Plans (OXHP) 136

P

PaineWebber (PWJ) 102
Palm (PALM) 80
PartnerRe (PRE) 90
PC Data 58
Pfizer (PFE) 60, 124
Pharmacia (PHA) 60
Philip Morris (MO) 136
Phillips Electronics (PHG) 114
Phillips Auctioneers 132
Phoenix Investment Partners (PXN) 124
Pilgrim (NSPAX) 114
Pimco Innovation Fund 80
Potomac Internet/Short Fund (PNETX) 124
Prepaid Legal Services (PPD) 108
Procter & Gamble (PG) 20
Profit Value (PVALX) 114
Prologis (PLD) 94
Proxim (PROX) 32
Prudential Securities 60, 66, 72, 74, 86
PRW (PRWW) 187
Psion 102
Putnam International Growth & Income Fund (POUSX) 114
Putnam Small Cap Value Fund (PSLAX) 124
Putnam Voyager 80

R

Rainbow Technologies (RNBO) 98
Raymond James & Associates 56
Raytheon (RTNB) 136
Razor 16
Relativity Technologies 54
Research In Motion (RIMM) 108
Rhodia (RHA) 114
Robertson Stephens (RFB) 98
Robert W. Baird 74
Rooster.com 20
Rosetta Inpharmatics (RSTA) 86
Royce Opportunity Fund 114
RWE Energie 102
Ryden Biotechnology Fund 86

S

SafeNet (SFNT) 98
Sagem 102
Salomon Smith Barney (C) 60, 72, 84, 112
Samsung Electronics 104
San Paolo IMI 102
Sandisk (SNDK) 108
Santa Fe International (SDC) 114
Sanwa Bank 104
SBC Communications (SBC) 84
Schaeffer's Investment Research 74
Seligman Advisors 72
SG Cowen 70
Shanghai Zhenhua Port Machinery 187
Siebel Capital 187
Siebel (SEBL) 80

Simpson Industries 90
SkyWest Airlines 187
Sony (SNE) 58, 187
Sotheby's Holdings (BID) 124
Spencer Trask 74
Spiegel (SPGLA) 114
Spieker Properties (SPK) 124
Standard & Poor's (MHP) 124, 136
Starr Securities 187
Starwood Hotels & Resorts Worldwide (HMH) 112
State Street Research 74
Stone & McCarthy Research 128
Sun Hung Kai Properties
Sun Microsystems (SUNW) 80
SunAmerica 132
Sunrise Assisted Living 108

T

Taiwan Semiconductor Manufacturing (TSM) 114
Tecemseh (TECUA) 90
Terabeam 54
Tesma International 90
Tess Instruments (TXN)
Third Avenue Value Real Fund (TAREX) 114
Time Warner (TWX) 54, 114
Titanium Metals (TIMET)
TMP Worldwide (TMPW) 9
3M/Pharmaceuticals (MM) 187
Tokai Bank 70
Tokyo Electron 104
Transkaryotic Therapies 8
Trinity Capital Partners 114
T. Rowe Price (TROW) 180
Tyco (TYC) 114

U

UBS Warburg 54, 56, 112
UniCredit 102
Unilever (UL) 102

V

Veritas (VRTS) 80
Verizon Communications
Veritas World Fund 102
Vestas Windsystems 102
Visteon 56, 136
Vodafone (VOD) 114
Volkswagen (VLKAY) 102
Volt Information Sciences 114
Vornado Realty (VNO) 94

W

Wal-Mart Stores (WMT) 74
Waters (WAT) 86
Wendy's (WEN) 90
Westell Technologies (WST)
Whirlpool (WHR) 54

X

Xerox (XRX) 128
XO Communications (XOX)

Y

Yahoo! (YHOO) 90, 98

Z

Zurich Financial Services 114

One small step for you. One giant leap for your small business.

BusinessWeek online



frontier

THE RESOURCE FOR ENTREPRENEURS

Discover frontier and launch your business to new heights.

frontier.businessweek.com

All businesses are setting the pace of today's economy. frontier is an essential resource that merges the immediacy of the web with the expert tools, information, and analysis you've come to expect from BusinessWeek Online. frontier's in-depth coverage and archives let you learn from the past and prepare for the future. And it's updated every day. Best of all, it's free

to BusinessWeek magazine subscribers. One click and you're powered with the knowledge only BusinessWeek Online provides to make your small business successful.



2000 National Magazine Award Winner
General Excellence in New Media

Keyword: BusinessWeek

Internet Keyword: BusinessWeek frontier

A Division of The McGraw-Hill Companies



IT DIDN'T HAVE TO END THIS WAY

Good people did bad things in this Presidential election, and the nation will suffer the consequences. The basic institutions of democracy have been tarnished. The dignity of the office of the Presidency and those who pursue it has been diminished. And the common ground that unites Americans of differing political beliefs has been eroded in a bitter display of partisanship.

American voters have repeatedly signaled their wish to be governed from the moderate center. This election was no different in that respect. But the advent of the endless campaign process and the ruthless pursuit of victory at any cost have elbowed out public concerns for fairness of outcome and balance in policy. The result is a growing polarization that threatens sensible compromise and a coarseness in political discourse that casts those who disagree as evil, unjust, or ignorant.

In Florida, for example, Gore supporters charged election officials who favored Bush of intentionally disenfranchising voters, while Bush supporters accused local canvassing-board members of deliberately invalidating votes cast by members of the military overseas. In the end, the Florida courts, the state legislature, the county electoral boards, as well as every decision, was reduced to a partisan interpretation. Rational solutions were denied. Compromise was ignored.

Throughout this agonizing process, the public waited for some wise person or some disinterested institution to step in and end the dispute in a manner that would reunite the nation. They longed for a conciliator—someone or something that could bridge the gap between differences, heal the open wounds of the election, and move on to the governance of the

nation. That should have been the U.S. Supreme Court—when its final decision also appeared partisan, those wounds became graver still. For 35 days, common sense cried out for a statewide recount of votes based on a commonly agreed-upon standard. But the political system was too partisan and the candidates too bent on a victory to get there. The result is a win with little credibility and little legitimacy—a President with much-reduced authority.

The U.S. must begin to learn to live with peace and prosperity. There is no cold war external threat to unite Americans anymore. The result has been an indulgence in the politics of vendetta. Normal political differences have been transformed into ideological crusades. Civil politics has generated into a politics of personal destruction. The political process has even entered the highest reaches of the judiciary. Democrats vilified U.S. Supreme Court nominee Robert Bork, a conservative intellectual, as far back as 1987, while the Republicans referred to the Florida Supreme Court as a bunch of political hacks just weeks ago.

This cannot continue. The U.S. cannot enjoy the rule of law with a politicized judiciary that makes its decisions based on partisan politics. No one can govern when winner-take-all political parties refuse to respect their opponents and negotiate reasonable compromises. There can be no cohesive society if its citizens don't respect the political positions of their neighbors. Unless this changes, we risk the complete disenfranchisement of the vast middle of the American public. Their disillusionment with the political process becomes even more justified. We must return to a common ground before it is too late.

A FULL PLATE FOR THE PRESIDENT-ELECT

President-elect Bush will face some difficult economic decisions as soon as he settles into the White House in January. Contrary to the optimistic conventional wisdom of most forecasters, the economy is decelerating faster and steeper than anticipated. It may level out for a soft landing—but it may not. If not, the long-term income-tax cuts that Bush campaigned on could prove to be less than effective in dealing with a New Economy cyclical downturn.

BUSINESS WEEK's Investment Outlook for 2001 shows that the vast majority of analysts think the economy is slowing, to a growth rate of around 3% for 2001 (page 66). Consumer spending is sure to decline as the wealth effect dissipates, along with dreams of double-digit returns from stocks. But the real determinant of how bad the slowdown gets will be corporate capital spending. Investment in information technologies has driven the economic expansion since the mid-1990s. It is uncertain how far corporations plan to pare back. The truth is, no one really knows because we haven't been to

this place in the New Economy business cycle before.

But if capital spending does dry up, incentives to promote investment would be the way to revive it. That means speeding up depreciation timetables to get companies to replace their high-tech gear faster, promoting the rollout of broadband to consumers, and working closely with the Federal Reserve to get interest rates lower, faster. Lower rates are perhaps the quickest way to get capital flowing again into big telecoms and small startups. Any huge tax cut could hamstring the Fed in loosening monetary policy.

The President-elect could also face some kind of global financial crisis as Asia, Latin America, and other parts of the world scale back their growth in the face of a U.S. slowdown. He may have to make decisions on the role of the International Monetary Fund, which has been busy of late putting out fires in Turkey and Argentina. Then there's the dollar, the price of oil, the euro....

Welcome to the White House, sir.

SMALL BUSINESS

IS A SPRINT TO THE MAILBOX

IN BOXER SHORTS:

www.firemansfund.com © 1998 Fireman's Fund Insurance Co., Norwalk, CA



NO RISK, NO REWARD.

Success as an entrepreneur requires the capacity to identify necessary risks, and a willingness to take them. Your insurance should come from a company that understands that.

LICENSE TO GET ON WITH IT.™



**Fireman's
Fund**

A company of the Allianz Group

10,000 CASES OF ENGINE OIL ○

Everything that can be bought and sold is getting online.

The world's dependence on e-commerce is increasing exponentially.

Small wonder there's a massive increase in demand for

the superfast, superbroad global optical network.

Small wonder there's such a demand for Corning.

